

FAMILIES IN PORT AU PRINCE:
A Study of the Economics of Survival

by
Simon M. Fass

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Preface

The Office of Urban Development, Technical Assistance Bureau (TA/UD) Assists the Agency for International Development with technical support to ongoing programs and with technical leadership in developing and gaining access to new knowledge and skills in the areas of urban and regional development, their relationship to rural development and their role in national development. For FY 1977 and FY 1978 TA/UD's focus is concentrated in programs concerning regional development, employment and productivity, urban finance and management and supporting activities.

Within the regional development program, an urban and regional analysis project has been developed to provide a framework and methods for identifying poverty groups and for examining their development potential in the context of urban, regional and national development. The purpose of the project is to produce information necessary to select targets, design projects and allocate resources to meet the needs of both efficiency and equity in development.

The purpose of the employment and productivity program is to help define points of intervention and to design projects that increase income-producing opportunities for the poor majority. Small-scale enterprises are a particular area of interest.

The purpose of the urban finance and management program is to develop appropriate ways and means of supporting local government activities in the planning and management of essential public facilities and services. A primary consideration here is the cost-effectiveness and the equity involved in the provision of public services, and attention focuses on financial, technical and administrative aspects in this context.

The various interrelated agendas are addressed in this research study of families in Port au Prince, Haiti; and indeed provide the original rationale for TA/UD assistance in its preparation. However, TA/UD has not endorsed the content. The information and views presented in this report are my responsibility alone.

Simon M. Fass

Los Angeles, California

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TABLE OF CONTENTS

1.0	Introduction	1
2.0	Social and Economic Characteristics of Haiti	10
.1	History	10
.2	Population	15
.3	Structure of the Economy	17
.1	Agriculture	17
.2	Manufacturing	19
.3	Trade	20
.4	The Economy of Port au Prince	21
.1	Manufacturing	21
.2	Construction	25
.3	Transport and Public Services	26
.4	Commerce	26
.5	Services	27
.6	Household Income	28
.4	Structure of the Society	29
.1	Class and Caste	29
.2	Governance	35
.5	Family Organization	38
.1	Household Formation	38
.2	Division of Household Responsibilities	40
.3	Intra-Family Sharing	42
.4	Family Economic Development	43
.5	Rural-Urban Changes in Family Organization	47

.6	Households as Producers	49
.6	Conclusions	50
3.0	The Community of St. Martin	58
.1	Physical Characteristics	58
.2	Social Characteristics	64
.3	Similarity with Other Areas in the City	66
.4	The Data Base	
4.0	Sources of Income in St. Martin	76
.1	Work	79
.1	Participation in Market Activities	79
.2	Employment	81
.3	Structure of Work Activities	85
.4	Capital	93
.5	Earnings	94
.6	Services	102
.1	Places of Work and the Search Process	104
.2	Employment and Earnings	106
.7	Trade	114
.1	Spatial Organization of Marketing Activities	114
.2	Employment, Capital and Earnings	118
.8	Manufacturing	123
.1	Spatial Organization of Manufacturing Activities	125
.2	Employment, Capital and Earnings	125
.3	Case Histories	130
.2	Non-Labor Income	143
.1	Rent	143

.2	Intra-Family Transfers	145
.3	Public and Charitable Transfers	146
.3	Conclusions and Recommendations	149
.1	Wage Legislation	154
.2	Government Purchasing Arrangements	155
.3	Planning of Urban Facilities and Use Control	156
.4	Public Infrastructure Services	157
.5	Marketing Services	159
.6	Training	163
.7	Financial Services	166
.8	Research and Development Services	168
5.0	The Household Income Obtained	182
.1	Individual Contributions	182
.2	Gross and Net Income	184
.3	Conclusions	188
6.0	The Uses of Income	192
.1	Expenditure Patterns in Port au Prince in 1970	195
.2	Housing	199
.3	Water	210
.4	Food	218
.5	Schooling	229
.6	Credit	235
.7	Conclusions and Recommendations	246
.1	Transportation Planning	256
.2	Markets Planning	256
.3	Land Management Services	258

.4	Land and Housing Financial Services	259
.5	Construction Materials Industry	259
.6	Housing Projects	260
.7	Water Distribution Management	261
.8	Food Price Control	263
.9	Nutrition and Health Services	264
.10	Savings Institutions	265
7.0	Policy	
.1	The National Development Plan	274
.2	Public Financial Resources	281
.3	Public Institutional Resources	286
.4	Quasi-Public Institutional Resources	303
.5	Implications	307
.1	Infrastructure	310
.2	Information	315
.3	Housing	319
.6	Conclusions	325
Appendix A:	Households as Producers: an Analytical Model	334
Appendix B:	St. Martin Survey Codebook	352
Appendix C:	Statistical Appendix	365
Appendix D:	Spatial Organization of Worker Activities	371
Appendix E:	A Sisal Cooperative	375
Appendix F:	Credit Institutions in Haiti	388
Bibliography		395

TABLES

2.1 Estimates of Employment and Productivity, Port au Prince, 1976	22
4.1 Primary Activity of Individuals, by Age Group	80
4.2 Classification of the Labor Force by Type of Employment	82
4.3 Occupational Classification of Workers	86
4.4 Industrial Classification of Workers	88
4.5 Classification of Workers by Type of Output	90
4.6 Origin of Demand for Work Goods and Services	92
4.7 Replacement Value of Working Capital	94
4.8 Daily Earnings, Annual Average	95
4.9 Monthly Earnings, Annual Average	97
4.10 Variations in Earnings by Type of Worker Attribute	99
4.11 Average Earnings of Service Sellers	103
4.12 Places of Work of Service Sellers	104
4.13 Variations in Earnings of Service Sellers, by Type of Worker Attribute	112
4.14 Average Earnings of Traders	115
4.15 Spatial Characteristics of Trader Activities	116
4.16 Working Capital of Traders	119
4.17 Average Earnings of Manufacturers	124
4.18 Working Capital of Manufacturers	127
4.19 Sources of Non-Labor Income	143
5.1 Contribution of Workers to Household Income	182
5.2 Distribution of Monthly Incomes of Households	185
5.3 Distribution of Per Capita Monthly Incomes of Households	186

6.1	Family Expenditure Priorities by Income Class, Port au Prince, 1970	196
6.2	Relationship of Housing Quality, Price and Income	201
6.3	Relationship of Housing Occupancy Arrangements, Price and Income	204
6.4	Patterns of Food Consumption and Expenditure, Port au Prince, 1975	219
6.5	Type of Basic Food Commodity, Price and Income	222
6.6	Type of Basic Staple, Price, Income and Place of Purchase	225
6.7	Loans, Lenders, Credit Prices and Household Income	240
C.1	Labor Force Participation	365
C.2	Work Status	365
C.3	Reasons Cited for Not Working	366
C.4	Number of Weeks since Last Work Activity	367
C.5	Monthly Days of Work, Annual Average	367
C.6	Forms of Payment for Work	368
C.7	Purchasers of Worker Goods and Services and Suppliers of Factor Inputs	369
C.8	Economic Base Classification of Worker Goods and Services	370
C.9	Ratio of High Period Earnings to Low Period Earnings	370
D.1	Spatial Characteristics of Work	371

ILLUSTRATIONS

3.1	Orientation Map, Port au Prince, Haiti	59
3.2	St. Martin 1973, Aerial View	60

Chapter 1: Introduction

Although the words were couched in seemingly neutral technical vocabulary replete with references to micro, macro, intersectoral income, consumption, output, development, policy, etc.; I had no doubt in 1974 that my professional contract with an international assistance agency project in Haiti 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 before the airplane landed in Port au Prince. After all, I had been inculcated with just about everything one really had to know about "international economic and social development theories, policies and strategies"; and was a veritable textbook on the subject. The legacy of policy 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. The preconception took a long time to die. The conditioning of academia, professional practice and day-to-day rationalization for experience in North America is not about to be thrust aside quickly; or ever.

Fortunately, my colleagues who preceded me to Haiti had little patience with visions of grandeur and assigned a set of tasks which assured that half of every day during the initial months was spent in the slums of the city speaking with people and gathering up information on various subjects from them; and that the other half was spent in the offices and hallways of public and international agencies speaking with officials and technicians and collecting data, opinions and ideas from them as well. Thrust, as I continually was between the "top" and "bottom" of society,

the foundation of my illusions began to erode.

It took several months on the "bottom", but I finally did get used to the crowing, the shacks, the people sleeping in the streets, the vision and smells of decomposing garbage and human waste in the mud, the beads of sweat of fever on cool nights, the fatigue of the elderly, the premature aging, the swollen bellies of the young, the sores on limbs and the small sizes of caskets being made by artesans throughout the city. These were images of the "norm", and I became convinced that I, my colleagues, other foreigners, the wealthy and the Government officials, and our respective lives in America, Europe and in the villas overlooking the city were the exception which seemed to confirm the rule that most people in this world are more or less the same as those in the slums of Port au Prince. The "poor" became human and "ordinary".

At the same time, the passage of each day in public offices and cocktail parties made me less and less comfortable with the assumptions, preconceptions, "theories", models and statistical indicators about the "bottom" which I shared belief in with those at the "top". The articles of faith concerning the marginals (Perlman: 1976), the proletariat, the masses, the homogeneous labor force, the underemployed, the informal sector (Bienefeld: 1975), backwardness (Baran: 1971, Myint: 1971) and various other encapsulations of the ideologies of poverty (Portes and Ferguson: 1975, Peattie: 1975, Vietorisz, Goldsmith and Mier: 1975) could not withstand the daily confrontation with the "facts" before my eyes and my ears. It became increasingly difficult to pinpoint the correct locus of the "poverty problem".

Eventually I decided that a situation wherein an individual had to

survive on twenty cents each day was not the problem. He or she had long since learned how to survive on that amount. We, the wealthy, had long since learned to rationalize that situation to our own satisfaction and learned to live comfortably side by side with it; even though we cannot obtain the remotest conception of the meaning of such a life and our relationship to it. I began to feel that the "problem" had less to do with the individual with the low-income and more to do with "our" apparent inability to effectively assist the individual in changing the quality of his or her life.

Although we of the international anti-poverty program are not a homogeneous group of individuals, we do share in a wide set of paternalistic beliefs about other people which is continually reinforced by our general unwillingness to deal on an interpersonal basis with them, and which in turn compromises those few rigorous and potentially useful methods which we have for carrying out meaningful social analyses (Myint: 1961) leading to the design of relevant mechanisms of assistance by the "haves" on behalf of the "have-nots". "We" are very much part of the "poverty problem".

However, it was not and is not my purpose to expend too much effort in the identification and the critique of the concepts to which I allude. I think it is more useful to demonstrate an alternative style of analysis and that is the purpose of this study. Although it is applied exclusively to Haiti and a small number of people there, I prefer to think of the work as the demonstration of a method which has considerably broader applicability and which may eventually lead to the disappearance of the "problem" as it applies to "us", and to the gradual elimination of parts of the

"problem" as viewed by "them".

One main focus of this paper is upon some characteristics of a small number of families who live in that part of Port au Prince called St. Martin. Their money incomes average about \$40 a month and they are more or less representative of the majority of inhabitants in the city.

A second focus is upon some characteristics of the broader social environment in which residents of St. Martin live. These latter characteristics include the history of the country, the economy of the country and city, the social and political organization of the society, the cultural traditions of family organization, the immediate social and physical characteristics of the neighborhood, and so on. Understanding of these broader issues provides both background and the capacity to interpret observations in the light of previous research.

The third focus, related to the second, is upon the environment of policy-making and the existing mechanisms of public social intervention. It is an examination of some characteristics about "us"; our relationship to both the broader social environment and to the specific circumstances of the people in St. Martin. The purpose of this focus is to identify "our" problems in coming to grips with perceived poverty, to identify the severe limitations which are placed upon our abilities to design programs of social intervention, and to identify the priority need to design programs around our own limitations so that we may improve our abilities to deal appropriately with the urban majority.

The report itself is organized into six more chapters, with supporting technical appendices, which are grouped in accordance with the three foci identified. Chapter 2, for example, introduces the broader environmental

characteristics of Haiti. It reviews the recent history of Haiti and describes the current demographic and economic characteristics of the country and city. The description begins to identify some of the reasons why Haiti and its people have remained unchanged and poor for at least the last two centuries. The chapter goes on to describe the social organization of the country and suggests that the principal feature of the social structure is the presence of two separate social entities which share the same geographical space: the governors and the governed. This feature, which is brought forward again at the end of the report is identified as one of the principal obstacles barring the way to effective intervention in the lives of the urban and national majority.

Within the majority population, the extended family organization is assumed to be the basic unit of social and economic organization, and the chapter discusses various aspects of intra- and inter-family interaction which has relevance to a better understanding of the people of St. Martin. Finally, the chapter refers to Appendix A where a rigorous model of individual and family behavior, based on an analogy between the household and the firm of micro-economic theory, is presented. The model, in combination with the insights provided by previous sociological and anthropological research, is the conceptual framework which brings order to the information gathered in St. Martin.

Chapter 3 makes the transition from the broad discussion of the environment to the neighborhood. It describes the physical characteristics of the community and some of the social aspects of the people who live there. It ends with a brief discussion on how I carried out the house to house survey and then underlines the subjective nature of "data". They

are elements of information which are produced by social interaction and hence their meaning must be interpreted with care.

The next three chapters focus exclusively on the economic attributes of the 464 people contained by the St. Martin survey. In Chapter 4 the discussion centers on the labor earnings obtained by workers of the community. It reports the results of a method of enquiry joining elements of standard employment surveys and standard surveys of business enterprises which have been modified to suit the concept of the household firm and the particular conditions of Port au Prince. The analysis of labor market characteristics is followed by a brief discussion of non-labor income sources, and then by a set of recommendations for programs which would serve to increase the productivity of workers and the demand for goods and services from them.

This is followed by a brief discussion in Chapter 5 of the household incomes derived from the independent earnings of individual family members. The assumption that household income is equivalent to the sum of the earnings of members is found to be an inappropriate one. The presence of family extension outside the household, polygamous conjugal relationships and distrust between certain household members reduces the level of income available for joint household maintenance. We will see that the higher the level of individual earnings, the lower the proportional amount given to household purposes will be. This observation questions the hypothesis that higher earnings in the marketplace will necessarily lead to an improvement in household welfare.

In Chapter 6 I turn to an extensive analysis of the uses to which income is put by households with different levels of income. Here I

compare expenditure patterns for housing, water, food and child education and I argue that the order of priority among these expenditures across the sample form low to high income is food, water, housing and then much later, education. In all these cases I examine the determinants of price on both the demand side and the supply side in order to identify points of intervention. The object of the intervention would be to reduce factor costs to the household; increase family productivity and increase the family and aggregate demand for goods and services.

The same chapter contains a discussion of credit systems in St. Martin which I demonstrate to be a general savings and insurance mechanism which provides financial services to meet economic opportunities and adversities at the same time. An analysis of the interest rate which varies between 25% and 60% a month is shown to be a reasonable one given the economic circumstances of the borrowers and the risks involved for lenders.

The chapter ends with a set of recommendations which directly or indirectly might serve to decrease the unit costs of food, water, shelter, schooling and credit and thereby yield household productivity changes. I argue further that efforts on the expenditure side of the family economy might better serve the purpose of improving the quality of life than efforts on the employment and income-generation side. The characteristics of the latter are brutal and I offer the opinion that increasing employment in such activities reflects a certain lack of sensitivity. "Unemployment" and "underemployment" are luxuries which most Haitians cannot yet afford and it might be more appropriate to regard such observations as symptoms of general economic improvement rather than as "problems" to be dealt with.

Finally, in Chapter 7, I turn to "us". I test the reasonableness of the technical recommendations presented earlier against the constraint imposed by policy implementation capabilities. I discuss the National Development Plan and show that current policy orientations do not, by themselves, limit implementation. I then discuss the financial resources available to the public sector, and discover again that even though maximum expenditures could not exceed \$26 per capita per year for the city, funds are adequate. The "problem" is then found to be in the public institutional adequacy of the country; both in the Government and in the external assistance organizations. Most of the technical recommendations proposed in Chapters 4 and 6 are found to be eminently impractical because of the technical, managerial, administrative and intellectual inadequacies of the mechanisms of social intervention. Although "we" might be able to identify programs, we cannot execute them effectively and will not be in a position to do so for a long time to come.

The major implication which follows from the analysis of planning and management capabilities is recognition that a policy is a work of social art (not science) which has been designed expressly to meet a broad spectrum of conditions which together impinge upon an issue under view and which thereby become integral parts of that issue. With this in mind I outline a small number of programs which can and should be implemented and which have multiple agendas oriented to assisting people like those in St. Martin in both the short-run and long-run, to improving Government and external agency capabilities, to closing the gap which historically and currently separates those who govern and those who are governed by creating situations of interaction between the two, and so on.

The programs outlined are small in relationship to the severity of conditions outlined in previous chapters, but I argue that they may be considerably more effective. The question of "poverty" will be less likely dealt with by the scale of intervention as it will by the appropriateness and sensitivity of it. Finally, and perhaps most importantly, I specify exactly who is responsible for taking the initiative and the first marginal steps in the direction suggested.

At the very end I come back to the issues identified at the outset of this chapter and suggest again that "we" are very much part of the "poverty problem" and that the sooner we accept this uncomfortable fact the sooner we will be able to deal concretely and seriously with the individual and his twenty survival cents each day.

Before moving on to the main body of this study, let me underscore that the entire report, reflecting the traditions of planning theory and practice, is entirely subjective (Friedmann: 1973). I have therefore tried to make my opinions and interpretations as explicit as possible in order that readers do not confuse the "reality" which was observed with the interpretations which theory and ideology have imposed upon those observations. I do not believe that relative "objectivity" is as important to the art of social enquiry as is care, sensitivity to detail and a habit of being explicit about ideas. Although this makes for a lengthy report, it might be more useful.

Chapter 2: Social and Economic Characteristics of Haiti

This chapter presents a broad overview of the historical, socio-cultural and economic characteristics of the national and urban environments in which the families described in this study live. The content is relatively superficial and general, and does not do justice to the extensive literature which has been published about Haiti. Nevertheless, it tries to provide a necessary background picture for understanding the broader context of day-to-day life in St. Martin.

2.1 History

History is one of the better-documented subjects about Haiti, but at the same time it eludes objective interpretation and understanding. Some historical accounts revel in the achievements of the independent nation, while others cast scorn upon the same events (e.g., Rothberg and Clague: 1971). Some historians have looked at the evolution of Haiti apart from the history of the rest of the world (Bellegarde: 1953), and others have treated it as a byproduct of that larger history. Most have traced Haiti through major events of journalistic importance that reflect the European style of reporting history (Dorsinville: 1975), but very few have tried to trace the evolution of the day-to-day lives of the typical individual and his relationship (if any) to those other events (Moral: 1961). These biases of method and of attitude, which continue today in the reports of journalists, make it difficult to describe adequately why Haiti is as it is today.

The brief recounting of events and circumstances in the following should therefore be interpreted with care, since it reflects many biases of the historians whose works were used to trace the evolution

of Haiti. The account begins at the end of the 18th century, a few years before the French revolution and about 200 years after Columbus came upon the place.

Eighteenth century Haiti was a quiet place, and a very prosperous one for the 30,000 French colonists who owned and operated plantations of cotton, sugar, coffee, cocoa, and 500,000 slaves that worked the fields. The two principal towns of Cap Haitien (20,000 people) and Port au Prince (10,000 persons) were centers of the elegance and depravity that marked the colonial period. There were tree-lined streets and squares, impressive churches, publishing works, many newspapers, repertory theaters, literary societies, gambling houses and brothels which were famous throughout the Empire. The whole of it was built upon a flourishing export trade. It all ended with the start of a civil war in 1791.

At the close of the war in 1799, 20,000 of the colonists had left or been killed, and 200,000 of the slaves were dead. Notwithstanding the tragic loss of life, the ravages brought upon the land, and the unwillingness of the newly liberated slaves to return to plantation work (preferring instead to subsist on whatever abandoned land they could occupy), almost 70% of agricultural production was restored by 1802. But the gains were wiped out by an ensuing two-year war of independence, and by a subsequent decision of the United States, the most important customer for Haitian exports, to ban all further trade (Moral: 1961).

In the period of relative political stability between 1804 and 1842, the system of subsistence farming replaced the plantation

throughout the country. As possibilities for export production fell, so did government revenues. What public revenues did exist were quickly drained by a huge indemnity to France paid in exchange for recognition of Haitian sovereignty, by the largest per capita standing army in the world, and by rampant corruption. In effect, the potential for economic development was heavily mortgaged.

Administrative competence, still never recovered from the effects of the civil war, was non-existent. There were no public investments to speak of and negligible large-scale private investments. Port au Prince, now the capital city, was populated by a new bourgeoisie of government officials. But since there was little trade moving through the port and no investments of significance other than schools, it was growing very slowly. Its size in 1842 was less than in 1791.

The period of relative tranquility ended in 1843, and in the following 72 years uprisings and coups d'etat became akin to a social pastime of the inhabitants of Port au Prince. There were 41 revolts, of which two could be considered civil wars, and the city was burned down in 1883 and 1886. There were 22 governments, of which only one leader completed his elected term without interruption. Fourteen presidents were ousted by urban revolts and forced into exile, three died in office, one resigned, one was presumably poisoned, one was blown up in the palace, and one was torn apart by a city mob (Dorsinville: 1975). In this atmosphere of instability, private capital investment did not occur and agricultural and resource exports remained the only source of public revenues for the country. As before, the country took on a series of heavy foreign debts in 1875, 1896, and

1908. The army continued to drain most of what was left of government revenues, corruption still reigned high, and administrative ability continued to be very weak (Pritchard: 1910).

Nevertheless, the first serious public investments since independence took place between 1879 and 1888. 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 reserves for potential future debt servicing (Schmidt: 1968). Twenty percent (20%) of expenditures were directed to the restructured army, 19% for social and agricultural services (including salaries of non-military American advisors), and 21% for public works. The dedication of the occupiers to having Haiti meet all its actual and potential foreign debts when most other countries defaulted did not leave much in the way of funds for public investments. Nonetheless some things managed to get repaired and built: roads, a telephone system, hospitals, more schools, irrigation systems, and a stormwater drainage system for Port au Prince. When the occupation ended, the physical structures remained, but there was little technical or administrative competence left behind 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 which revealed that 143,000 people or 5% of the national population resided in the city; rural health and irrigation projects; rural education and community development programs; a hydroelectric facility (completed in 1971); new urban drainage facilities; improved urban sanitation; a slum-clearance project; worker housing projects; and the start of the first important industries in the country. One hundred and fifty years after independence it appeared that the country was about to finally start planning for the future and move away from the stasis of the past.

Unfortunately, urban disorder flared up again in 1956 and did not end until the end of 1957. During the next ten years relations between Haiti and other countries deteriorated. Export revenues, foreign aid, and private investment fell off, and many of the projects begun in 1950 fell again into disrepair for lack of funds and personnel to maintain or continue them. Some new public projects were begun and completed in the city: a new airport, housing for government workers, and the construction of the town of Duvalierville, some 30 km. from the capital, built to "decentralize" the growth of Port au Prince.

The 7% decline in GNP that took place during the period was reversed in 1966 as foreign relations and private sector confidence in the economy improved. From 1966 to the present, technical assistance,

major public projects, and private investment have flowed into the country at a scale and rate that had never been 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 so on. Industrial exports, which in 1968 represented 23% of total exports by value, increased to 54% in 1974. The country has been enjoying an economic boom.

But today Haiti contains over 5,000,000 people who have crowded into a small space where very little public investment has ever occurred, where public services are sorely deficient, and where administration and public management capabilities have rarely had much opportunity to develop. After some 170-odd years of national independence, anarchy and neglect, and 40 years of untended urban growth, the challenge of social and economic development looms very large.

2.2 Population

The population estimate for Haiti in 1975 varies from 4.5 million to 6.0 million depending on the source of information and the validity of census and samples taken in 1950 and 1971 (Lundahl: 1975c). The usual figure adopted is about 5.0 million, representing a population density of 470 per square mile.

This population is increasing at a relatively slow rate of 1.8% a year, the result of a low life expectancy, 45 years, and a high infant mortality rate of 172 per thousand live births (United Nations: 1971). These average figures vary from year to year depending on the grace of nature. In a good year of abundant rains the figure will be

higher than the average. In a bad year or series of years of drought, such as 1975 and 1976, the figure may even be below 1%.¹

Though some of these depressing figures may be ascribed to poor health practices, most is the result of endemic malnutrition; 37 gms. of protein and 1580 calories per day per person, which reduces the level of resistance of the population to even the mildest of ailments. The fact that there are 1500 persons per hospital bed nation-wide, or that there are 2100 persons in Port au Prince and 43,000 persons in rural areas for each doctor located in the respective regions makes matters even worse.

The official estimate of the national urban population is about 22% (Haiti: 1973). This estimate refers to all persons living in communities with more than 500 people. The proportion living in cities of 20,000 or more inhabitants is 15%, and the proportion in Port au Prince is about 13% or 640,000 persons. In the capital the income per person (measured in 1955 constant prices) is \$276 (Haiti: 1974b).

In the other major urban centers: Cap Haitien (pop. 46,000), Gonaives (pop. 30,000) and Les Cayes (pop. 22,100) income per capita is \$194. In the rural areas it is \$60. Paralleling this structure of income, it is estimated the capital has been growing at an annual rate of 6.1% (3.8% net migration), the other centers at 3%, and rural areas at 0.8% (Haiti: 1974b).

The 6.1% growth figure is an average for the period 1950-1971. Given the very recent increase in activity in the city, starting sometime between 1968 and 1970, it is more reasonable to suppose a higher current growth rate. Comparisons of aerial photographs taken in 1965

and 1973 suggest that the figure should be closer to 6.7%, and that in-migration is more of the order of 4.4% per year (Fass: 1977).

2.3 Structure of the Economy

Although most of the national population is young, 42% are under 15 years of age, the labor force is today estimated at about 54%. This high figure is explained by the early introduction of children into productive roles: 11% in the age group five to nine years and 41% in the age group ten to fourteen years (ILO: 1976a). It is also explained by the presence of a large proportion of women in the labor force: 54%. This is considerably higher than averages published for other parts of the world, e.g., North Africa, 11%; West Africa, 38%; "less-developed" country average, 23%. and "developed country" average, 27% (Lundahl: 1975c). Eliminating the age group under 15 years, 82% of women and 94% of men are currently in the work force. The supply of labor is high.

2.3.1 Agriculture

Most of the labor, about 72%, is today concentrated in agriculture. This proportion has not changed substantially since 1950 (ILO: 1976a). Within the agricultural group, 48% of workers are "family laborers" and another 44% are independent cultivators who do not hire other laborers, reflecting the small scale nature of agricultural production. A bit less than 60% of all farms are no larger than one hectare in area (Haiti: 1973).

Though agriculture employs the vast majority of workers, it contributes to half of the total current gross domestic product (GDP) of

about \$380 million (\$1955), yielding a low figure of \$140 per year contributed to GDP by each worker. According to the World Bank, growth of production was negative during the 1960's, and only about 1% in the period 1971-1975 (IBRD: 1976a). Since the population growth in rural areas during the period was just a bit less, there has been relatively little increase in per capita production and income for quite a while.

Analysts have had a habit of ascribing the relatively poor performance of this sector to inadequate education, resistance to technical progress, limited arable land, long periods of insecurity, etc. While all of these factors may contribute to some extent, it seems to me that a 1% annual increase in agricultural production should be regarded as a remarkable breakthrough. For all intents and purposes the typical farmer in Haiti has few if any resources with which to work. Government extension services have been virtually non-existent, financial resources are extremely difficult to accumulate or borrow, the productivity of land has been slowly depleted by erosion and subdivision, etc. In this context one can interpret the 1% annual increase in a positive light. Although there is little detailed data upon which to base an opinion about the growth rate, we should at least admit to the possibility that it is a "good" statistic as readily as it is a "bad" one.

Besides the obvious relationship between agriculture and climatic conditions, rural welfare and production has always depended largely on the success or failure of exports, principally coffee, sugar, and sisal. In 1955 these commodities represented 88% of total national exports. By 1975 the proportion of these items in the value of exports

had dropped to less than 50%, and their volume had dropped to pre-1955 levels. The direct importance to rural workers of sales of these commodities is gradually diminishing. As increased industrial exports and tourism draw more and more workers to Port au Prince, the urban demand for non-export agricultural commodities is also increasing. In this way the market for rural output has been expanding and the welfare and production of individuals outside the capital is coming to depend also on the success or failure of exports of non-agricultural goods and services. In principle at least, urban and rural welfare are becoming more intimately tied.

From 1955 to 1975 the overall GDP did increase at a real rate of annual growth of 1.7%, and this underlines the compensating influence of the high rate of growth of the manufacturing, commerce and construction sectors which together increased at 2.4% a year.

2.3.2 Manufacturing

According to the census of 1971, manufacturing employs about 6% of the total labor force. Although most of these workers, about 65%, are located in rural areas, the minority of 35% in Port au Prince was responsible for almost four fifths of total industrial production of \$45 million (\$1955) in 1975 (Haiti: 1974b). This arises from the concentration of larger-scale and export-oriented enterprise in the capital. However, the 6% employment figure for the industrial sector underestimates the scale of manufacturing activity in Haiti. Although some of the underestimation results from non-inclusion of small-scale urban manufacturing activities, most of it results from non-inclusion

of the manufacturing activities which constitute secondary income sources for a large number of farming families. There exists in rural Haiti an important manufacturing activity which is not accounted for in official data documents.

2.3.3 Trade

Another important activity sector is trade which currently accounts for about 10% of employment and 11.5% of total GDP. As in the case of manufacturing, although only 30% of commercial employment is located in Port au Prince, these workers contributed 60% to the total product of the sector (Haiti: 1974b). Though part of this concentration is due to the presence of larger-scale commercial enterprises in the capital which deal in capital-intensive distribution of imports and bulking of exports, much of it is also due to the fact that Port au Prince is the principal market of Haiti and thousands of traders move between city and countryside, each transporting relatively limited quantities of products back and forth. The importance of this part of trade in the city is underlined by the fact that women (who are concentrated in trade) outnumber men in the city by about 30% (Haiti: 1976a), and many of them have either left rural home and family to take part in the urban bulk-breaking and marketing process, or are constantly moving between rural home and the city in rural-urban bulking, bulk-breaking, and marketing activities. We see here another important tie between the city and the rest of the country, and its manifestation in thousands of individuals whose independent activities link one group of sectors to another, and the capital to the countryside.

2.3.4 The Economy of Port au Prince

Today Port au Prince is the economic center of Haiti. It produces 40% of total gross domestic product, 78% of industrial production, 80% of the product of the transport and public utilities sectors, 60% of commerce, 70% of the activity in housing and real estate, 85% of personal and business services, and almost 70% of government services and administration. The inhabitants consume almost 25% of total agricultural production, even though they represent about half of that proportion of the population (Haiti: 1976a).

In 1976 the economically active population was estimated to be about 320,000 or 50% of the total; and it is generally assumed that they all participated in the labor force and that "unemployment" was and is a logical impossibility in the absence of substantial private and/or public transfer payments for the vast majority of the population.

Table 2.1 indicates the general breakdown of employment as it was estimated for 1976. It also provides "guesstimates" of the relative value added or productivity of each worker. Although the data in Chapter 4 tends to question some of the figures, particularly for "cottage industries", commerce and services, the table is the only comprehensive approximation of the structure of urban employment and production available.²

2.3.4.1 Manufacturing

Most rapid growth in the economy over the past five years has taken place in the manufacturing sector, particularly assembly industries, and in the construction sector. Both have registered annual

Table 2.1 Estimates of Employment and Productivity,
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. TRANSPORTATION :		3,500	1.1	4.00
4. GOVERNMENT :	.1 Public Services	2,000	0.6	8.00
	.2 Administration	26,000	8.2	1.91
5. COMMERCE :	.1 Large Scale Commerce	17,000	5.3	2.71
	.2 Small Scale Commerce	40,000	12.5	0.40
6. 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
TOTAL (AVERAGE)		319,000	100.0	(1.00)

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

increases in value, added of between nine and ten per cent.

The labor-intensive assembly industries, which transform semi-finished imported materials into finished products for export, offer wages that are equal to or something 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 absorption of labor and on the amount of disposable income cycled through the local economy.

About 90% of these 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%). Exports of these products on official accounts totalled about \$40 million, but the net value was more in the order of \$20 million after subtracting the amount of imported materials in the exports. Even this is somewhat exaggerated because part of profits is usually transferred abroad and because basic infrastructure of water, transport facilities, electricity, etc. are underpriced by the government in order to attract these firms to Haiti in the first place (IBRD: 1976a).

This rapid growth of sub-contracting by U. S. firms was fostered by the U. S. tariff provisions for Offshore Assembly, enacted in 1965 and which exempts U. S.-made components of imported goods from import duties. On the opposite side of the ledger, the provision of an airport suitable for jet aircraft (1965), the provision of an adequate supply of water and of hydro-electric 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, stable political conditions, etc. also provided incentives for installation of firms in the city.

Foreign firms essentially send the most labor-intensive parts of their operations to contractors in Haiti who supply labor in an almost pure form; and this makes most of the manufacturing sector highly sensitive to small internal and external changes. The suspension of many plant activities in 1975 underlines the large effect of international, and in particular, U. S. economic conditions. The fact that 16% of workers in these enterprises make baseballs demonstrates the large effect that a small change in U. S. trade policy might have. Also, in the first half of 1977 most factories closed down because of a drought which reduced electrical generating capacity. Factories in this group have no particular incentive to invest in the increased costs of independent stand-by power facilities.

The precariousness of these enterprises has led many analysts of the economy to stress the need to expand transformation and export of commodities whose base materials are of local origin (IBRD. 1974, 1976a). But such diversification runs up against serious competition from Africa and Asia and there will likely be a need to use machines rather than "pure" labor more extensively to compete in international and U. S. markets.

Large industries, engaged in the relatively capital-intensive manufacture of cement, flour, soaps, fibres, etc. for local consumption and limited export employed a bit less than 3% of urban

workers. Recent growth has not been as great as in the case of assembly activities, but the higher average wage rates paid to the more skilled workers make a significant contribution to the level of disposable income and to the level of Government revenues.

Table 2.1 suggests that "cottage" industries containing the very small-scale activities of wood, fibre and metal artisans who produce tourist-oriented and local household items, employed only 0.6% of workers. However, the data obtained in St. Martin and which is presented in Chapter 4 seriously question the limited size ascribed to these activities, and suggest that manufacturing employment may actually be as high as 35% of the labor force.

The large difference in estimates arises as a result of definitional problems in the sectoral classification of the self-employed. Many workers in the services sector of Table 2.1 are in fact involved in small-scale transformation. It should also be noted that the employment figures for larger-scale enterprise refer to "in-plant" workers only. They do not take into consideration the large number of workers who are sub-contractors (e.g., homework) to these "modern" firms, and who also fall into the services category. The table not only underestimates the number of people who work in manufacturing, but also the number who work directly for large-scale firms outside the plant. As will be seen in Chapter 4, these numbers are not insignificant.

2.3.4.2 Construction

The other active sector in recent years has been construction. Some of the 9% annual growth can be attributed to industrial building,

but the great portion of activity has been in residential construction. Important investments in this area 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 moderately sized firms, but for the most part consists of informally organized teams working under supervision of a foreman who has obtained a contract, or self-employed groups of one to three individuals who specialize in small houses. Excepting supervisors, who are the most skilled workers in a team, workers obtained average wages of approximately \$1.00 per day, irrespective of the size of the firm or the type or scale of the contract involved.

Not counting individuals who build their own houses, 5.6% of the labor force in 1976 was engaged in construction activity.

2.3.4.3 Transport and Public Services

Highest average wages, varying between \$60 and \$80 per month were obtained from occupations in the highly capitalized transport sector, and the Public Services sub-sector of Government. Nine and nine tenths per cent (9.9%) of the labor force was engaged in the two sectors.

2.3.4.4 Commerce

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

Small-scale activities are dominated by self-employed vendors of limited quantities of products, usually agricultural, in which they have invested. Most of these workers operate from fixed locations on sidewalks and streets, and exercise an activity whose productivity is relatively low. In the future, it is possible that the effects of increased migration on one hand, and continued capital intensification of larger-scale commerce on the other will perhaps further reduce this low productivity and the incomes.

2.3.4.5 Services

The Services sector is, according to Table 2.1, the largest employer of workers in the city. Aside from Personal Services (6.3% of employment) which contains the various activities of tailoring, dry cleaning, hair cutting, professional services, etc., and which offers relatively high wages, this kind of employment involves extremely low productivity.

Domestic services contain 25% of employment (servants, gardeners, guards, baby-sitters, etc.). Although sometimes money wages 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% of workers engaged in miscellaneous other services (car watchers, porters, boot-blacks, etc.) are doubtless the worst-off group in the labor force. Although a full day's labor might provide up to \$0.60, or perhaps a dollar, many days or weeks may pass before the worker accumulates a full day's worth of work. This sector appears

to be like a residual labor pool wherein much of the time spent by each individual is occupied by a continual search for work. From time to time short-run occupations are found in other sectors, but periods between jobs may be longer than the periods actually spent obtaining incomes. It should be noted, however, that although a household with two workers in this sector may only obtain annual money earnings of about \$85, this is 45% higher than average rural real incomes.

2.3.4.6 Household Income

The more productive activities are unable, even at low wage rates and high degrees of labor intensity, to employ much of the actual labor supply directly. There results the indirect generation of a large number of activities with extremely low productivities that provide a great many workers with incomes that are close to what might be called a "normal" subsistence level. There is a small demand relative to the supply of workers, and this relationship is at the root of urban poverty.

Forty per cent (40%) of households have incomes less than \$20 per month and 70% less than \$40. These 80,000 families constitute the "low-income" population of the city. Twenty four per cent (24%) of households, defined as "middle income", earn between \$40 and \$100 per month, though more than two-thirds of this group obtain less than \$60. The remaining 6% are the "high income" group, and they receive almost half of total incomes in the city. This extraordinary concentration of wealth suggests something about the more general organizational characteristics of Haitian society.

2.4 Structure of the Society

Descriptive models of the structure of Haitian society have been numerous, and date backward some 200 years. A reading of the available literature indicates a peculiar lack of unanimity among social analysts on how the social "whole" is organized. The variation in structural descriptions arises because of the different time periods when the analyses were carried out, the different separation criteria used, the different subsets of the population being examined, and the different purposes for which "structuring" was carried out. An overview of the various structural models is presented in the following sub-sections, together with an evaluation of the kind of "structure" model which best fits the purpose of policy design and my own experiences in Haiti.

2.4.1 Class and Caste

In 1797 Moreau de Saint Mery (1958) classified the pre-revolutionary colonial society into three major classes, and into two sub-groups within the first and third major class. At the top were the whites, split into those of more importance (e.g., government officials, slave-owning planters, etc.) and those of lesser importance such as shopkeepers. In the middle group were the "free people of color" who were originally mulatto byproducts of white men and black slave women, and who had originally been granted non-slave status by white fathers. These people were smaller property owners and artisans and were educated to some important degree. At the bottom were the black slaves, also differentiated into house servants of local birth

and then 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. This pyramidal model, which attributed more or less unique characteristics of family structure, economic position and wealth, exercise of power, religion and folkways, values, language, education and skin color to each class served as a basis for most subsequent structural analyses.

Much later, Leyburn (1941) divided Haitian society into two "castes": the elite and the masses, respectively representing 5% and 95% of the national population. The former group were the property owners, merchants, liberal professionals, and the government. They lived in the cities (mostly in Port au Prince); they were educated, French-speaking, and maintained "Western" outlooks and behavior in all respects, including domestic family organization. They were a sort of aristocracy.

The second group was the peasantry: rural farmers, who spoke only Creole, uneducated and illiterate, who believed in voodoo, who practiced common-law and polygamous marriages, etc. The maintenance of this "caste" structure was explicitly promoted by the elite who held the reins of social, economic, and political power. Subsequent analysts rejected the "caste" view (Simpson: 1941, Price-Mars: 1942, Lobb: 1946, Bourignon: 1952, and Moral: 1959) in favor of the "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) identified four basic strata. The top 2% of the national population was the traditional

urban "mulatto bourgeoisie"; the next group, 4%, consisted of an emerging "black middle class"; the third group, 6%, was a "black urban proletariat"; and the bottom 88% consisted, as usual, of a "black peasant mass". In addition, about one-tenth of one per cent of the population consisted of foreign "whites" and a Syrian colony which have an important economic role, but constitute an "unintegrated sub-cultural" group within the bourgeoisie.

According to the authors, the bourgeoisie is a prestige class which currently is becoming a decreasing proportion of the population because of emigration and lower birthrates. It resides exclusively in Port au Prince and occupies most professional, managerial and administrative occupations, though their dismissal and exclusion from top-level government positions since 1957 supposedly reduced their political power. The "non-elite" foreigners and Syrians in this group wield little or no direct political power, but are nonetheless influential through their control of large-scale industry, commerce and, together with the "mulattoes", urban land. They take a supposed paternal view of the "masses" as being simple and honest folk that, if they were educated and if economic conditions were good, could have a much better life. On the other hand, they are very suspicious of the middle class, who supposedly replaced them in government during the regime of Dr. Francois Duvalier.

The next group "down" is the middle class of Port au Prince. The membership is fluid and has a lack of traditions, of shared class values or solidarity; material wealth provides status. Here the

prominent members are "black bureaucrats" in the form of top government officials, government employees, military officers, etc. Since a man behind a title in politics is very interchangeable, this class is socially insecure, self-conscious, sensitive and suspicious. The lower echelons of this class are shopkeepers, teachers, lower government employees, clerks, and skilled artisans who are often the owners of their own establishments. More than half of this group are salaried and are directly or indirectly dependent on government for their occupational security. The incomes range (in 1965) from \$500. to \$2,000. per year, and the major aspirations center on a better home, a better car (or any car), a better salary, extensive education for children who may have to earn a living outside the country, and opportunities for saving against the insecurities of tomorrow.

The "bottom" in the city, only a small notch above the rural peasantry, is the urban "proletariat" comprising more than half the city population. These persons originated from and are still composed of peasants migrating to Port au Prince in search of employment and a better life. They live in the slums and their hope for a better life supposedly turns up as an exchange of one form of misery for another. There is no industry to absorb the migration, although some do find employment. The "luckier" ones consist of more regularly employed semi-skilled artisans, truck drivers, market women, household servants, lottery ticket vendors, a few factory workers, i.e., the bulk of the urban labor force. The more ambitious elements are moving into the lower ranks of the middle class through education and political participation.

The unlucky ones, the majority of the proletariat, are unemployed or sporadically employed, and are forced to depend on relatives or ingenuity to meet daily subsistence needs. Poverty among this part of the class is endemic and "worse" than it is in the countryside. They constitute the "hordes" of shoe-shiners, peddlers, beggars, porters, and dock workers of the city. And then of course comes the rural peasant mass which is characterized in much the same manner as it was by Leyburn.

Even this last group can be broken down into sub-classes when it alone represents the universe of people which has to be classified. For example Herskovits (1971), writing about rural Haiti in 1937, tried to look at the way peasants stratify themselves. He suggests that the very bottom is composed of the "indigent" who for whatever reason have lost their family connections and their property and must beg in order to eat; they are a very small minority. One step up are those who are "miserable" and who are usually though not always "incompetent", but who are generally unlucky in terms of crop failure and yield. Most of the population in the rural area considered themselves a "middle class". They are comfortably situated, according to Haitian standards, living frugally on their habitations with their families where their lives follow an equitable course. One step up from this central group are those of wealth and position or of spiritual power; the successful members of the community. So if one were to pursue self-stratification, in the style of Herskovitz, with any one of the classes of Wingfield and Parenton, one likely would find "classes" substantially different and carrying quite different meaning than

the two or four great groups into which several million people are usually allocated by social analysts.

For the purposes at hand one must decide what form of social structuring is relevant. The St. Martin population described in subsequent chapters fits the description of the upper part of the "urban proletariat" and the lower part of the "middle class". My own observations tend not to support the idea that the "lower" part of the "proletariat" is as large as has been suggested or as destitute in comparison to persons in rural areas. To believe Wingfield and Parenton is to accept that a large part of the urban population is wilfully masochistic and remains in the capital in more misery than that available outside the city. To suggest that they remain because they are unaware of their state or too impoverished to return is also unacceptable. This implies a lack of intelligence and of finances at a scale totally at odds with my own observations.

But the more important issue is whether there is a great distinction between the "middle class" and the "proletariat", and whether the "proletariat" is really as homogeneous as it appears. In regard to this second question, my observations do not support the idea of homogeneity, if for no other reason than the fact that the respondents in the study structured themselves more or less along the same lines as the rural people did for Herskovitz in 1937. A few cases were identified as misery situations where bad luck was to blame, and a few cases were identified as examples of "success": machine operators in factories at high wage levels, certain kinds of government workers,

property owners, entrepreneurs, etc. The "success" category, which leads back to the first question, clearly points in the direction of the "middle class", or at least to the lower reaches of it. There does not seem to be much of a discontinuity here.

Another class separation which does not fit with my experience is that one between the "bourgeoisie" and the upper "middle class". The color distinction is more or less irrelevant with respect to control of the economy and control of the government. Although certain individuals are only in government positions, and others only own factories and large commercial establishments, many are in both places at the same time, and they are especially likely to be in both places the higher they are in government.

2.4.2 Governance

There is a great split or discontinuity between the group of people who are tied into (or who are) the official political and economic institutions of the country, and all the rest who have no such links. This is probably the most salient "structure" that affects the design of policy. Mintz (1974) puts the issue 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 and, given Haiti's present structure, need not be heard by those who are content to rule. This is the real problem of Haiti."

What this statement suggests, and what my observations during rural and urban surveys tends to confirm, is that in the "whole" there are two separate social entities which share Haiti. The day-to-day concerns of those in government and in industry whose interests range beyond immediate job security and wages do not overlap very much with those of the rest of the population. The former was and still is primarily interested in the collection of taxes, the distribution of tax revenues and in keeping tabs on the population. So 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.

But it would be an error to imply, as Mintz does, that the institutions of governance are totally absent among the group that is not tied to government directly. Because "government" in Haiti has not come as close to representing the idealized model of what a government is supposed to be and is supposed to do in the "modern" conception, those not in "government", especially those in rural areas, have evolved their own democratic and sometimes very extensive organizations for the carrying out of specific tasks of common value and interest, at least in recent times. The country and city are dotted with large and small organizations of citizens involved in collecting "taxes", and forming committees and work groups to build roads, dams, bridges, health and community centers, schools, nutrition programs, etc. Sometimes these community organizations work well, sometimes

not. Sometimes they were tied to government but usually not. Sometimes they are quite small but often quite large with active memberships numbering into the thousands and tied together into loose regional federations. A ubiquitous characteristic of these organizations is extreme paucity of resources and an explicit definition of the "state" as a reference to the people who are the "state", rather than the general population of Haiti.

This reference to the "state" as a separate entity was also evident in Port au Prince. In surveys of water consumption, for example, I found that reference to "public" water fountains meant reference to broken water mains and pipes. "Public" water fountains in the usual sense had to be identified as the fountains of the "state", meaning that they belonged to someone else.

This aspect of the structure of society should not be taken as static. There have been some promising changes in the dynamic evolution of the groups recently. The government has begun to support rural organizations and has even restarted programs to generate new organizations from the bottom up when they have been absent. Interest has also begun for starting such organizations in the neighborhoods of the capital. Although miniscule in comparison with the scale of organization necessary to carry out even rudimentary policies and actions, current directions in extending access to official institutions for a larger part of the population appear promising. The fact that they are still limited poses severe limitations on the kinds of public development policies which would be appropriate today.

2.5 Family Organization

Within the "whole" of Haitian society the nuclear household, consisting of mother, father and children, is generally considered to be the basic unit of organization of the society and of the economy (Bastien: 1951). The family, however, includes a wider extension of relatives on the sides of both parents, and so the nuclear unit is part of a larger group (Herskovitz: 1971).

This form of family draws its traditions from Africa, where descent is usually 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 combination results from the destruction of the African family tradition during the colonial period of slavery and the reconstitution of a new form integrating European characteristics after the colonial period. The "hybrid" family evolved partly as a result of the spread of the small private property system which required an effective use of available labor in a form unlike that required by Africa or by large plantations, and partly as a result of the desire of the first governments after independence to encourage and reinforce family organization along the lines of their own European models. State favors were promised to couples who "married" and maintained virtuous family lives (Bastien: 1951).

2.5.1 Household Formation

Although some residents of rural areas "marry" through the church and obtain "legal" unions, most people, especially outside the capital, form families through essentially common law means. The former type

of union, which is relatively expensive to obtain (and break up) has some more prestige than the latter, but both forms are regarded as permanent and are treated as constituting true marriage. Either form of union requires parental consent, and one of the requirements of a young man in rural areas is to possess land, a house, animals, etc. in order to demonstrate, 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 sanctions behind monogamy and church marriages and the jealousy manifested by co-wives toward each other and toward their husband tends to keep this practice limited, or at least relatively hidden from view. A man 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.

Many unmarried men result from the plural mating system. Although some do so by choice, especially in towns where homosexuality is far more prevalent than in rural areas, many do not have the economic means to "compete" for wives and thereby enter the "household production market". Partly in response to this situation prostitutes, both married and unmarried, are found everywhere in rural and non-rural areas (Herskovitz: 1971).

While it is relatively easy to form a family, it is quite difficult to break one down through divorce or separation. The basic causes for these latter are sterility, a mismatch of "tempers" that yields

constant quarreling or sometimes the practice of "sorcery" by one partner when the other is a practicing Christian. Neither adultery, nor persistent neglect of household duties, nor "bad" upbringing of children, nor regular beatings, nor jail sentences usually warrant or result in separation. These problems are resolved through other available and less drastic means because at least part of this recalcitrance about divorce and separation is the required division of wealth (Comhaire-Sylvain: 1961)

2.5.2 Division of Household 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 these earnings is also used for purchase of animals, and anything left over is saved for ultimate use in the purchase of land. So we see that the woman is the salesperson, banker, and investor of the family. Quarrels do, however, 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 all 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 else except laundry. If she is back or recovered, he will stay in his fields or, if there's nothing to do there, will pass the time with his friends (Comhaire-Sylvain: 1961).

In a great number of cases both men and women have control over separate income sources. She often works her own plot of land and/or engages in independent trade activities. In these situations her income is supposed to cover her own personal expenses, food for children, clothes 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 supplies, uniforms, books, registration fees, and shoes required for sending children to school, fathers have been asked to voluntarily contribute to cover these costs by school administrators, and usually do. But even if fathers do not willingly 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 accumulation of savings for the purchase of land or the building of a house.

While a man is usually not unwilling to give his wife a plot of land to work on, he will rarely give her money to start in trade activities. She would also have to skim for this purpose, or else borrow capital from her mother or from 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 learn techniques until about age 15 when they can cultivate a field. At about 17 or 18 a boy is given a field and seed for sowing. The produce is sold by his mother and she saves it for him until he marries. Girls learn to sew, to cook, to wash and to iron from their mothers until they are considered able to manage all of a woman's work, which is the time when they become ready for marriage. At the same time girls are trained in the art of market selling techniques and are given small articles to dispose of, the proceeds of which, after accounting with their mothers who evaluate their on-the-job training progress, belong to them.

2.5.3 Intra-family Sharing

Investment in and investment of children occur in other ways too. Parents who have considerable means entrust some children to relatives in the city for education. The parents pay for clothing and school expenses, and contribute to their maintenance by gifts of food and produce. Very poor parents send their children to wealthier relatives or to strangers for better care (and perhaps education) in exchange for their work as household servants. These children are often mistreated by unrelated foster parents. Also, children are sometimes sent to fond 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. Affective relations are important to the Haitian family.

Adult relatives move in with each other too, and there are many varying shades in the treatment of persons taken in as permanent or temporary guests of the family. Depending on the degree of economic welfare, household help requirements, and fondness for particular relatives, treatment may range from honored guest to servant. Self-supporting guests would not usually think of paying or of 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 buy their own clothing, but would offer their work in exchange for food, including the sale of produce on commission. "Servants", who enter the family as children and who are not related to the family are generally not paid in cash. They eat the same as everyone else, but do not receive as many clothes. We can see in all this that the Haitian family has a propensity to share with relatives, and this sharing takes the form of shelter, food, services (of adults and of children) and sometimes gifts. The sharing of cash is another matter.

2.5.4 Family Economic Development

Although cash has value for the purchase of some necessities, and some "luxuries" such as drinking, gambling, jewelry, gifts, etc., its most important characteristic is that it is "capital" which can be saved and accumulated for investment that will yield increases in material wealth. The opportunity cost for an individual or a family to spend or to transfer cash to another is high and will usually take place only in dire circumstances such as the payment of medical and legal services.

As Herskovitz (1971) clearly points out, the foundation for the accumulation of family wealth during its lifetime is the inheritance, usually the endowment of land in rural areas. Few inhabitants would not seek by all means to add to their heritage, and they would skimp and save money until they could buy an additional property. While husband and wife may argue over the disposition of monies for personal and household necessities, and while they might share a great deal of what they have, the two work together very hard to extract as large earnings as possible from their income producing activities. Also, although wealth may be desired for the prestige it gives, it is rarely prized for the display it permits, for it might arouse envy and that is "bad". Wealth, if it is manifested, is shown in extensive holdings, in education of children, and so on. Thus, the outward appearances of clothing, household goods, housing, etc. will necessarily be a misleading indicator of the household's economic position -- at least within the "non-bourgeois" segment of society.

Families in rural areas who do not work the land or market the produce of the land find income sources in legal services, herbal medicine, woodwork, carpentry, masonry, tailoring, dressmaking, shoemaking, mattress making, ironwork, baking, distilling, milling, hair-dressing, jewelry making, etc. But these families are a minority. The majority who do in fact work the land also sell their agricultural labor services to other larger scale planters of sugar, cotton, sisal, etc., and, more importantly, engage in a remarkable set of independent secondary occupations that address a variety of rural-based demands for goods and services (Metraux: 1951). While a few of these activities

are craft activities, such as basket-making which is part of the African tradition (Herskovitz: 1971), the vast majority are small-scale industrial activities that are today essentially the same in rural and urban areas as they were in the pre-revolutionary period, and as they might have appeared in late 18th century France before the coming of the "industrial" revolution. There are leatherworks, 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 using simple machines or hand processes, dugout makers, shipbuilders, sail and seine makers, pottery and ceramic makers, shoemakers, distilleries, etc. (Mintz: 1974). That these activities have not changed much in 170 years is less a reflection of any inherent "primitiveness" or conservatism than it is the result of almost 170 years of relative isolation from the "progress" taking place in other nations. It is nevertheless evident that a large part of the population is already engaged in "industrial" activity.

This characteristic is important. It should be clear that the accumulation of savings, investment, and the growth of "capital" is not exclusively concentrated into land, animals, etc. which are normally associated with agricultural production. Given the range of income-earning sources, investment will also take place in materials, tools and equipment as a means to increase family wealth, and the heritage from generation to generation will also include the transfer of

non-agricultural "skills" and "capital" from parents to children. We can combine this observation with that of Mintz (1964) concerning four "principles of trading" that typify family economic activity in Haiti.

The first precept of the family is: "build a personal niche within the arena of exchange." Since labor is Haiti's most plentiful resource and capital its scarcest, large numbers of people must fill every possible corner of the economy in order to obtain income; and this means that they must specialize in occupation, in the sectors where they work, and in the space where they locate. They must hold onto a piece of the market and always try to substitute labor for capital in doing it.

The second precept is "keep capital working", which means that materials, stocks, and equipment (and skills?) should not be allowed to rest and thereby risk their being squandered in overhead expenses, such as food and shelter.

Related to this is the third principle which is "never sell retail if you can sell wholesale", which means that it is better to operate at large-scale than at small-scale in order to obtain certain operating economies and faster cash turnovers.

The fourth and last principle is "try to buy dear and sell dear rather than buy cheap and sell cheap." Simply translated, this means that net earnings (or profits) are higher in a situation of scarcity, and that capital accumulates faster when prices are high. This principle operates in practice when individuals sense a demand for a good or service which is not being adequately filled and which they thereupon fill.

These ascribed precepts will affect most every family in the country to some degree or another, and we cannot very easily accuse them of not trying to increase their incomes in a systematic way. 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 abandonment of land in favor of looking for an employment. If there are a host of other skills and enterprises in rural areas and in the rural farming household, then it should be clear that there is a certain inherent mobility within a family and that its decision to go or send someone to the city is simply that it sees higher profits there for the goods and services which it produces and sells than those it would obtain in rural areas (e.g., Sjastaad: 1962). Families migrate to Port au Prince in search of higher profits in the same way, and for the same purpose that firms migrate to Haiti from New York and Miami (e.g., Hoover: 1948).

2.5.5 Rural-Urban Changes in Family Organization

This introduces the question of whether the family in urban areas is fundamentally different than the family in the rural areas after migration. Some studies seem to think so. 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 is quite reminiscent of Wingfield and Parenton's characterization of the "proletariat", and also bears little correspondence to my experiences with urban families. If anything, I am of the opinion that within the low income groups there is little fundamental difference between family organization in the city and the family organization in the countryside as described by Herskovitz (1971), Comhaire-Sylvain (1961), Metraux (1951), Courlander (1960), and others.

One cannot "prove" that organization is the same in both places (after all, how can one "prove" an opinion?), but current studies of urban families tend to at least support the view that urban family life is not as destitute or as different as poetic analysts believe (Laguerre: 1975(a), Laguerre: 1976(b)).

There would appear to be some differences though, not so much based on the fact that the "city" and "country" are necessarily completely different environments, but rather on the fact that the city provides opportunities for higher income, greater education, more neighbors, and so forth. A recent examination of a neighborhood similar to St. Martin suggests that migrants to the city maintain

their basic intra-family relationships. Exceptions to this are migrants who have attained relatively high education levels (in the city or prior to coming to it) and who develop strong ties to friends outside the family structure (Pierre: 1975).

Although intra-family organization may not be substantially different in the city and in the country, there would seem to be some sorts of differences in inter-family relationships that stem from the fact that the common economic base, the locational stability, and the common orientation to agricultural production is more conducive to the formation of institutions such as community development committees, personalized credit arrangements, cooperative work groups, and exchanges of favors than is the varied economic base, locational mobility, and neighborhood anonymity that is characteristic of urban areas. Some preliminary studies have begun to penetrate the issue of inter-family social institutions carefully (Laguerre: 1976c), but no exhaustive studies have yet been found.

2.5.6 Households as Producers

The foregoing discussion of family organization contains an implicit analogy between the behavior of a household, and its members, and a firm. This model, derived from capital theory in economics (Becker: 1964) pervades the entire analysis presented in this report. For those not acquainted with this method of structuring observations, Appendix A provides a brief synopsis.

2.6 Conclusions

The brief overview of the social and economic characteristics of Haiti leads to a number of conclusions, both optimistic and pessimistic, concerning the ability to design ameliorative policy and the possible effects of implementation over the short and long run.

The examination of the organization of the family indicates that it would be misleading to suggest that a major obstacle to increasing income is something akin to an ideology of resistance to social and cultural change (Mintz: 1974) or the presence of a "backward" way of life and attitude that would require major "re-education" to correct (e.g., Francisque: 1968). We can be satisfied that if policy is well-conceived and executed, so that individuals and households see that they can obtain direct benefits by responding to new incentives, they will do so.³

Another observation is that the intra-family sharing arrangements and plural marriage habits will lead to a direct distribution of any income increases resulting from policy to a wider set of people than we would usually expect. We should therefore anticipate that the pattern of income distribution will be more equitable and that the per capita increase will be lower across any direct "target" group of policy action. Another way of saying the same thing is that the increase in welfare of a "target" group of households will be proportionately less than any increase in their income. This seems a good thing.

Related to this question is the differing effect which an increase in the earnings of men and women will have upon family welfare. From the examination of the household we might guess that "target"

households will be better off if a woman obtains an increase as opposed to a man obtaining the same increase. Chances are that income will tend to stay in the household rather than extending out to extra-legal households as would be the case of male earnings increases. Although not in a position to say that it is better to concentrate income increases in a "target" household rather than across a larger number of households, we should be aware of these different effects.

Policy should also take care in selecting the medium by which income increases are to be generated. Ten dollars in cash is not equivalent to, say, ten dollars of housing. Each medium is discounted by the uses to which it can be put and, if cash in hand is more valuable than the in-kind income ascribed to housing, then under a given set of circumstances it would not be difficult to describe situations where housing projects may lead to decreases in household income and welfare. Income is basically capital, and the various productivities of different forms of capital will yield correspondingly different subsequent returns of income. If we understand the dynamic properties of income and the forms it takes, we are in a better position to formulate effective household economic development policy.

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

All this presupposes that it is in fact possible to prepare and implement ameliorative policies. But given the account of the historical evolution of Haiti and its current bi-polar social structure wherein the state and the populace are entities more or less independent of each other, the possibilities for witnessing significant short-run changes ought not to be overstated.

It is evident that development policy actions must be adapted to the current social structure. It must be adapted to the conditions set by the characteristics of each of the social groupings and the degree of interaction between the groups.

Specifically, the discussion of the group which is the government and is large industry and commerce means that policy must not be designed around the ideal concept of "government" which analysts have a habit of accepting without question. Besides the technical and resource limits on institutional actions, which are discussed in later chapters, the attitudes and self-interest of those who "govern" must be understood as basic constraints on public action.

High public officials spend time in public office and in promoting their private industrial, commercial, and business service concerns. Among other things this means that it is unlikely that they would willingly compromise their private income by supporting a public policy aimed at reducing it or otherwise changing it in a negative way. We would have to take care over the short-run about what is meant by redistribution of income, "support" of small-scale activities, acceleration of labor-intensive techniques, deceleration of capital-intensive industry, reduction of monopolistic or oligopolistic practices,

minimization of dependent use of external capital, and so on. At present, policy designs should not be expected to propose actions with the inherent contradictions imposed by the fact that government, industry and commerce are for the most part one and the same thing.

A de facto institutional development program that would lead to public service "careers" wherein high public officials would have considerably fewer outside interests is in slow progress, but its effects will not be evident for a long time yet. Nevertheless, this is cause for cautious optimism.

Below these high officials, Wingfield and Parenton have suggested a bureaucracy caught up in job insecurity and bureaucrats at middle and lower levels more concerned with self-promotion in material things than with any broad purpose of civic responsibility. If provided better security and better salaries, then they might carry out their functions better (Vieux: 1975). This issue is also an important object for direct institutional development programs. A very hopeful sign in this regard is that public documents now explicitly concede Government inadequacies, outline programs to upgrade the civil service, specify concrete plans to extend the coverage of the "state", and solicit private local and external assistance to help accelerate the modernization of public institutions (Haiti: 1976(c)). But the removal of this obstacle is a very long-term affair. At the present time the public reach does not carry very far into the majority of the rural and urban population.

Under such circumstances it is hard to see how specific public actions could get implemented in the city without a major prior institution-building program. However, it has already been mentioned that

even though institutions of government do not reach the majority of urban citizens, it does not necessarily follow that the kinds of institutions necessary to execute many types of local actions are not already present in many parts of the city. Although far less organized or extensive than in the rural areas, urban community organizations do exist, are tolerated by authorities, 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 a low level that they are practically unnoticeable; but they are there to find if there's an interest in finding them, and they are there to be integrated with if there is an interest in doing so.⁴

Therefore, rather than suggest 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 down from the "upper" level and up from the "lower" level 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 policy are quite clear: they have to be far less general and far less sophisticated and far different than those which are usually proposed after having undertaken analyses of a "problem" that did not include an analysis of the historical and social environment of that "problem".

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 significantly alleviated in the near future. On the other hand, the history of the country and the recent increase in economic activity in the city underline the very clear observation that the potential capabilities of the country 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.

Ultimately the social and economic resources of the country will be pushed to the limit and it will become increasingly difficult to facilitate further increases in welfare. I think that Haiti has a very long way to go before it reaches that point, and this conclusion has been arrived at many times before (e.g., Moore: 1972).

Notes: Chapter 2

1. The crude birthrate is about 3.7%, and the death rate 1.6%. Emigration takes place at a rate of 0.3%; and these together underlie the 1.8% growth figure.
2. The estimate for the whole city was based on published general survey data, published studies on specific workers such as market women, employment data from public and private institutions covering workers included in social insurance programs, street-by-street surveys of all fixed activities in the city, detailed sample surveys of each class of fixed activities, examination of Government payroll records, and a number of other direct and indirect information sources that could provide a basis for reasonable "guesstimates" of the structure of employment. The premise in this method was that unemployment did not exist, and so the services sector was loaded with all labor force participants who could not be allocated to other sectors and who could not be classed as unemployed. Although the method used depended on a lot of guesswork, it does provide a better picture than one which suggests that half of all workers are unemployed.
3. Even if we were not so convinced about this for rural inhabitants, logic would require us to be convinced in the case of urban inhabitants who have migrated from rural areas. We would have extreme cause for worry if income was much greater in the city than in rural areas, and people did not migrate. Such a situation would imply that information was highly compartmentalized, or that institutions to prevent migration were very strong or that urban income was heavily discounted by rural residents. If material income was indeed of little relative importance to rural residents, then that would mean that policy aimed at increasing income would run up against severe attitudinal obstacles. Indeed, in such a situation there is no real rationale for pursuing such a policy in the first place.

However, rural residents do migrate and I suppose they do so in order to increase their welfare. Since we believe that the urban-rural income differential is one of the things they respond to, then we can also believe that once they arrive in the city they will also be responsive to other types of opportunities to increase income again.

4. In St. Martin, for example, there is a group of men who are all part of the militia (the "Tonton Macoutes:") 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 a man in his position could "demand" donations for the project, he did not; because once his crew of ten workers started to actually do things, donations, such as they were, began to flow in from residents at a rate of about \$15.00 per day-- just about equal to the costs of operation of the project. The man kept accounts and furnished receipts. I spent a couple of days with him trying to improve the quality of construction and reduce its unit costs; but the obstacle to longer-lasting paving was a financial one that limited the amount of cement that could be combined with sand and water.

To try to overcome this obstacle, I introduced the man to authorities in the urban planning department of the Dept. of Public Works with the hope that the latter could find a means to supply some technical assistance and reduced cement prices. The meeting occurred in February 1976, and by mid-1977 no further contact was made.

Chapter 3: The Community of St. Martin

St. Martin is located at about a 15 to 20 minute walk from the center of the city and the central urban market of Croix des Bossales (Fig. 3.1). It has been populated for a long time. Back in 1964 aerial photographs revealed a density of structures quite similar to photographs of 1973 (Fig. 3.2). In the earlier period the area was peripheral to the city, a suburban "squatter"-like settlement; but the city has expanded and St. Martin is now a typical residential area.

3.1 Physical Characteristics

According to the most recent estimate, the community contains about 20,000 people today, compressed into an area of 13 hectares where all buildings are one story high. The gross density of 1500 persons per hectare (625 per acre) is one of the highest in Port au Prince (Haiti: 1976b). This estimate was based partly on the results of the 1971 census of the population and partly on a small number of site surveys which indicated an average dwelling unit size of about 12 square meters. This implied that 40% of the area was given over to structures and 60% to public and open space.

My survey indicated that average household size was larger than that reported in the census: 5.3 as opposed to 4.5 people per household. The area lived in by each household was smaller: 6.5 square meters as opposed to 12. Also, the ratio of covered to uncovered space was larger: 6 to 4 as opposed to 4 to 6. Estimates based on the survey data would indicate a total population of 60,000 and a population density of 4600 persons per hectare (1900 per acre). Of course the

Figure 3.1
ORIENTATION MAP
PORT AU PRINCE - HAITI

- 1 St. Martin
- 2 Central Market Area } Downtown
- 3 Other Central Area }
- 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

500 300 100
600 400 200 0 600 Mètres

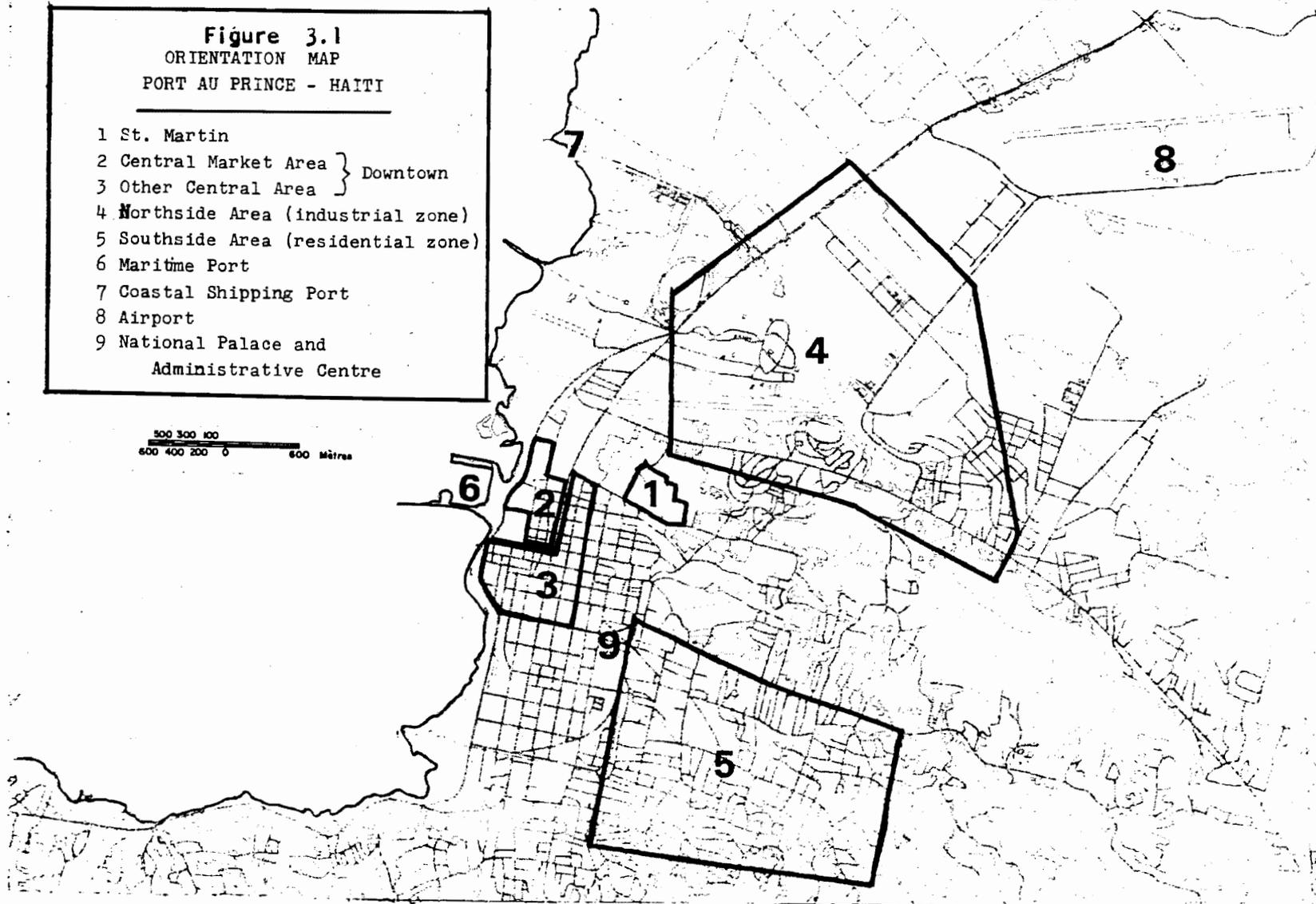


Figure 3.2

St. Martin 1973

Aerial View

Scale of 1:2000



survey of 88 households is small and probably overstates the population and its density. However, whether one accepts this last estimate or that of the census, the observation remains that St. Martin is a relatively crowded neighborhood .¹

A major stormwater drainage ravine passes through the center of the area and carries garbage and debris from other parts of the city to the neighborhood. Unfortunately the ravine is also used as a garbage dump and feeding area for pigs by local residents. This use creates dams and whenever it rains debris from upstream builds up against the obstacles and causes severe flooding. The ravine also serves as a breeding ground for a host of diseases including parasites carried by pigs, malaria carried by insects, and typhoid carried in drinking water. The Interamerican Development Bank is currently planning to one day finance a major reconstruction of the ravine that would remove some of these problems. At the same time, 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 food contributions.

Roads suitable for vehicles pass on the western and on the southern sides of the neighborhood; but there is no access to the interior. Although roads would not serve much of a useful purpose other than open space for marketing activities for residents, they do provide access for such things as removing garbage and fighting fires. St. Martin is an extreme fire hazard area, partly because of the almost exclusive use of wood as the building material of structures, partly because of extended dry seasons, partly because of the high density,

partly because there are no fire-breaks that would contain the spread of flames, partly because there are no fire hydrants or reservoirs, and partly because there presently exists no access for men and equipment to the area. Fires in 1973 and 1975 near to St. Martin and in physically similar areas left 11,000 people homeless.

A program to build an access route and some fire hydrants is currently in the planning stage. Financing of this action is expected to be assisted by grants from the United Nations Capital Development Fund.

Pedestrian access is also quite limited, and this makes life in St. Martin even more hazardous. 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 is bounded by a ten-foot concrete wall topped with barbed wire. The major paths are complemented by a network of minor paths. These latter, however, only feed into the former and do not give access to the surrounding streets. So the interior of the area is much like a maze with minor pathways, sometimes only two feet in width, zig-zagging between structures and fences of cactus and barbed wire which inhabitants have strung about to delimit the spaces which they occupy.

The typical house, as mentioned, 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, or about \$1000. for a structure 40 square meters in area.

This typical large structure is subdivided into six or seven dwelling units or apartments with mud, plywood or sheet-metal walls.

Households residing in any one such dwelling unit sometimes subdivide these small spaces again by hanging a curtain across it, living on one side of it and subletting the other side. The investment for the structure tends to get spread across a large number of people who pay around \$4.50 a month for six or seven 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 are shallow and usually never get cleaned; but they are remarkably well-maintained and provide better service than more sophisticated facilities provided by the Government in some other areas. The reason for this has been ascribed to the fact that each user knows all the others, and it is in the interest of each not to misuse a communal facility (i.e., the community of neighbors living in the same building).

Water facilities do not exist inside the area. There are three public fountains on the street to the south, 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 market the commodity during the day. Electrical service is not available.

Although there is considerable selling and manufacturing that takes place inside the neighborhood, the local focus of economic activities takes place 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, a couple of bakeries, schools and a church or two. Though the street has some importance, it is a minor one. 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 6000. The schools do not serve the community exclusively and by the same token, residents send their children to schools all over the urban area. Crude estimates have suggested that up to 80% of children between 6 and 15 in St. Martin go to school. My own figures point to a proportion of about 50%.

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 literacy programs available to the community.

3.2 Social Characteristics

Household size ranges from one person up to 24 persons, but the most frequent size encountered is four persons (21%), and the average size is about 5.3.² The vast majority of families are renters of land and/or dwelling units. A small proportion (8%) rent on a weekly basis. Most of the rest rent units on a monthly basis (35%) or 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 being in the hands of a relatively small number of large owners, including the Government.

Given this kind of supply of dwelling space, it is not surprising that a parallel observation indicates that households tend to move a great deal; almost half the residents stay in one dwelling less than a year. On the other hand, most movement of households 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 in or in the immediate vicinity of the community. Another 15% moved in from the central market area which is the first receiving ground for very low income migrants to the city, and 9% came directly to St. Martin from rural areas.

In terms of "social" mobility, St. Martin is a step "up" for those who move in from the market or directly from rural areas, and a step "down" for some residents who move in from other parts of the city (21%). Of course the area is not homogeneous and there are concentrations of relative misery and of relative well-being in different parts of it. Expressions of "upward" and "downward" mobility can be expressed within the area as well as between the area and the rest of the city. Whatever the locus of movement, St. Martin cannot be classed as a place with a stable populace.

A very small sub-sample of 66 individuals indicates that residents have been in Port au Prince for an average of five years, though the range starts as low as one month and extends more than 25 years. If this observation is valid for the whole population of St. Martin, then

the inhabitants are, by and large, most definitely "urban". Their demographic characteristics reflect those of the general population quite closely: women outnumber men by about 20%, children under five represent about 24% of the total population, and children under 15 represent 45% of the population.

The households in St. Martin are composed almost exclusively of related individuals. Unrelated individuals and servants represent less than 2% of the population. Most adults are married and live with their spouses (67%), and only a very few do not because of polygamous relationships (3%). About 10% of adults are widowed, divorced or separated. The rest are single and unmarried and a quarter of these (women) have children. These last civil status characteristics do not fit well with the description of social organization among "slum" dwellers which others (e.g., Legerman: 1975) have ascribed to the urban family and which was quoted in the previous chapter.

3.3 Similarity with Other Areas of the City

Besides knowing the characteristics of the population of St. Martin, it is rather important to have an idea of how many people in Port au Prince conform to the same characteristics, i.e., to what degree is the population of St. Martin representative of the whole urban population?

As will be seen in Chapter 5, the incomes of the families in St. Martin is about \$40. a month after deducting transfers to other households. The distribution of that income across the sample is 61% in the income class \$10. to \$40., 28% between \$41. and \$60., and 11% between \$61. and \$100. For the city as a whole the most recent estimate of

family income suggests that 86% of urban families, containing about 552,000 people falls into the range between \$10. and \$100. a month (Haiti: 1976a). The distribution across income sub-classes is respectively 72%, 17% and 11%. Even though the basis for estimating income for the urban population was quite different (i.e., based on rental payments), the distributions across the major income classes are rather similar. Still, it would be imprudent to suggest that St. Martin is representative of 86% of the population, because the latter is spread out all over the city and exhibits a much broader range of habitat characteristics and economic activities than those encountered in St. Martin.

The estimate of the number of people living in areas that physically resemble St. Martin, where rents are roughly equal, where distances to the central urban market are roughly the same, and where economic activities seem to be of very similar types totals about 330,000 or 52% of the urban population (Haiti: 1976a). Whether we take the lower figure or the upper one, and presupposing that the small sample accurately depicts life in St. Martin, then this study provides insights into many characteristics of the majority of urban residents.

3.4 The Data Base

The original information upon which this study is based was obtained by means of informal interviews in St. Martin with the adult members of 88 families which contain a total of 464 individuals. The interviews were carried out during the months of January, February and March of 1976, but the survey process really began in October of 1974.

In 1974 a number of field survey teams were created within a metropolitan planning and project identification program that united the resources of the National Planning Council (CONADEP), the Department of Public Works, the United Nations Centre for Housing, Building and Planning, and the private consultant services of Planning and Development Collaborative International, Inc. (PADCO). The responsibility of the survey teams, one of which consisted of this writer and a Haitian assistant, was to gather basic information on urban phenomena which would be relevant for the program's purposes. Though some of this research consisted of surveys of public and private documents on file in various parts of the city, most of the research took place in the "field". 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, residential rents, and so on. This was all pretty basic stuff.

These surveys were carried out all over the urban area and also required repeated passes through St. Martin, which by mid-1975 had been targeted by Government as a first priority zone for execution of a public upgrading demonstration program. Thus by July 1975 I had come to some understanding about the characteristics of the city and its people, had developed a survey method adapted to those characteristics in the local language of Creole, and was prepared to start exploratory investigations into the subject of the family economy.³

Between July and December 1975 experiments 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. I had long since recognized the sensitivity of answers to small nuances of phrasing and to the demeanor of interviewers. Thus it took six months of trial and error to work out a survey document and a personal survey method that would finally be used in 88 interviews for a period of three months. This is a very expensive method of obtaining information. On the other hand, the next time around will profit from the first experiments and gradually the cost of such surveys will decline.

The families which were interviewed were selected at random. Aerial photographs were used to mark off eleven districts with roughly equal populations in each. Within each district eight equidistant reference points were selected on the photograph. I then entered St. Martin and sought out each point. There, I faced north and selected the closest structure to the left. One household in any one of the dwelling units of the structure was picked out for an interview. This somewhat complicated method had to be adopted because even though I had spent considerable time in the community it was still difficult to pinpoint a location or area without the help of an aerial map. The maze inside limited vision so much that it was impossible to recognize a displacement of even five or six meters; and so ran a high risk of concentrating all interviews in a district to one small portion of that district.

The final interviews began with questions on the costs and

characteristics of housing, water supply, food and education. These issues were of vital concern to respondents and their inclusion at the outset of the interview in the context of the proposed Government upgrading program served to promote an atmosphere of mutual interest. Since responding to a question was regarded as a service being rendered to the interviewer, it was absolutely necessary to convince the respondents that such a service would also be in their own interest; otherwise there was little point in rendering something to a stranger which consumes time, effort and privacy. The subject matter of the first questions hit "soft" spots and set up the appropriate atmosphere quite well. At the same time, the answers to the first questions paved the way for the next set which dealt with work and income.

The first series of questions established that fact that families make 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 I found that questions like: Do you work? How often do you work? etc. invariably led nowhere since "work" meant a full-time salaried employment. As far as most respondents were concerned they were not "working" even though they were constantly earning money. I therefore had to address the money part first and the means of getting it second.

For each individual identified as an earner I pursued a line of open-ended questioning that delved into the accounts of the income-production process. For salaried workers I inquired after their wages; for traders I followed the accounts of their operations, as I also did

for manufacturers. 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 housing, water and school expenditures, and to whatever clothing and household goods to be seen in the house. If there was a severe mismatch between revenues and outlays (three cases), I asked for clarification and proceeded with another iteration from the top of the questionnaire. The second iteration provided sensible results.

I never asked for an estimate of household income. This was calculated on the basis of the answers given to the various questions. I did not ask the question partly because it seemed redundant, but more importantly because a direct query would upset respondents who generally were quite private about their economic status. The indirect route which was pursued did run up against some resistance, but considerably less than had been encountered with the direct income question during trials.

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, I came to the conclusion during trials that a questionnaire could not serve as the sole instrument for data gathering since almost every case had unique properties that would only 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 itself served the prime purpose of maintaining some rigor during the interviews by continually bringing lines of inquiry back to home base before they strayed too far off the subject.

The data gathered in this manner was stored in two forms. The first form is the usual one of responses to questions identified in the appropriate spaces of the questionnaire. The second form is a diary that combines some of the information in the spaces with the information jotted down on the margins and with any other observations and impressions which were noted during the course of each interview. The diary was prepared at the end of each day of interviewing. At the same time, coding of information susceptible to codification was carried out and allocated to two data banks: one for individuals and one for aggregate households. The coding process also included a number of manual calculations and checks on the reasonableness of the gathered data. The final code book which complements the diary (parts of which will be presented in Chapter 4), is attached in Appendix B.

Obviously the survey was not "objective". They never are. This very brief picture of the data-gathering process has been made explicit because I think that it is important never to take "data" at face value or to regard it as susceptible to being highly accurate in all situations. Besides the often-noted problem of inaccuracy inherent in surveys that rely on respondent memory and estimate, there is the less obvious problem that "data" are the result of human interaction and subject to a wide variety of influences within interviewers and within respondents, as well as between the two. Therefore our abilities to carry out useful analyses and to formulate good policies depend not

only on the availability of appropriate data susceptible to analysis, but also on an understanding of the meaning of each datum and the process by which it was obtained.

However limited in breadth, I think that the data is reasonably good and provides a valid facsimile of parts of family 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 is really necessary is that data stay within the bounds of reason and provide interpretations and results that are understandable and logical.

Notes: Chapter 3

1. The higher density figures suggest a covered space availability of 0.77 square meters or 8.2 square feet per person. By way of comparison, we can note that the residential space available in the high-rise flats of the Hong Kong resettlement program, usually regarded as a high-density operation, is on the order of 25 to 30 square feet per person.
2. To date there have been no major surveys published of the characteristics of the population in St. Martin. From this point in the text onwards I am using my survey data as the basis of the discussion. Although the sample of 464 individuals in 88 households is small, and may not be truly representative of the 20 to 60 thousand people who may reside in St. Martin, it is the only source that exists. I have therefore decided to use it and hope that it doesn't stray too far from presenting an accurate picture.
3. House to house surveys are probably the most difficult part of social analysis, and they are also the most important part because all that follows after the data is obtained is totally dependent on the validity of the answers, the interpretation of the answers at the time they are given, and the temperament of the interviewers. The validity of analysis depends heavily on who obtains the data.

In the final survey of St. Martin I decided to carry out the investigation directly rather than rely on others, such as university students, to do it. I made the decision because I had recognized that total reliance on survey documents gathered by persons who would subsequently not take an important part in the interpretation of the data was technically wrong. The interviewer, and his temperament, must fully comprehend the simultaneous link between the data which is being gathered, and the uses to which it will be put in subsequent analyses. The important element in this is the ability to recognize a situation that is intimately related to the subject of analysis, and the ability to pursue it fully even though the pursuit questions are not predicted and do not appear on the questionnaire. This is especially important in experimental situations where the investigation pursues new areas where relatively little precedence has been established.

I think that analysts should continually keep in mind that the compartmentalization of social analysis among two groups of people, the interviewers and the analysts, yields different objectives for each group. The former documents answers to set questions; the latter analyzes the documented answers. If the analyst bases his work only on the documentation, then he logically is carrying out an analysis of documents rather than an analysis of the original individuals or families whose answers filled the documents. The

analyst needs to assume that the individuals embodied in the documents are accurate representations of the individuals themselves. While this assumption can be made rather easily for a number of attributes, many other attributes, such as employment history, earnings, income, etc. are not so readily understood via the paper medium.

Chapter 4: Sources of Income in St. Martin

The households interviewed in St. Martin have average total incomes of about \$40. a month, and per capita incomes of about \$10. a month. By any standard of international comparison, these families are poor. But the ascription of "poverty" and the identification of a monetary measure for it is a superficial description. Although various kinds of images may come to our minds, such information does not convey a meaningful picture of what life is like for a family surviving on a budget of \$1.30 a day, and does not provide any direction for finding actions which might possibly serve to make things somewhat better. The purpose of the next three chapters is to convey an understanding of some aspects of this kind of life and to point the way to appropriate social intervention.

The objective of this chapter is to provide substance to the \$40. a month income statistic by describing and analyzing in detail the operational characteristics of individual and household income production processes. I underline the word "processes" because I think that one of the most important analytical perspectives which has to be adopted in this kind of study is recognition that a stated level of income is only a static outward manifestation of dynamic interactions between people and their immediate social and economic environments. In order to bring about changes in the income indicator it is essential to understand the properties of the underlying causes and effects and then to act upon them.

The examination of sources of income which follows places great emphasis on individual earnings obtained from the sale of goods and

services in the market, i.e., work or labor income. This is the predominant source of family revenues. The analysis of this source begins with a general overview of the labor market characteristics of the workers interviewed in St. Martin. This is followed by a more detailed focus upon each of three sub-groups of workers (i.e., sellers of labor services, traders and manufacturers), including some case by case accounting of the operations of certain small-scale enterprises. This in turn is followed by a brief discussion of the relatively small contribution of non-labor sources to family income, and then a final section which draws out the more important conclusions and implications of the information presented for policy. But first it may be useful to review the broader context of the content of this chapter.

The subject of income production or employment has had a revived international interest during the past few years and has more and more become a prime focus of the development strategies of many countries (Friedmann and Sullivan: 1972, Edwards: 1974, 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 have been 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 aimed at increasing employment and productivity within the subject activities (Nihan: 1976).

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

Fortunately, there is a body of relevant analytical literature which predates the invention of the "informal" sector and which offers insights of the kind necessary for depth of understanding and preparation of specific types of actions. While the breadth of these studies covers a smaller range of activities than those usually understood to fall into the "informal" category, their detailed presentations of the nature of handicrafts, cottage manufacturing and small-scale industry 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, BNB: 1958, Hoselitz: 1968) and in the export sector (Smith: 1952, Willis: 1955, Ho and Huddle: 1973). Finally, they propose various concrete policies and assistance programs based on the detailed background analyses (Elkan:

1959, Ligget: 1959, Stepanek: 1960, Weddell: 1960, US AID: 1962, Schumacher: 1965). One such work (Staley and Morse: 1965) even though caught up exclusively in the philosophy of modernization and industrialization which was in vogue several years ago, remains, I think, the "state-of-the-art" analytical work.

The examination of income activities in St. Martin which follows 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 in the preceding paragraph.

4.1 Work

The vast majority of families in the study, 85, generate part or all of their incomes from the earnings of individual members engaged in market activities. These workers are a heterogeneous group and their activities involve the sale of a broad array of services and commodities. In order to better understand the returns to these kinds of activity, it will become necessary to analyze the characteristics of different and relatively more homogeneous sub-groups. But before carrying out the disaggregate analyses, it is useful to look first at the general labor market characteristics of the whole set of workers.

4.1.1 Participation in Market Activities

During the course of the interviews I asked what the usual day-to-day activity or activities of each household member was during the previous year. The classification scheme which was adopted contained the following set of activities: earning money income, taking on basic

household management responsibilities, going to school, apprenticeship and other.¹ Persons regularly engaged in one or more of these activities were classed accordingly, irrespective of age (Table 4.1).

Table 4.1 Primary Activity of Individuals, by Age-Group

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

The data indicates that 8% of the age group between 6 and 11, 35% of the age group between 12 and 16, and 96% of those 17 and older were engaged in one form of economic activity or another. However, this definition of the economically active population includes both market activities (i.e., earning and apprenticeship) and non-market activities which complement and support market work (i.e., household management).

More specifically, 198 individuals participate more or less regularly in market work activities.² Out of a total of about 260 persons who are 14 years and older, this represents a labor force participation rate of 76%. This is not only considerably higher than the city

average of 66%,³ but also higher than is found in most other countries. The reason for the high rate is the participation of a large proportion of women (Table C.1).

The participation rate means that on the average there are 2.25 earners in each household, or that 43% of members in each household work. This proportion increases to 52% when household size is converted into adult equivalent units.⁴

4.1.2 Employment

As indicated in Table 4.2, the majority of workers, 64%, may be classed as self-employed. This group may be broken down into three categories: those who work alone, those who work with other household members and draw a proportional share of earnings, and those who regularly employ the services of others who are not in the household. Actually, 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 out of materials provided by the family). 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 is generated by the group than the 6.6% figure in Table 4.3 would suggest.

The remaining 36%, those employed by others in the conventional sense of the word, work for the most part for other households (e.g., domestic servants) and firms, either on a regular basis or on an

irregular basis such as casual day workers. In addition, a small number of these workers are employed by other members of their own household. They do not obtain a share of earnings, but rather receive a regular day wage, a piecework payment, a lump sum or the like. There were no cases of household members regularly helping out in direct market activities who were not paid in cash by one means or another.

Table 4.2 Classification of the Labor Force by Type of Employment

Type of Employment	Men	Women	Total
Self-Employed - works alone	23%	51.0%	36.7%
- works with another in the HH	22%	19.8%	20.9%
- employs others not in the HH	13%	0.0%	6.6%
Employed - works for others not in the HH	38%	26.0%	32.1%
- works for another in the HH	4%	3.1%	3.6%
Total	100%	100 %	100 %
(Number)	(97)	(101)	(198)

Unfortunately it is not possible to compare the sample characteristics with those of the city population directly. The Haitian Institute of Statistics (IHS) does suggest that for those persons it defined as "working" in 1970, 34% were self-employed, 2% were employers, and 63% were employees (Haiti: 1975a). So the sample, with double the proportion of self-employed, three times the number of employers and half the number of employees does not appear even closely representative of the general population.

However, the IHS at the same time indicates that something around 48% of the labor force was unemployed in 1970, so that many individuals classed as self-employed in the sample would have been classified as unemployed by the government survey.⁵

Therefore, the degree to which the sample employment structure conforms to the larger one from which it was drawn cannot be properly evaluated.

In order to get some idea, for comparative purposes, of the number of persons who were working and not working, I asked each individual whether or not he or she was engaged in an income-producing activity during the day of the interview, irrespective of whether or not that activity yielded any income that day. For the group classed as employed, those persons who were searching for work were considered not to be working. For the self-employed group, only those persons who were not actively buying, transforming, selling or carrying on any other sub-activity related to their income-producing activity were not working. (Here one can see the inherent difficulty in delimiting an "unemployed" statistic).⁶ The results indicated that about 30% of the labor force was not working, or "unemployed", at the time of the interview (Table C.2). This is much lower than the rate identified by the IHS.

There were a number of specific reasons why individuals were not working (Table C.3). More than half of the non-working total, and almost all men, simply had not found work. Those who usually were employees had not encountered any job offers, and those who usually were self-employed had not obtained any contracts to render services or to furnish goods. This reason for not working was less important for women.

A bit less than a third of these latter were ill and exhibited the symptoms of fatigue and fever that are usually associated with malaria, typhoid and gastro-intestinal disorders that are endemic in the poor areas of the city and which mostly affect children and the elderly. The women who cited illness as the reason for not working were almost invariably the older ones.

Another important reason cited by women was that they were about to give birth, or that they were nursing a recently-born infant. At first I was tempted to not include these women in the labor force, but it was clear from the interviews that the respondents regarded their non-working status as a temporary affair that was essentially the same as a seasonal lay-off. They indicated every intention of returning to work when the appropriate time came to do so. When asked when they expected to work again, their responses ranged from four months for those about to give birth, to one month for those who were nursing. Under these particular circumstances it did not seem correct to exclude them.

Among the remaining reasons the more important one was the inability to find sufficient funds to invest in goods, and thereby work in wholesale or retail trade activities.

Given the reasons for not working, it is clear that the 30% "unemployment" figure mentioned previously would fall substantially the longer the reference time period adopted. Individuals would find work, would recover from their illnesses, would cease nursing, and so on.

Without a specific purpose in mind, the time frame, and hence the unemployment rate (and the rate of participation) are arbitrary decisions. For the purpose of estimating income derived from work, it

seemed important that the individual have worked during the high market activity period (September to January) that immediately preceded the months over which interviews were carried out. If he or she had not worked at all during the period, but tried to, the calculation of their annual contribution to family income would register as zero. So it was more useful to limit the period of analysis to 27 weeks, suggesting a truer "unemployment" rate of 7% (Table C.4). But this "unemployment" measure does not really say very much in the context of St. Martin. The more relevant issue is the overall frequency of workdays encountered by the workers.⁷

In this regard, the data indicated that most workers are heavily engaged in income earning activities. Two-thirds work at least 26 days a month on the average, and almost three-quarters work 22 days a month (Table C.5).

The data also revealed that the workday tends to be long. Two-thirds of the labor force work at least nine hours a day, and over four-fifths work at least seven hours when a workday occurs.

Looking back over the data which has been presented, i.e., the size of the active population, the participation rates of men and women, the frequency of workdays and the hours of work effort placed into each workday, we are confronted with the unavoidable conclusion that families work very long and hard in order to earn money income.

4.1.3 Structure of Work Activities

One conventional method of defining the structure of work activities is to classify workers by their occupation. This classification scheme is straightforward enough for workers whom we may regard as

"employees", but is more difficult for those who are self-employed. These latter workers typically embody a number of occupations across the range of their entrepreneurial sub-activities. A rug manufacturer may be occupied during part of a day or week in machine or benchwork operations, and for the balance of time in the retail or wholesale marketing of his rugs. Across the entire time period he is the manager of his own enterprise. However difficult, it is nonetheless possible to break down the labor force in terms of "primary" occupation so that comparisons can be made with other data sources.

Table 4.3 describes the occupational classification of workers, together with the 1970 occupational breakdown of the employed work force surveyed by the IHS.

Table 4.3 Occupational Classification of Workers

Occupations	MEN		WOMEN		TOTAL	
	Sample	City	Sample	City	Sample	City
Professional, Technical, Managerial	8%	12%	--	7%	4%	9%
Clerical and Sales	9%	28%	51%	32%	29%	30%
Service	10%	10%	22%	41%	16%	26%
Processing	1%	37%	8%	15%	5%	25%
Machine Trades, Benchwork	51%		19%		35%	
Structural Work	10%		--		5%	
Other	11%	13%	--	5%	6%	10%
Total	100%	100%	100%	100%	100%	100%
(Number)	(97)*	--	(101)*	--	(198)*	--

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

Within the sample we can see that men are heavily concentrated in machine, bench and structural occupations, and women in sales and service occupations. This reflects some of the historically-defined division of labor between the two sexes which was described in Chapter 2. In rural areas men are engaged in primary production and women in the marketing of the products, and the sample reflects some of that division. However, we should note that most women do not market the products that the men manufacture. Men usually market their own products, even in the cases where the men and women are of the same household. The division of labor is not one between production and marketing as the occupational classification might suggest, but between the marketing of one set of goods by women and another set by men.

In comparing the total distribution for the sample and for the city as a whole 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 another part is explained, as mentioned earlier, by the large (48%) unemployed labor force defined in the IHS survey which would not count workers with relatively infrequent workdays.

Some of the difficulties encountered by using the occupational classification scheme can be circumvented by adoption of an industrial sector classification, certainly insofar as the self-employed workers are concerned. Even so, it has the inherent drawback of not being able to deal with workers whose activities overlap two or more sector categories. The sectoral classification of workers contained in Table 4.4

nevertheless provides a similar picture of the structure of work activities as the preceding one based on occupation.

Table 4.4 Industrial Classification of Workers

Sector	Men	Women	Total	
	(Sample)	(Sample)	(Sample)	(City)**
Construction	10%	1%	6%	6%
Manufacturing	46%	24%	35%	12%
Transportation and Utilities	6%	—	3%	2%
Wholesale Trade	3%	3%	3%	} 18%
Retail Trade	5%	58%	31%	
Services	22%	13%	17%	54%
Public Administration	3%	—	2%	8%
Other	5%	1%	3%	—
Total	100%	100%	100%	100%
(Number)	(97)*	(101)*	(198)*	—

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

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

The two right-hand columns of the table compare the sector distribution of workers in the sample to an estimate of the sector distribution for the whole city.⁸ The differences in the proportion of

workers in manufacturing, trade and services are not as great as they might seem. In the case of trade, only women who operated in and around the official markets of the city and those who worked in fixed commercial outlets were included. Those who were involved in trade anywhere outside the markets were excluded, and this severely underestimates the number of traders in the city. Also, a large number of individuals were classed into the services sector who were actually involved in small-scale manufacturing such as dressmakers, tailors, metal workers, woodworkers and so on. So the difference between the sample distribution and the city estimate in these two sectors is considerably smaller.

This last issue is a very important one. As the scale of enterprise becomes increasingly smaller (down to the level of one individual) there is a tendency to class workers into services or trade rather than manufacturing. Hence self-employed tailors, dressmakers, shoemakers and the like usually become excluded from the manufacturing sector. But the industrial classification has no inherent capacity to distinguish among different scales of operations. So, in Table 4.4, independent workers were classed in the same manner as would have been done for larger establishments engaged in basically similar operations. Under this assumption there is clearly considerably more manufacturing and trade activity going on than the city-wide data would lead us to believe.

Even though it has been possible to structure workers in terms of occupation and sectoral concentration, there are, as has been mentioned, some serious limitations placed upon them by the multi-occupational and multi-sectoral nature of individual activities. In St. Martin, the

division of labor has not yet reached the degree of specialization where even the broad classifications which have been presented yield clear disaggregations of the structure of economic activity. A more basic type of categorization is necessary.

The concept that all workers are self-employed and that their market activities are simply the sale of goods and services helps to avoid the problems mentioned. Within this framework it can be assumed that everybody sells something, so the "sales" attribute is common to all workers and does not serve as a criterion for distinguishing among them. The criterion for defining what they do is the identification of what they sell, i.e., services or goods.

Table 4.5 presents a first attempt to break workers down into three groups based on this criterion. In the first category are workers who sell various forms of labor services which are not embodied in any goods. These include professionals, technicians, construction workers, salespersons, factory workers and so on. In the second category, trade, are all workers who sell goods which have been bought, but have not been transformed substantially inside the household; where the value added by the worker is derived from marketing, bulk-breaking, etc. The third category, manufacturing, contains all persons who are involved in selling goods which undergo major transformation in the household.

Table 4.5 Classification of Workers by type of Output

Type of Output	Men	Women	Total
Service	56%	30%	43%
Trade	6%	47%	26%
Manufacturing	38%	23%	31%
Total	100%	100%	100%
(Number)	(97)*	(101)*	(198)*

* Includes all workers defined as being in the labour force

There is a clear similarity between this kind of breakdown and the sector classification described earlier. However, the two methods are not the same. The sectoral classification imposes an attribute of a market model upon the worker while the output classification above imposes an attribute of a household model upon him. While the types of output classes that are contained in Table 4.5 can certainly be improved upon, and while there are hazy areas of distinction (i.e., at what point does a traded good undergo sufficient transformation to become a manufactured good?), there is no problem in dealing with employed and self-employed workers, and there is no overlap. The usefulness of this output classification is that it provides distinct and mutually-exclusive sub-groups of workers which can be examined independently of each other. This more detailed examination will be presented in subsequent sections of this chapter.

Another useful property of the output orientation is that it leads quickly and logically to another set of questions concerning worker-market interactions; questions which are more typically posed in connection with the activities of larger enterprises rather than in connection with individuals. It is of interest to know, for example, how sales transactions are conducted (Table C.6), who are the immediate purchasers of outputs and suppliers of inputs (Table C.7), what is the national-international economic role of worker production (Table C.8), etc. Of more immediate interest to us here is the question of the general origin of "final" derived demand for the goods and services produced by the workers. This information is contained in Table 4.6.

Table 4. 6 Origin of Demand for Worker Goods and Services

Source of Demand	Men	Women	Total
Urban, lower income groups	18%	48%	33%
Urban, all income groups	37%	20%	28%
Urban, high income groups	12%	13%	12%
Urban, high income groups & export	13%	5%	9%
Export	7%	10%	9%
Urban & Rural Groups**	10%	3%	7%
Rural Groups	3%	1%	2%
Total	100%	100%	100%
(Number)	(97)	(101)	(198)*

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

** Includes Government services which are national in scope.

The table makes it evident that most of the demand for worker output is concentrated in the city, and most of that is located within the lower income groups which call especially upon the output of women traders. The effective absence of a rural-based demand can be explained by a number of things. On the supply side, the workers do not produce goods and services which could be of much use to rural households. This could result from inadequate information or inadequate marketing networks between city and country. But this is unlikely given the large number of traders who continually move between rural and urban areas when marketing agricultural produce. A better explanation can be traced to what essentially amounts to a level of purchasing power among rural

groups so low that the demand that does exist as a result of the sale of rural products does not make it as far as the city, or at least as far as the workers of St. Martin. Given that the rural population is five times greater than that of Port au Prince, the former's effective demand for urban inputs must be very low indeed. On the other hand, we can note that foreign demand for worker output is not insignificant. But the important observation to be made here is that workers are well-integrated into all parts of the urban economy.

Another important dimension of worker-market interaction is the spatial structure of income-earning activities in the city. This set of characteristics will be discussed in detail later in the chapter. A general overview of the spatial organization of activities is, however, presented in Appendix D.

4.1.4 Capital

In Table 4.5 we have seen that most workers, and women in particular, interact with the market by exchanging goods, either transformed in the household or simply traded. In essence then, most of the workers are capitalists. The majority of these latter are industrialists in the usual sense of the word.⁹

The scale of operations, as is clear in Table 4.7 below, is very small compared to a few large firms in Port au Prince, but that does not change the inherent capitalist nature of worker output.

Table 4.7 Replacement Value of Working Capital

Value of Capital (\$)	Proportion of Workers in each Category
0.50 - 5.00	28%
5.01 - 10.00	20%
10.01 - 15.00	11%
15.01 - 20.00	10%
20.01 - 30.00	10%
30.01 - 40.00	8%
40.01 - 60.00	7%
60.01 or more	6%
Total (Number)	100% (118)*

* Excludes most sellers of labour services

The replacement value of operating capital contains the current prices of tools, finished goods, raw materials, cash in hand, and equipment of each individual. It is of course an underestimate because part of the housing cost (even though it is a fixed cost) and the cost of food that are required production inputs are not included. Nevertheless, Table 4.7 does give a first indication of the scale of operations, the distribution of the scale across the group, and it does make explicit the importance of capital in income-producing activities.

4.1.5 Earnings

Having discussed the extent of market participation of household members, the frequency and intensity of work, the structure of work activities and the physical scale of income-producing operations, we now come to the central issue of the earnings which workers obtain as a result of their various styles of interaction with the market environment.

Daily earnings range from a minimum of \$0.10 to a maximum of \$10. The average for a day of work is about \$1.30, which is equal to the theoretical official minimum wage for workers covered by social insurance legislation (9% of the sample). This average ranges from \$1.45 during the high economic activity season (September to January) to \$1.15 during the low activity period (February to August). The average is, however, a misleading indicator of the earnings situation of the workers.

Table 4.8 makes rather clear that 74% of the workers obtain daily earnings that are less than the average, and that about 45% earn less than half the average. Evidently, the averages mentioned above are biased by relatively few workers who obtain relatively high earnings.

Table 4.8 Daily Earnings - Annual Average

Earnings Category (\$)	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%
Total	100%

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

These earnings figures are those obtained during a day of work. But as indicated earlier, many individuals work less than the maximum of 30 days a month, and a quarter work less than the 22 days which constitute 5-day weeks. In this circumstance monthly earnings are a better measure of the income which results from work than daily earnings. These monthly earnings 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.

Although daily and monthly earnings are seasonally stable for the majority, more workers are subject to month-to-month variations than are subject to day-to-day variations (Table C.9). This difference represents the effect of the seasonal fluctuation in the frequency of workdays.

When we look at the distribution of monthly earnings (Table 4.9), we find that the proportion of workers who earn less than the average is 60%, and who earn less than half the average is about 36%. Both these indicators are lower than those presented for daily earnings, and one explanation is that taken as a whole, workers with low daily earnings tend to work more often than workers with higher daily earnings.¹⁰ The end result of the various ways of combining daily earnings and frequency of workdays is that there is a very broad, i.e., unequal distribution of monthly incomes across the sample of workers. Significant numbers of workers appear in each of the earnings classes.¹¹

The data variables which were gathered in St. Martin can have only limited usefulness in explaining these observed differences in earnings. Other indicators such as specific age, education, language capability,

Table 4.9 Monthly Earnings - Annual Average

Earnings Category (\$)*	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%
(Number Reporting)	(174)

* Excludes earnings from secondary occupations.

literacy, migration history, indices of selling skill, etc. were not obtained, and do have effects upon earnings. Furthermore, given that most workers are "self-employed" in the usual sense of the word, an explanation of earnings differences is akin to an explanation of the profit differentials of firms whose activities and scales span many sectors, markets and sizes of operation. Under these circumstances it becomes difficult to arrive at clear-cut statements which pinpoint the reasons behind the differences in earnings of some 200 heterogeneous individuals. Still, the characteristics of work activities presented earlier do allow some headway to be made into this question. The results indicated in Table 4.10, where daily and monthly earnings are each associated with the work characteristics introduced earlier.

The first dimension which the table contains is sex. Men earn more than women both on a daily and on a monthly basis. The ratio of the differences in earnings is more pronounced on the daily account, and one can see that women work more often than men and thereby bring in monthly earnings closer to that of men. Although the difference in earnings is an interesting observation, it is not a useful one. The earnings difference between men and women is more likely caused by other attributes such as occupational and industrial specialization amongst men and women than by "pure" effects of being of one sex rather than another.

The employment classification reveals that both on a daily and on a monthly basis employers earn considerably more than other types of workers; attesting perhaps to a market advantage accruing to individuals with entrepreneurial talent and relatively important amounts of

working capital. The next highest earnings group, which is considerably below that of the first, are those who are employed outside the household, and who usually are employees of government, commercial enterprises and factories. Close to this group are the own-account workers who work alone with relatively limited amounts of capital. The lowest earnings are obtained by individuals who work with or are employed by others in the household.

Table 4.10 Variations in Earnings, by type of Worker Attribute

Category	Average Daily Earnings	Average Monthly Earnings
Sex:	(F=26.16)	(F=13.07)
-Men	1.80	29.00
-Women	.70	17.00
Employment Classification:	(F= 3.50)	(F= 8.60)
-Self-Employed, works alone	1.20	22.00
-Self-Employed, works with another in HH	.90	19.00
-Self-Employed, employs others not in HH	2.50	55.00
-Employed, works for others in HH	1.40	23.00
-Employed, works for another in HH	.60	10.00
Occupational Classification:	(F= 9.61)	(F= 1.51)*
-Professional, Technical, Managerial	3.90	35.00
-Clerical and Sales	.90	24.00
-Service	.70	16.00
-Processing	.80	20.00
-Machine trades, Benchwork	1.20	23.00
-Structural Work	3.30	37.00
-Other	1.80	28.00
Industrial Classification:	(F= 6.06)	(F= 5.64)
-Construction	3.30	37.00
-Manufacturing	1.10	23.00
-Transportation and Utilities	2.10	42.00
-Wholesale Trade	2.30	58.00
-Retail Trade	.60	17.00
-Services	1.80	17.00
-Public Administration	2.40	54.00
-Other	.60	14.00
Output Classification:	(F= 7.06)	(F= 0.71)*
-Service	1.70	25.00
-Trade	.80	22.00
-Manufacturing	1.00	21.00

* not significant at the 0.05 level

Although the occupation of workers indicates that professionals and workers in structural trades have significantly higher daily earnings than others, the earlier observation that workers with low daily earnings work more often has the effect of equalizing monthly incomes. So while the occupation of a worker may specify what he or she may earn during a day of work, it has less usefulness in specifying the ultimate income which will be obtained over an extended period of time.

We face a similar problem when we turn to the industrial classification. While there are significant differences between groups on both a daily and monthly basis, a careful examination of the table reveals that the rank ordering of earnings of workers in different sectors change drastically between the day and the month.

With regard to the classification according to type of worker output, it is apparent that those who sell labor services do considerably better than traders and manufacturers on a given day. However, these daily earnings differences are not reflected in monthly earnings. Labor sellers, on the whole, work less often than sellers of goods.

Besides the nominal classifications contained in Table 4.10, there is one important metric or ordinal worker attribute which was introduced earlier and which has an impact on earnings. This is the replacement value of operating capital. However, although the correlation of capital and earnings is significant for both the day and the month, it is also not a clear-cut indicator of income.¹²

The apparently weak abilities of the variables presented to provide clear explanations for income differentials should not be surprising. There is a great deal of heterogeneity among the 200-odd workers

which we have been looking at and, as indicated earlier, some kinds of variables are more applicable to certain groups of workers than to others. In principle each worker is unique and his or her earnings result from a set of unique characteristics. This implies that we ought to examine each and every worker on a case-by-case basis in order to obtain more complete knowledge about the income-production process of St. Martin families. For all its potential merits, such an examination would be far too lengthy an undertaking.

Nevertheless, some kind of disaggregation is necessary and some case examples seem worthy of presentation if we wish to get to the heart of the matter and arrive at a meaningful understanding of the process of work and the income which it obtains. This more detailed examination is contained in the following three sections which treat separately the activities of sellers of labor services, traders and manufacturers (Table 4.5).

4.1.6 Services

Eighty-six individuals (43% of all workers) earn income by selling their labor services. Of these, 77 provided useful information about the work which they did during the six-month period preceding the survey. The type of activity in which each person was engaged is listed alphabetically in Table 4.11, where it becomes evident that workers are involved in the sale of a broad range of services: 35 to be exact.

The list of activities is interesting. It reads like a sample of urban activities that are likely to be found, in varying proportions, in almost all cities of the world. 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 and electronic appliances; and the degree of specialization that exists within these technical and historical ranges makes it difficult to state simple generalities about these workers and the market in which they operate.

Table 4.11 Average Earnings of Service Sellers

Services Sold	Daily Earnings (\$)	Average Number of Work Days Per Month	Monthly Earnings (\$)	Ratio of High to Low 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	71.00	3.0
12 Carpentry - Buildings	4.00	20	80.00	*
13 Carpentry - Furniture	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	2.30	22	51.00	*
17 Customs Broker	3.30	15	48.00	1.5
18 Coffee Washer	1.00	22	22.00	*
19 Coffee Washer	1.15	25	29.00	1.3
20 Coffee Washer	1.15	25	29.00	1.3
21 Day Worker	1.30	1	1.90	3.0
22 Day Worker	1.30	1	1.80	3.0
23 Day Worker	1.30	1	1.80	3.0
24 Day Worker	.20	7	1.40	2.0
25 Dental Technician	2.70	22	59.00	*
26 Doctor - Priest	9.50	5	48.00	*
27 Doctor	2.40	5	11.00	1.9
28 Doctor	2.50	7	18.00	1.5
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	2.5
42 Driver - Public Transport	4.50	14	63.00	4.0
43 Electronic Repairs	2.50	12	29.00	1.4
44 Embroidery	.40	30	12.00	*
45 Embroidery	1.30	26	34.00	*
46 Embroidery	.80	13	10.50	7.0
47 Fire Protection	2.30	26	60.00	*
48 Games of Chance	1.10	26	29.00	1.8
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	3.0
55 Mason - Master	5.00	5	27.00	1.2
56 Mason	.80	13	10.00	2.7
57 Mason's Assistant	1.30	6	8.40	1.1
58 Mason's Assistant	1.30	3	3.40	1.3
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	1.3
63 Numbers - Lottery	1.40	15	21.00	2.0
64 Numbers - Lottery	1.40	15	21.00	2.0
65 Painting Master-Houses	5.00	20	100.00	*
66 Painter - Houses	1.30	4	5.00	2.7
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	3.0
73 Ship's Captain	3.50	20	70.00	*
74 Ships Crewman	1.00	20	20.00	*
75 Shoemaker	2.30	NR	NR	NR
76 Shoe Repair	1.20	27	32.00	8.1
77 Waitress	1.40	30	42.00	*
Average	1.72	18	25.40	1.7

* The ratio is 1.0, meaning that earnings are seasonally stable.

4.1.6.1 Places of Work and the Search Process

As indicated in Table 4.12, the locations of places of work are rather widely distributed. About 15% are located either at home or in the immediate neighborhood of St. Martin. Thirty two percent (32%) are located in the "downtown" area of the city. Another 20% are located 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. Finally, 20% work all over the urban area, and these are mostly construction workers.

Table 4.12 Places of Work 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%

St. Martin is situated more or less at the central point between most workplace locations. In this kind of situation it is rather evident that land-use and/or housing policies and projects that incorporate actions to move workers, as a group, in any given direction will at best shorten work-trip distances for some workers and lengthen them for the majority.

Since on any given day a number of workers will not be working, the locations contained in Table 4.12 also represent the places where individuals search for work. The day workers, for example, will leave home at about 5:00 a.m. to seek work in the downtown area, and will return home at 10:00 a.m. if they haven't obtained any work. They do not search longer because they say that all jobs are taken by that time. 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 in the hope of an offer at opening time, which is between 7:00 and 7:30. If they have not obtained anything by mid-day, they return home. Also, work offers are made only on Mondays and Tuesdays, so they would be idle the rest of the time, hoping that someone whom they know who is working for a factory can intervene on their behalf. At the opposite extreme, the construction workers will meander, tools in hand, from job site to job site all over the city and from dawn to dusk. So there are varying degrees of temporal and spatial intensity in the job-search process. One thing that this does seem to indicate is that workers understand the activity cycles and the spatial characteristics of the markets for their services very well. Inadequate job market information may not really be a problem.

4.1.6.2 Employment and Earnings

A bit less than three-quarters of the workers can be classed as "employees" in the conventional sense, though the nature of "employment" is sometimes quite different than what we are used to 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 owners. His earnings are derived from any small change which customers might decide to give him; though they are not obliged to give him anything. The store which ostensibly "employs" him only provides the right of access to the interior and the right to render a service there. Similarly, a waitress who works in a restaurant is not paid directly by the owners, nor directly by the customers. Service charges are added to all bills and the restaurant workers on a given shift share equally from the total service charges collected during that shift. Again, the "employer" is essentially granting a right of service and administers and allocates to workers only those monies collected for that service. Leaving aside the theoretical arguments presented earlier concerning the usefulness of the employed/self-employed classifications,⁶ it is still difficult to distinguish clearly the point where employment begins and self-employment ends. To simplify matters, the porter, waitress and other workers in similar situations were defined as "employed".

The remaining workers are self-employed and include master craftsmen in the construction specialties, a customs broker, herbal medicine practitioners, public transport vehicle drivers, an electronics repairman, gamblers and lottery ticket sellers, a prostitute and several others.

Examination of earnings reveals that the self-employed earn significantly more (\$2.80/day and \$29.00/month) on the average than employed workers (\$1.40/day and \$23.00/month). This difference can be explained in part by the fact that one group of workers operates more independently than others, i.e., they are entrepreneurs in the usual sense. However, the differences also arise from a number of other attributes which separate the two groups. Obviously, working capital is used only by one group. Also, the specific occupations are different, as are the industrial sectors with which the workers are associated. Clearly, earnings vary as a result of many simultaneous factors, and these have to be examined carefully. In addition, noting that the ratio of monthly earnings for the two groups is quite different than the ratio of daily earnings, then the frequency of workdays is clearly another important determinant of income.

Indeed, on the day of the interview half of the service sellers 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 a third of these workers had worked during the previous week, half during the previous month, and four-fifths during the previous six months. If obliged to state a rate of "unemployment", then it is 20%, and it is considerably higher than the 7% figure established earlier for all the workers in St. Martin.

The average number of days of work each month is 18, and the median is 22. So half the service sellers work less than 22 days, and this again is quite different than the 25% value for all workers. However, a

a suggestion that 50% of the workers are less than "fully employed" would be highly misleading.

If we dissect Table 4.11 and pull out all those workers who work less than 22 days and who earn less than the group average of \$25.00 per month, we arrive at 24 workers or 30% of the total. The other 20% of workers earn more, and often considerably more than the group average while working much less than 22 days. These latter individuals could obviously earn more if they worked more, but they are not the central object of concern in the usual discussions of "unemployment".

Of the 30% who work less and earn less, three persons cannot work more often because of the specific nature of their work. The sellers of numbers (i.e., the unofficial lottery) cannot sell more numbers than they have available for sale between drawings. The ship's crewman cannot work when the ship is not at sea. Two additional workers, the herb doctors, ought not to work more since it implies that more clients ought to get sick. Therefore the number of persons who could reasonably be placed inside an "under-employment" category is about 25% of labor sellers, and this represents about 10% of the total of 198 workers.¹³

Another 25% of individuals work 22 days or more and earn less, often considerably less than the average. Evidently the notion of "under-employment" does not serve to explain all of the ways in which the market for workers manages to provide low average earnings.

Within this latter group who work often and who earn little, a third are domestic servants in the homes of the well-to-do.¹⁴ Almost all the rest work for the so-called "modern" enterprises of manufacturing (31%), government (16%), and commerce (16%); and this observation

places some doubt on the general presumption that employment in the "formal" or "modern" parts of the economy invariably yields higher earnings than in other parts.

In manufacturing, for example, the bead collar assemblers, two embroidresses and the knitter all work for factories, but they work at home on consignment. Since they do not work inside the plant, they are not covered by social insurance legislation and so their daily earnings are only one-half to one-tenth of the official minimum wage. The wood sculptor, another example, 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 can be paid \$0.50 per day because he is not covered by minimum wage laws "outside" the plant. These cases are classic examples of the "put-out" system developed in industrial countries over a century ago (Staley and Morse: 1965).

In this manner factories can expand production without substantially expanding their labor bills or physical plant. In fact, the workers do not register on the payroll of the plant, but rather on the accounts for purchases of input goods. 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 some analysts believe.

These practices also drive wages below the minimum rate for workers inside the plants. The coffee washers, for example, should earn the stated minimum of \$1.30 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 stipulate the "half-day" as being six

hours, and thereby save about 40% in per unit labor costs. Employers use this technique most often during peak production periods when export coffee prices are unpredictable and when they need to cushion themselves against potential losses resulting from payment of high local prices. When times ought to be good for workers because demand is high, it turns out that their earnings decline.

The workers know what their situation is, complain about it, and realize quite correctly that there is very little they can do to change matters. The public sector itself operates in much the same fashion as private establishments.

Three of the building maintenance workers, for example, are employed at an air force base. They earn \$0.60 per day; not because they work half-time, for they do put in eight to ten hours each day, but because they go to school at night and hence are not "true" workers. They are paid out of petty cash. Again, 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 and who is on the payroll of the department earns \$1.30 per day.

On the other hand, the more sophisticated workers (the clerks, the machine operators, the transport workers, most of the construction workers, etc.) earn more than the official minimum day wage whether or not they are active in "modern" enterprise.¹⁵

Since it is evident that the usual assumptions about the employment practices of "modern-formal" enterprises do not exactly correspond to actual practices, this type of descriptive vocabulary is not particularly useful. The variable classifications which are in fact helpful

are the ones derived from the more rigorous tradition of market analysis: occupation and sectoral classification.

These two forms of classification, as well as the employment-self-employment breakdown discussed briefly above, are contained in Table 4.13, where the daily earnings and monthly incomes of sub-groups of workers are associated with sub-classes of each of the three variable categories.¹⁶

The Table suggests that the important determinant of daily earnings is the occupation, or the skill which a worker offers for sale. Workers who sell professional, technical and managerial services (mostly self-employed) do best on a given day. They are followed by workers in the construction trades. After a rather large drop, we find clerical and sales workers of government and large commercial enterprises, and then the machine trades and benchwork trades associated with industrial enterprises. The lower earnings of this last group, \$1.45, result from having some workers well above the average and some others, the "outsiders", well below. The lowest earnings category is filled by service workers and the \$0.75 per day figure reflects the weight of the large number of servants in the group. In these last two categories there is considerable variation in earnings within each group.¹⁷

If we shift attention to monthly earnings, which is the measure of income derived from interaction with the market, we can note an equalizing tendency among earnings within the employment classifications, some occupational classifications and industrial classifications.

The industrial sector classification, which has little significance in explaining daily earnings, now takes on greater importance in explaining

Table 4.13 Variations in the Earnings of Service Sellers, by Type of Worker Attribute

Category	Average Daily Earnings	Average Monthly Earnings
Employment Classification	(F=2.61)	(F=3.25)
-Self-Employed	2.80	29.00
-Employed	1.40	23.00
Occupational Classification	(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
Industrial Classification	(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.

monthly income. The reason for this is that the number of workdays for each worker is more associated with the sector wherein he or she works, and less with the occupation which is pursued.

Summarizing these observations, what we have found is that work income depends on: entrepreneurial ability (i.e., a self-employed worker is likely to earn more); the skill or occupation which determines the day wage; the sectoral demand for use of the skills which determines the number of days of work; and the institutional arrangements such as hiring practices which affect the preceding three determinants. In other words, the determinants of income here are the same as would be found in any more or less competitive economy anywhere else in the world.

4.1.7 Trade

Fifty-one persons, mostly women, were regularly involved in trading activities. Complete information about 41 of them and partial information about the other ten was obtained during the survey. As indicated in Table 4.14, the variety of goods sold by these workers is quite large and consists of 29 different combinations of items. Although seasonal harvests may modify the combinations of agricultural products, such as the addition of sugar cane or mangoes to the stock of goods, traders are relatively conservative and do not substantially change the set of items which they deal with over 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 another set. The risks of losing a part or all of one's operating capital is substantially higher in any market for which little prior information (and experience) is to be had. The dangers are even greater for those who enter trade for the first time.

4.1.7.1 Spatial Organization of Marketing Activities

Table 4.15 indicates that four-fifths of traders purchase goods in and around the central market area. Those that deal with food and related products purchase inside the market area, and those that deal with durables purchase on the market's periphery. The only other relatively important location is in the neighborhood market of St. Martin.

By comparing the places where goods are bought to the places where goods are sold, we can sense very clearly the spatial dimension of the marketing process.

Table 4.14 Average Earnings of Traders

Traded Goods	Daily Earnings (\$)	Average Number of Work Days Per Month	Monthly Earnings (\$)	Ratio of High to Low Monthly Earnings
1 Grain	1.00	26	26.00	2.0
2 Grain	1.40	26	37.00	2.6
3 Grain	.70	24	17.00	*
4 Grain, Charcoal	.50	30	15.00	2.0
5 Charcoal	2.80	26	74.00	2.0
6 Tobacco	.90	26	23.00	1.2
7 Bananas	2.70	26	69.00	2.3
8 Bananas, Potatoes, Yams	.90	26	23.00	1.2
9 Eggs	.30	30	9.00	*
10 Sugar	.70	26	18.00	3.5
11 Sugar, Cooking Oil	.60	28	17.00	2.0
12 Sugar, Biscuits	.30	27	8.00	*
13 Sugar, Biscuits, Coffee (Prep)	.30	30	9.00	*
14 Sugar, Butter, Rum	.20	30	6.00	1.5
15 Fish	1.30	26	34.00	2.4
16 Fish	1.30	26	34.00	2.4
17 Biscuits	.20	30	6.00	*
18 Biscuits, Tea (Prep)	.70	26	18.00	1.3
19 Cooking Oil	.90	26	23.00	4.2
20 Laundry Soap	.80	26	21.00	*
21 Laundry Soap	.20	25	5.00	*
22 Hand Soap, Kitchen Utensils	.30	23	7.00	2.0
23 Hand Soap, Face Powder, Linen	1.10	26	29.00	4.0
24 Linen, Handkerchiefs	.50	28	14.00	5.2
25 Handkerchiefs	.50	28	14.00	5.2
26 Underwear	.50	26	13.00	*
27 Underwear	1.40	26	37.00	2.8
28 Underwear	.20	20	4.00	1.7
29 Cloth	.60	27	16.00	*
30 Tablecloths-Plastic	.30	27	8.00	5.0
31 Dishes, Glassware	.40	25	10.00	1.6
32 Cigarettes, Candies	.50	26	13.00	1.6
33 Sugar Cane, Miscellaneous Goods	.70	30	21.00	1.3
34 Sugar Cane, Miscellaneous Goods	.70	30	21.00	1.3
35 Miscellaneous Goods	1.00	30	30.00	*
36 Miscellaneous Goods	.50	30	15.00	1.5
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	1.6
41 Construction Poles	5.80	26	151.00	*
	0.84	27	22.40	1.9

*The ratio is 1.0, meaning that earnings are seasonally stable.

Table 4.15 Spatial Characteristics of Trader Activities

Location	% of Workers		
	to obtain factor inputs (goods)	To store goods	To sell goods
At home	2%	83%	29%
St. Martin area	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%

Thirty five percent (35%) of the traders use the central market area as their place of sale. Although some are involved in the sale of food, most sell non-food items purchased just outside the market. Clearly, traders expect to obtain a significant marginal increase in earnings as a result of transferring goods from one locale to another. This is an obvious characteristic of marketing, but the important aspect is that the transfer distance here cannot be more than 100 meters.

The implied sensitivity of earnings to small changes in locale is an important observation. It suggests that while time may have relatively less value than other factors, such as capital, it is a scarce resource nonetheless. This is evident in the behavior of traders who have given amounts of working capital and who must invest their time carefully at specific locations. It is also evident in the behavior of customers who presumably are willing to spend more buying a good from a trader than going 100 meters away to buy it from a store at the same price which the trader paid.

In this we can see the potential loss in efficiency, productivity and earnings that would arise as a result of disruptive harassment, and also the care which must be taken in any direct or indirect actions to significantly modify the physical space where marketing activities take place.¹⁸

After the central market, the next important location of sale is at home, where traders sell limited amounts of miscellaneous goods (macaroni, carbonated beverages, canned and powdered milk, palm oil, tobacco, matches, cigarets, rum, etc.), biscuits and sometimes sugar. The sale of almost all these goods involves no bargaining because the prices are

more or less well-established. These women earn less as a group and use less capital than others. They are basically tapping a residential market for goods which can be obtained anywhere in the city at the same unit prices. Their earnings per unit of capital therefore do not depend so much on sales skill or on locational advantage in the city so much as upon the locational advantage of their homes within the St. Martin neighborhood. All the women who sell at home sell in front of houses that are located in principal pedestrian paths that criss-cross the area. In other words, these women operate in the same manner as small neighborhood stores that can be found in the residential areas of any city.¹⁹

Another important observation in this spatial analysis is that 83% of traders store their goods at home.²⁰ This underlines the size of the potential impact which disasters such as fire, floods, rodents, etc. can have upon a family's ability to generate income.

4.1.7.2 Employment, Capital and Earnings

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

On the day of the interview about a fifth of the workers were not working. Of these 40% were still nursing recently-born infants, 30% were temporarily ill and manifested symptoms of fever and fatigue, and the rest were not working because they did not have funds with which to restart. In this last group were women who had lost their capital

through a number of bad market transactions where the speculative price they paid was in excess of the subsequent price at which they could sell, 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, however, had been working at some time during the previous six months.²¹

The average value of the total stock of goods which each worker deals with 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. So the median value of \$10.00 per worker is a closer approximation of the average scale of operations. The distribution of capital among the workers is indicated in Table 4.16.

Table 4.16 Working Capital of Traders

Size of Capital (\$)	% of Workers
less than 1	8%
1 - 5	27%
6 -10	21%
11-20	19%
21-30	8%
31-40	9%
41-50	4%
51 or more	4%
Total	100%

Since many workers were inactive because they had not been able to find start-up funds over a long period, it is apparently difficult to obtain capital with which to engage in trade. The usual sources of capital for women are their own savings from other forms of work. However, even presupposing that they had been working prior to attempting to enter into trade, Table 4.11 suggests that the earnings from the sale of labor in domestic service and consignment factory work, if used to support other family members, could not easily provide the opportunity to save even \$5.00 or \$10.00. Another source of capital is the women's parents and sometimes other members of the immediate family such as a working child. Husbands 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 will be seen in a later 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 assets worth about \$30.00. But if she had assets of \$30.00 there would be little point in borrowing. Therefore, women who must borrow funds and who have no marketable assets must obtain unsecured loans where the interest rate runs between 50% and 100%.

A \$5.00 investment in trade will yield an average gross return of about \$14.00 at the end of one month. At the lower interest rate a woman would have to repay the lender \$7.50 and that would leave her \$6.50 to allocate between further reinvestment and all other household expenditures that she is responsible for. Even if it were possible to obtain an unsecured loan, and the lower interest rate, it would be

difficult for her to maintain trade activities within the constraints imposed by the price of borrowing.

Capital is scarce, and this limits entry into trade activities for many individuals. It simultaneously provides the conditions whereby active traders can obtain profits and net positive earnings.

The earnings obtained by combining capital and skill in trade are, as indicated in Table 4.14, lower than earnings obtained from the sale of labor services (Table 4.11). The average daily net earning is about \$0.85, which accumulates to about \$22.00 at the end of a month requiring 27 days of work. The averages are biased by a major wholesale trader of construction poles. Neglecting this worker, the respective daily and monthly amounts fall to \$0.60 and \$19.00.

About these averages, earnings vary considerably from a low of \$0.10 a day to \$2.80. It should also be noted that the "real" earnings of traders who engage in distribution of food products are an underestimate. They do not include a portion of produce which is used as food by the workers and their families. One of the 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 with small-scale purchases of food destined only for eating.

Table 4.14 also makes clear that the number of workdays used for selling, where the length of an average day is about 11 hours, is pretty much at a maximum. Those who work 26 days also work at maximum since market activity runs six days a week, and the seventh, Sunday, offers a very small return to effort relative to what could be obtained the rest of the time at market centers. Within this group of workers "employment" is not an issue.

A detailed analysis of the data revealed that traders who were involved in wholesale trade earned more than those in retail activities; and those that operated in the central market did better than women who sold goods in front of their homes. These differences are, however, explained by the fact that wholesalers and central market operators work with larger capital stocks than do the others.²² Simply put, the larger the scale and the more capital-intensive the operation, the higher the net profits or earnings were likely to be. As in the case of service sellers, the quantifiable determinants of income for traders are the same as those which one might find for commercial activities anywhere.

However, we should not overlook the fact that the ability to obtain and accumulate capital depends on trading skill, personal business and credit connections, family inheritance, etc., factors which cannot be readily quantified. Although the initial availability of capital will facilitate entry into trade, success or failure afterwards will depend on entrepreneurial talent and some luck.²³

4.1.8 Manufacturing

The survey provided detailed information on 56 individuals out of a total of 61 who were identified as sellers of goods which they themselves manufactured. Partial information on another four was also obtained. These workers represent a particularly important sub-set of the total group of workers because they are engaged in the "small-scale" industrial activities that many consider to be a prime target group for direct policy actions intended to promote income growth.

In the previous two sections we have seen that workers sell a large variety of types of labor services and that traders market a large variety of goods. In Table 4.17 the pattern is repeated. There are 26 different sets of goods which are produced, and closer to 30 if hand-bags, for example, are disaggregated into categories associated with the materials with which they are made.

As in the case of traders, manufacturers rarely vary the types of goods which they produce. Sometimes a short-lived market for goods will present itself, such as straw hats for Mardi Gras, and some workers will produce those for a week or so, and then return to their regular lines of output. The conservatism of manufacturers is not unlike that of traders: they know the markets for their product lines or closely similar lines, and would engage a risk in shifting to other products which they know less about. In addition, the skills of manufacturing are relatively specialized, and the risks of earnings losses are high during the self-training period when production is wasteful and quality too poor to obtain good prices. For some workers capital is tied up in a particular set of tools and these are not always readily useable for

Table 4.17 Average Earnings of Manufacturers

Manufactured Goods	Daily Earnings (\$)	Average Number of Work Days Per Month	Monthly Earnings (\$)	Ratio of High to Low Monthly Earnings
1 Baskets	1.40	24	33.00	2.6
2 Bead Curtains	.75	30	22.00	*
3 Bead Curtains	.75	30	22.00	*
4 Bed Frames (Wood)	.40	25	10.00	1.6
5 Buckets (Scrap Sheet Metal)	.50	30	15.00	*
6 Buckets, Stoves (Scrap Sheet Metal)	.80	26	21.00	1.4
7 Carpets (Sisal)	.15	27	4.00	2.0
8 Carpets (Sisal)	.15	27	4.00	2.0
9 Carpets (Sisal)	.45	29	13.00	9.0
10 Carpets (Sisal)	.45	29	13.00	9.0
11 Castings-Ornamental (Scrap Lead)	1.10	28	29.00	*
12 Coffins (Wood)	3.80	26	100.00	1.6
13 Decorations for Handbags (Sisal)	3.50	5	18.00	*
14 Decorations for Handbags (Sisal)	3.50	5	18.00	*
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	50.00	1.4
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	1.7
23 Furniture (Wood)	.60	15	9.00	1.7
24 Sculptures (Wood)	.70	26	18.00	2.0
25 Sculptures (Wood)	2.50	15	37.00	7.5
26 Salad Spoons & Forks (Wood)	.15	27	4.00	2.0
27 Salad Spoons & Forks (Wood)	.15	27	4.00	2.0
28 Salad Spoons & Forks (Wood)	.15	27	4.00	2.0
29 Strainers (Scrap Metal Screens)	.30	30	9.00	2.5
30 Strainers (Scrap Metal Screens)	.30	30	9.00	2.5
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	28.00	5.2
34 Sugar Wrappers (Paper)	.40	25	10.00	*
35 Shoes (Wood)	1.30	30	39.00	2.5
36 Shoes (Wood)	.70	30	21.00	1.3
37 Shirts	.80	26	21.00	4.8
38 Shirts	.80	26	21.00	4.8
39 Shirts, Vests	.50	22	11.00	12.0
40 Shirts, Vests	.50	26	13.00	2.6
41 Shirts, Vests	.50	26	13.00	2.6
42 Shirts, Pants	5.00	16	78.00	3.3
43 Pants, Vests	2.10	27	56.00	4.8
44 Dresses	2.00	2	4.50	4.0
45 Dresses	1.00	26	26.00	6.5
46 Dresses	1.00	27	27.00	2.2
47 Peanuts	.30	27	8.00	*
48 Peanuts	.50	26	13.00	*
49 Peanuts, Coffee	.50	30	15.00	*
50 Soup (Corn Base)	.25	28	7.00	1.5
51 Soup (Fish Base)	1.40	26	37.00	2.0
52 Meat (Raw and Fried)	.90	26	23.00	1.2
53 Meat and Roots (Fried)	.60	25	15.00	1.3
54 Meat and Roots (Fried)	.40	28	11.00	1.3
55 Meat and Roots (Fried)	.40	28	11.00	1.3
56 Bananas and Roots (Fried)	.30	23	7.00	2.0
Average	0.97	25	21.00	2.5

*The ratio is 1.0, meaning that earnings are seasonally stable.

other products, or are not readily convertible into cash for retooling. So production flexibility is not often as great as would appear at first glance.

4.1.8.1 Spatial Organization of Manufacturing Activities

The spatial organization of activities of manufacturers is very similar to that of trade activities. The only important differences are that 12% of workers obtain factor inputs in rural areas, that 32% of workers sell goods in the central area adjacent to the market, and that another 5% sell goods directly in rural areas. The very significant characteristic is that 87% of workers manufacture goods at home; the dwelling is their physical plant. What was suggested earlier concerning spatial planning implications and risk-reduction for traders applies with equal force for manufacturers.

4.1.8.2 Employment, Capital and Earnings

All of the workers in Table 4.17 are "self-employed" in the usual sense. About 38% work alone and represent the smallest possible scale of manufacturing activity. Another 45% work together with other household members in groups of two and three, and the rest are employers of workers who are not household members. Even in this last case the largest scale of operation is five persons.

On the day of the interview roughly 13% of workers were not engaged in one aspect or another of the manufacturing activity. Half of these were not working because they didn't have a contract in hand, and the rest did have contracts and/or a regular market for outputs but were too ill to be active. All had worked during the preceding six months.

Unlike the situation of some traders, manufacturers were not inactive because of a difficulty in finding start-up funds. The reasons for this include the fact that most of the workers produce low-risk goods for which market prices are fixed over considerable periods of time (62%), and that half of the remaining individuals work on contract orders for which they receive advance payments (20%). Another reason is that most of these workers are men, and wives are more or less obliged to lend them money for starting income-production activities. Although part of the obligation results from the unequal social relationship between men and women within the organization of the household, another aspect of the obligation is that men are likely to earn as much or more than women. A woman's investment of capital in her husband is likely to yield her and the family a higher rate of 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 interview was about \$23.00, ranging from a low of \$0.50 to a high of \$100.00 for three manufacturers. The median value of about \$11.00 per worker is really the more accurate indicator of the typical scale of operations. The distribution of capital indicated in Table 4.18 is somewhat similar to that described for traders.

Table 4.18 Working Capital of Manufacturers

Size of Capital (\$)	% of Workers
less than 1	2%
1 - 5	29%
6 -10	17%
11-20	18%
21-30	7%
41-50	3%
51 or more	13%
Total	100%

The average daily earning of manufacturers is a bit less than \$1.00, and over the month it is about \$21.00 (Table 4.17). This reflects a relatively high frequency of workdays.

These earnings and the frequency of workdays compare favorably with those of service sellers discussed earlier. Although professionals, structural workers and bench workers earn more each day on the average, bench workers obtain the same monthly incomes as independent manufacturers (Table 4.13). Similarly, workers employed in the manufacturing sector (Table 4.13) earn about the same as the self-employed producers. So unless manufacturers were to change their occupational skills or their sector of activity, their incomes remain on a par with counterparts who work for larger-scale industrial concerns.²⁴ In a country where there is a more or less "unlimited supply of labor" this is to be expected (Lewis: 1958, Turnham: 1974). There is little reason for profit-maximizing establishments, at whatever scale of operation, to pay wages in excess of the going rate of earnings.

About the average value of \$1.00 a day, earnings vary across the sample from a low of \$0.15 to a high of \$5.00. This is a wider variation than that found for traders, and narrower than for sellers of services. The monthly earnings run from a low of \$3.00 to a high of \$100.00.

One characteristic that has some significance in explaining these differences in earnings, or net profits, is whether an individual works together with another member of his family (45%), or works by himself (38%), or is an employer of others outside the family.²⁵ Monthly earnings in each of these three situations are respectively \$15.00, \$20.00 and \$42.00. But these attributes, as was the case for traders,

clearly relate to the way in which factor resources of production are combined, including the amount of working capital used in the transformation process. Indeed the correlation between earnings and capital is rather important.²⁶ and the general pattern found for traders is present amongst manufacturers: the larger the scale of operation and the higher the ratio of capital to labor, the higher will be the net earning.

However, the significance of this observation is not nearly so clear for manufacturers as it was for traders. This is because the quantitative measure of manufacturers' capital is not nearly as homogeneous as it is in commercial activities. A given amount of capital may sometimes consist mostly of machines, or it may sometimes consist mostly of raw materials. Also, the same tools may be used to produce different things for different markets with different levels of skill and productivity. So the factors that affect earnings of workers in this category are a bit more complicated than they are for the other groups of workers which have been discussed.

One indication of the broader range of influences is the large seasonal variation in earnings for a single individual. Although manufacturing activities are engaged in on an average of 25 days a month (Table 4.17), and although this average does not vary substantially from season to season, individual earnings vary by an average factor of 2.5 between peak and off-peak periods.

This oscillation is considerably higher than that encountered by the service sellers, 1.7, and by the traders, 1.9. By inference, this means that demand varies a great deal, that prices may be unstable,

that rates of production change, and that it would be difficult to measure such things as "productivity" or resource underutilization.

The point of the matter is that the 56 producers identified in Table 4.17 who produce 25 or 30 different commodities not only work with different factors of production, different factor combinations and at differing scales, but also in different supply and output markets (requiring different skills in trade) with considerable variations in demand. It would indeed have been surprising to have derived a simple explanation for the net profits of 56 firms operating in 30 commodity markets.

Since the data here does not permit easy generalization about earnings, it may be useful now to draw out some random cases from Table 4.17 and to examine them carefully in order to see what we can learn about income-production in manufacturing activities.

4.1.8.3 Case Histories

a. The basket maker listed at the top of Table 4.17 is an individual who arrived from the south of the country six months earlier. He makes baskets out of banana leaves in his house. In order to make 11 baskets of 10 cm. 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 a half days for making baskets. The only tool that is used 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 can therefore be \$4.00 each day. However, the market for baskets varies a lot 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, which is sufficiently high for him 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" label is affixed, varies from \$18.00 in Miami to \$24.00 in Los Angeles.

b. Next in Table 4.17 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 strings; and the customer buys as many as they can make at that price.

For most of the previous year they could produce two dozen strings a day because they only had an old drill bit, but no drill with which to put holes into the beads and wood. Their net income was then \$1.00 per day or \$0.50 each. But they were able to save up about \$12.00 to buy a drill and some new bits two months ago, and they now produce six dozen strings a day and each worker nets \$1.50 per day.²⁷ One of the results of their higher earnings was that they've been able to lend a sister in the household \$3.00 so that she could leave her job as a domestic servant and enter into trade activities.

It is of interest to compare this curtain-making operation with the earnings obtained by a mother and son team who assemble bead collars for a factory (Table 4.1D). In this case 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 workers is two dozen collars a day even though they don't have to drill and though the length of each string is half that of the curtain-maker's. The factory pays \$0.15 per dozen collars and that is the daily earning of each worker. So the production of the same good can yield earnings that differ by a factor of 10, depending on the method of organization of production which is taking place.

c. A maker of buckets (five-gallon and eight-gallon sizes) 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, because either the galvanizing process was substandard or because the printing of labels for beer or carbonated beverage trademarks had flaws. The sheets in the latter category are very thin and are not destined for long-term use. They are nonetheless imported by major import houses of the city.

In order to make three dozen buckets, our worker buys metal worth \$14.00. He combines this with tools, that consist of a work-blade, a wood block, a hammer and a pair of shears, and three days of production. He then spends \$2.00 in transport costs to go to rural areas in the centre of the country where he will spend about

six days selling in various markets. At an average price of \$0.55 each, the sale of buckets will gross about \$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.

d. Another husband and wife team make carpets out of sisal. To begin the operation the man walks to a major rural market about 12 kilometres outside the city and buys five packets of sisal braids for \$2.00, which is sufficient to make ten carpets. These sisal braids 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 kilometres away to buy braids that have already been formed into one foot squares at a small factory. He buys about 200 square feet at a time for \$0.13 each, 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 colour 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, an awl, and a metal dyeing pan.

Working together, the man and woman can make 24 carpets a day at maximum. But even at maximum they would necessarily make only about 18 because the man must sell the carpets, wandering 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, while 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 go 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, netting a profit of \$13.00. On the other hand, 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 earn roughly \$0.45 a day each.

The workers indicated to me that what they really would 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 just be 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 kinds of 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.

e. We can compare this pair of workers to another pair who also make sisal carpets and who earn only \$0.15 a day on the average. This latter pair make slightly different rugs, but they 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, though, 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), which limits sales to two or three rugs a week. We ought to note that these workers can afford lower earnings because at least two other family members also earn incomes.

f. The man who manufactures lead castings for use as decoration on coffins does not really reside in St. Martin. Although he sleeps in the house four nights a week and maintains a housekeeper there, his family lives in another part of the city. He uses the St. Martin location basically as his workshop because it is close to where he buys materials and where he sells much of his products. Since the rental of the house is about \$0.10 a day and he pays the housekeeper the equivalent of \$0.02 a day, he saves \$0.06 on bus transport costs of commuting between home and downtown each day. We should note also that he used to live in St. Martin, but could not afford to buy a

"decent" property there. He found one near the edge of the city, bought it, and moved his family to it two years back after he quit the baking business and started making better profits in the metal business.

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 wood screws, to which the lead dies will be cast, 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 of paris molds. He made the molds himself sometime back using as prototype an imported ornament which he bought at a funeral parlour.

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 about \$2.00 per gross, which is all he can make in a 12-hour day. He sells the castings to funeral parlours in the city at \$3.00 per gross and to parlours in the city of Jacmel (60 kms. away) at \$4.00 per gross. In the latter case the transport cost is \$4.40 return and he usually travels with four gross at a time. So 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 for too long a stretch.

g. Another man makes handbags, or rather women's purses, 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 back in 1967. In those days he worked as a punch press operator cutting figure-eight shaped pieces of leather, about four inches in length, which were then assembled into handbags by women at benches. At that time he could earn \$1.00 a day or about \$24. 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 far better on his own than as an employee. Currently he can make three bags a day, the cost of which is about \$0.33 each, broken down into \$0.13 for leather and \$0.20 for hired labour 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 doesn't work as fast as the worker does.

Back 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, or about \$2.00 a day during the peak season and \$1.40

a day during the off-season. The manufacturer says that there isn't all that much he could do to increase off-season earnings, but he wishes he could get another blade to increase his rate of cutting, which is the limiting factor on how many purses he can make 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 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. 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 they've discontinued the design and have disposed of their surplus blades.

ii. A different type of handbag is made by a husband and wife team that has been in the city only a few months. This type of 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 respectively 20 kilometres north and west of the city.

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 reduces 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 much as the couple can produce, which is four bags a day (including the time to purchase all the inputs). This work then provides each worker with an earning between \$0.45 and \$0.50 a day; and requires the use of a pair of scissors only.

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

Faced with my question as to why they did not sell directly to tourists, the couple identified two logical reasons. Firstly, they said it would take too long, and the more time they spent selling the less time they had to make the handbags. Secondly, to reach tourists they would necessarily have to work the streets near and around their client store; and that would amount to competition. The verbal agreement between them and the store was that the latter would buy everything they produce if they did not sell independently either to tourists or to other tourist and export shops. Our workers indicated that the risks involved in alienating a sure customer outweighed any possible increase in earnings -- even if selling time would actually be short.

If we skip down towards the bottom of Table 4.17 we pick up the food processing group, which usually gets classed as retail trade operations, but which are considerably more involved activities than are straightforward bulk-breaking and marketing steps carried out by traders.

i. We can take, for example, 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 this 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 a further addition 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; and this works out to an average daily earning of \$0.30.

j. The spread of these activities can sometimes be compressed into a single day. A maker of fish soup 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 profited \$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 before (on consignment) and rarely could get more than \$3.00 a week.

In the foregoing examination of manufacturing activities it is obvious that the determinants of earnings and the obstacles to the growth of earnings vary significantly from case to case. Sometimes it is a question of an inadequate and variable demand for a product. In other situations it is a difficulty of supply of a factor input. When demand is high for a good, producers cannot respond adequately because they have insufficient time to obtain information, insufficient resources to hire and train other workers, or to undertake retooling. Occasionally they face monopolist markets. At the same time, within the limitations imposed by the environment within which they operate, manufacturers demonstrate a high degree of flexibility in responding to opportunities as they arise.

No general ascription of "low-productivity" or "informality" can have much relevance in bringing about an operational understanding of the kinds of activities which we have been looking at. As was concluded at the ends of the respective sections concerning services and trade, the examination of small-scale industry has essentially recounted the history, accounting and transformation operations of ordinary business people that face the same types of issues as their counterparts all over the poor and wealthy parts of the world.

4.2 Non-Labor Income

Besides earnings from work, 42 individuals in 27 families obtain regular and irregular income from non-labor sources.²⁸ As indicated in Table 4.19, there is a wide range of sources, but most income is obtained from rent of land and/or dwellings, from regular visitors to the household and from what is locally referred to as "generosity" or charity.

Table 4.19 Sources of non-labor income

Source	Number of Receiving Families
Rent	12
Regular Household Visitor	7
Family in the city	3
Family in rural areas	1
Family in the U.S.A.	2
Government Pension	1
Generosity	3
Total	27*

* A number of families received non-labour income from more than one source.

Only part of non-labor income is received in the form of cash. Sixty two percent (62%) of recipients received income in this form, 8% in the form of goods and services (like the payment of rent by visitors), and the rest in the form of meals and/or reductions in school registration fees.

4.2.1 Rent

Those who receive income from rent have been in St. Martin a

relatively long time and either own land or lease it on an annual basis. They have built a house with a number of dwelling units and rent them out on a weekly, monthly, semi-annual or annual basis. Two individuals are relatively important property owners and obtain rents from a number of units scattered throughout the neighborhood. The monthly value of rental income is about \$135.00 or roughly \$11.00 per family that has a rental source.

These rental incomes accrue to one individual in each family, usually the male head of household. In two cases the heads had retired from high-wage government jobs and their wives were still working as traders. Here rents comprised more than half of family income. In eight cases the men were still working but they were among the highest income earners in the sample: a masonry contractor, a ship's captain, two wholesale traders, a master sculptor, and two doctors. In these cases rents amounted to less than a quarter of their respective family incomes. In the remaining two cases the heads were obtaining average earnings from work and had bought their properties sometime before with money obtained from inheritance, and here rents accounted for about a third of income.

Clearly, the size of funds necessary to purchase a property, and/or to build a structure on a leased property in St. Martin, is relatively large. In most cases the money is obtained from high returns to work, and in most cases rent represents a supplement rather than a substitute for work. We can also see that if for any reason an individual stops working, his income will fall substantially, but his family will nevertheless obtain some cash flow. The rental business, for those who are

in it because they have accumulated enough cash to enter, appears a good investment in terms of earnings and insurance.

4.2.2 Intra-Family Transfers

Another important income source is obtained by women from the fathers of their children (divorced or polygamous husbands, boyfriends, etc.) who do not reside with them most of the week but who visit them regularly. The men bring in something in the order of \$128.00 a month, which works out to about \$18.00 for each woman and her household. To these contributions of fathers are added those sent by other members of the extended family in the city, the countryside and Miami, who supply something around \$43.00 a month or \$6.00 per household.

In the case of the women who received monies and goods from regular household visitors, three were not working and the monies represented 100% of their income. In the first case the woman was nursing, but expected to return to work after which the proportion of her income represented by payments from the father of her child would fall to 20%. In the second case the woman had stopped working because she had just "married" a man (who had other wives) and he provided her with a weekly allowance and paid the rent. The third woman received income in the same form as the previous, but was not working because of a lengthy illness affecting her eyes.

The other four women were working while receiving transfers from their mates (one "husband" and three boyfriends). In one case the non-labor income represented about 50% of the total, and for the rest it was about 20%. Obviously the level of transfers to women is generally not sufficient to remove them from active participation in the labor force.

Then there are the six families that obtain income from extensions outside St. Martin. These sources accounted for between 10% and 20% of total income of each family.

This documentation suggests that 15% of households in the sample benefit from family income sharing arrangements, and that these sources which total about \$170.00 a month are relatively important for most of the families that receive them. However, as in the case of rental income, these incomes are earnings supplements rather than substitutes, and only in one case, or perhaps two, are they sufficient to keep able-bodied persons from working.

4.2.3 Public and Charitable Transfers

One individual, a retired Government administrator, receives what amounts to a pension of \$50.00 a month. The money is actually his regular salary which he continues to receive from regular payroll accounts even though he has not worked for two years.²⁹

Finally, eleven children in three families receive school-related subsidies from the Salvation Army, which runs a center on the edge of St. Martin. This "generosity" runs up to about \$22.00 a month; \$2.00 per child or \$7.00 per family on the average. The subsidies are set up through a number of programs which the Salvation Army administers, and the children obtain different forms of income depending upon which program they fall into. Sometimes the programs cover only school fees, sometimes meals, and sometimes both meals and fees if a child has been "adopted" by a family outside Haiti. Because of heavy competition amongst families to place children into these programs, respondents indicated a certain satisfaction in getting at least some of their children

into them. They also indicated that it cost them more to have their children in the school program than to keep children at home since the costs of books and uniforms more than offset the costs of home-feeding. On the other hand, it was much less expensive than the alternative public and private schools to which their children could have access.

In these cases of families whose children receive subsidies in kind, the total value of these subsidies, \$22.00, represent respectively 5%, 8%, and 12% of family cash income. They are of less importance for each family than are the non-labor sources of the households discussed earlier.

As a general observation, the proportional contribution of non-labor income to total income increases with increases in the absolute value of the latter. This is to be expected: after all, monthly earnings from work average about \$22.00 and household income, as will be seen in the next chapter, averages \$40.00. So as the contribution of non-labor income moves from \$1.00 to \$50.00, it necessarily comes to dominate the earnings that arise from work.

Non-labor sources probably underestimate the flow of income to the group. Within the extended family system in particular, there were many cases of mothers outside the interviewed households who sometimes sent food for children or grandchildren, or who received and fed grandchildren during the day when their mothers and/or fathers were working, and so on. However, these undocumented sources appear to total an amount far less than the total of documented sources. Also, given that women receive funds from men outside the sample population, we ought to expect that the reverse is true and that men in the sample draw part of their earnings away from their households to support others.

It seems that one cannot avoid an overall conclusion that, for the sample of workers and families, the sale of goods and services in the market is the absolutely necessary and unavoidable means of sustenance. Income flows from prior investments (i.e., rents), transfer flows from within family extensions and transfer flows from charitable organizations are relatively small and generally cannot support current inactivity in the market.

4.3 Conclusions and Recommendations

There is no question in my mind that most of the workers interviewed in St. Martin are engaged in activities which, like those in most poor countries, are either "boring or brutal" (Pickett, et al: 1974). Market participation involves long and hard work, patience, flexibility and extraordinary ingenuity in an array of activities which are quite different than those found in wealthier countries. At the same time, for all the effort and imagination which appears invested into interaction with the market, returns in the form of incomes are generally low. Under these circumstances the temptation to regard these activities as essentially homogeneous and to invent generalizing labels such as "informal sector" is understandable. However, I have attempted to demonstrate that within the range of low incomes, differences are significant; they can be explained by use of basic economic terminology and basic concepts of cause and effect, and they therefore can be modified by actions which can change the causal factors identified. In other words, I think that the most appropriate subjective analytical position to adopt for the purpose of planning is to regard the market activities here as "ordinary" ones.

With this assumption it follows that the general approach to increasing worker earnings will be found in actions aimed at increasing "productivity" and at increasing the demand for worker-produced goods and services (Sousa and Tokman: 1976). This is, of course, a tautological statement which is true all the time (Viner: 1957), but it does serve as a useful point of departure for drawing conclusions about different kinds of workers in St. Martin.

In the case of sellers of labor services, we have seen that earnings depend on two things: the wages paid for use of particular skills and the frequency of use of those skills in specific sectors of the urban economy. Actions to increase the earnings of these workers would necessarily have to address both the wage dimension, as expressed through programs which promote occupational mobility from less-skilled and highly competitive occupations to more skilled and currently less competitive occupations; and the employment dimension as expressed through programs which stimulate demand for labor services in various sectors of the urban economy. This is a kind of approach that one could propose anywhere.

However, it is important to keep in mind that the market demand for labor is not the same thing as the demand for workers. We have seen that a given level of income can be obtained by a low-wage individual working all the time or by a high-wage individual working infrequently. In these circumstances an objective of equitable income increases can be met by the combined outcomes of wage and employment policy actions. It would be inappropriate to place exclusive concern on the equitable distribution of wages, or on the equitable distribution of working time (i.e., employment).

In this context, much as one might dislike the way in which "modern) activities exploit opportunities to engage workers at less than minimum legal wages, these actions do serve to provide more direct earnings opportunities to people than would be the case if employers were obliged to operate within strict legal bounds. Similarly, efforts to decrease "underemployment", by which I refer to the frequency of

workdays of a given number of workers, may reduce the income opportunities available to other individuals over the short-run. It is really quite important always to retain explicit recognition that wage policy and employment policy are means to improving the lives of people, and not ends in themselves.

With respect to trade, we have seen that these activities offer many employment opportunities at relatively low earnings and yield a relatively equitable distribution of income across workers. This suggests the presence of relatively intense competition.

Although these earnings are subject to wide seasonal variation because of seasonal fluctuations in the supply and demand for agricultural and non-agricultural products, net profits are made and individuals find this type of activity preferable to a number of other wage employment alternatives. One of the key factors which explains the presence of positive earnings in the face of heavy competition is the limited availability of working capital, and hence the relatively limited number of participants in trade.

In this situation suggestions that increases in earnings could be obtained by increasing the availability of capital must be interpreted with care. If there was no corresponding increase in the demand for and the supply of goods, and if additional capital was as readily available to potential entrants to trade activities as to those already there, then the net effect might be to expand employment and drive individual net earnings down.

It seems doubtful that public intent ought to be directed to undercutting earnings that average \$0.60 a day. If anything it would be

more reasonable in the short run to protect the status quo, and in the long run to assure that future increases in the demand for goods be distributed through a marketing system more or less similar to that of today.

Since manufacturers are also traders when they buy their inputs and sell their outputs, much of what has been said above concerning capital availability also applies to these workers to some extent. However, earnings here are determined by a broader array of factors and hence are subject in principle to a broader array of interventions. At the same time the heterogeneity of the sample of manufacturers makes it evident that nothing short of a full range of business promotion services is required.

Manufacturers require new and less costly information about markets, products and methods of transformation. Some may require sizeable loans to increase scales of operation. Others may need creation of cooperative purchasing and marketing organizations. Almost all of these workers could profit from overall increases in the demand, either rural, urban or export, for their general lines of output, particularly in the off-season; and overall decreases in the costs of their factor inputs. The broad range of services required by these workers suggests a high cost involved in rendering those services. A priori, one cannot know with any degree of certainty which kind of action or combination of actions would yield income increases greater than the cost of obtaining them and at the same time, at least as fairly distributed as the current structure of earnings.

Whatever the conceptual similarity, it is nonetheless important to remember that activities in St. Martin are outwardly different from

those to be found in wealthier countries, and it is essential to recognize that the concept and determinants of "productivity" will also be outwardly different. Care should be taken to avoid application of preconceived ideas about "productivity" which have been borrowed from societies bearing little resemblance to the one in Port au Prince.

We have found, for example, that almost half the workers interviewed bargain wages and prices to some degree or another (Table C.6), and this indicates something important about the nature of "marketing".

Worker-market interaction is characterized by relatively high transaction costs; workers invest their time heavily in order to obtain a "best" wage or price. This suggests that workers assume that the market carries imperfect price information and that they therefore must invest additional resources in order to best exploit (and on the other side, to avoid being exploited by) the imperfections. While this may be obvious in the case of retail sellers, it is usually not as obvious in the case of manufacturers and sellers of labor services. Earnings and income will depend not only on the type of good or service which the individual sells, but also on how well he or she sells it when market information on the particular good or service is less than total. We should therefore expect that workers with identical occupations, facing identical markets and selling identical goods or services nonetheless obtain different returns if their respective "marketing" proficiencies differ. Since half the workers are willing to bargain extensively, then we must presume that the differences in return to that activity are important.

This is an issue which should be carefully weighed when thinking about changing worker "productivity" because the marketing skill is one

gleaned through experience with a particular market and cannot usually be improved upon by outside aid. By the same token, measures to change the market by outside action runs some risk of eliminating the comparative advantage that many workers have as a result of their expertise with the existing market.

Having said these generalities and reservations, it is clear from the analysis that there is a very large number of possible ways in which incomes derived from market activities can be modified. These potential methods can be organized into classes of appropriate kinds of orientations for public intervention.

4.3.1 Wage Legislation

There would seem to be little point in enforcing minimum wage legislation in Port au Prince today. The "put-out" system, the "half-day" wages and other techniques of "modern" enterprise are inherently repulsive to local workers and to observers from outside the country. But given the economic realities of Haiti such "informality" among large firms provides a far greater number of direct income opportunities than would otherwise be the case. It is possible that higher wages would provide large indirect income opportunities, but only at the cost of a more inequitable distribution of incomes amongst workers and significant Government research and enforcement outlays. The historical socio-economic forces which have shaped a more or less equitable income distribution across the country should not, I think, be artificially modified by institutional imports from abroad which might create the inequitable urban distributions causing concern in other newly urbanizing countries.

Similarly, "high" wages which force even marginal forms of capital substitution would appear to be counter-productive in a place where labor seems to be in large supply and seems to be willing to work for a low wage which, as we have seen, is comparable to the wages and earnings in "non-modern" activities.

Problems associated with "excess" and/or repatriated profits arising from low wages can be dealt with, if they exist, by other methods such as taxation, which in turn can be redistributed towards the common good in the form of various kinds of public services.

4.3.2 Government Purchasing Arrangements

Government salaries, like those in "modern" private enterprise, should not be higher than the wages necessary to produce a given level of employee effectiveness. Whether such public workers are on the salaried payroll or on contract there should be no difference in payments if they deliver equivalent services. Discrepancies of the kind uncovered in St. Martin reduce the effectiveness of limited public funds. Minimum wage legislation need not be enforced within the public sector either.

Again, as in the case of private firms, certain kinds of capital substitution in public projects are inappropriate. Admittedly, sometimes there is no local precedent for labor-intensive methods of producing public goods and services, and sometimes the costs of capital-saving methods outweigh the benefits of labor intensiveness; but efforts continually need to be made to develop and/or import methods containing appropriate mixes of machines and workers which simultaneously satisfy the objectives of income distribution and income growth. The Government, as a major purchaser of local labor services, can have a sizeable impact on family income.

Similarly, opportunities exist for Government to purchase goods produced by small-scale local manufacturers instead of from large-scale producers and importers. Again, there may in fact be no comparable local or small-scale production of certain commodities, and the costs may be prohibitive. Nonetheless, local development or importation of appropriate techniques and factors should be pursued whenever reasonably possible.

The theme which runs through these arguments is that a country, which outwardly does not resemble "modern" economies, need not be represented in all respects by a Government which outwardly resembles its "modern" counterparts. Public purchasing arrangements should reflect the dominant kinds of purchasing arrangements of the private sphere to some important degree (Hunter: 1968).

4.3.3 Planning of Urban Facilities and Use Controls

Most workers, especially traders and manufacturers, are sensitive to changes in the organization of physical space. Direct or indirect public decisions to move market location or to move homes involve operational adjustments on the part of workers, which often may involve losses in earnings. While losses in earnings are an unavoidable consequence of major changes in the environment, and while adjustments and positive earnings can eventually take place and perhaps even lead to higher earnings if space is organized more productively, workers who live close to a level of subsistence by finding advantage in the skilled use of \$1.00 or the skilled transfer of goods across 100 meters of distance have neither the capital nor the time to withstand major losses over extended periods.

In this regard it is important to integrate explicit understanding of possible consequences upon income into the analysis of urban programs in transportation, market facilities, harbors, housing, etc. which currently contain agendas related to direct objectives other than the income generation processes of individuals.

More directly, a very appropriate short-run action would continue the public policy, in effect since 1974, of not harassing manufacturers and traders (Duplan and LaGra: 1974). Alternatively, if harassment is a political necessity brought about by pressure from large-scale commercial establishments, a wiser public course would be the provision of adequate marketing space elsewhere. This would at least provide an alternative work place for those traders who are not dependent on the location of larger operators, but who have no other place to go. This lowers the overhead cost of small-scale trade.

4.3.4 Public Infrastructure Services

The analysis has shown that St. Martin is much more than a place to shelter people. For all intents and purposes St. Martin is a significant warehousing center and an industrial estate. At any given moment in time the area contains a non-negligible proportion of consumer goods and productive resources which exist in the city. It should be obvious that disasters such as rodents, fire and flooding will not only impact upon the capacity of residents to produce income, but may also have direct price and productivity effects upon a much wider urban population. To this list of environmental risks we can add the effects (compounded by malnutrition) of disease upon productive human resources. These effects, as we have seen, underlie much of the "unemployment" encountered

in St. Martin. They also undermine the abilities of households to accumulate productive capital by forcing savings away from market activities and towards medical overhead expenditures. These losses in production and productivity, if large as in the case of epidemics spread through the crowded community, will also make effects felt in the broader urban economy. Such effects may be further compounded by transmission of illnesses through personal contact at such places as the central market, or through the transfer of various kinds of goods from person to person. So, while there are many determinants of productivity and income which, like marketing skill, lie beyond the reach of conventional methods of intervention, there are many opportunities which exist for improving some parts of the market environment so that those skills may be exercised to their fullest extent possible.

It follows that certain kinds of public infrastructure may have significant effects upon income production processes. First and foremost are those services which may help to avert disasters of various kinds. The provision of fire-breaks, hydrants and fountains coupled to functioning water mains, and adequately trained and proximate fire-fighting personnel seem basic necessities in a place like St. Martin. Basic residential storm drainage works, garbage collection and sewage removal services are first steps at reducing the risks of flooding damage and related disease. Improved potable water supply mechanisms and regular rodent and vector eradication and control services are further elements which may prevent the incidence of illness and the income losses which result from market withdrawal and medical expenditures. Finally, proximate preventive and curative low-cost health services would be of great advantage.

These kinds of services (provided, hopefully, in as labor-intensive a manner as possible) can be located in St. Martin, in other areas like it across the city, in the local or central markets, and so on. At each stage of development of infrastructure, measured in terms of type of service and coverage across the city, the social benefits to be derived in terms of income should be weighed carefully against the costs involved. Given the quasi-total absence of any of these services in St. Martin, I am led to believe that public investments for the kinds of services identified above, even if not paid for by the recipients at all, will prove sound social expenditures. The net benefits of more sophisticated services such as electricity and local roads would be less certain in the short-run.

An important dimension to note here is that it is not necessary to speak in terms of "basic needs" on moral grounds in order to justify public infrastructure expenditures. They are necessary on basic economic grounds as well if it is the intent of public policy to maximize the productive capacity of urban human and non-human resources. St. Martin is a warehouse and an industrial park. It can be made a more effective one.

4.3.5 Marketing Services

Marketing services which facilitate the flow of goods and information between buyers and sellers are an essential means of increasing both the productivity and the demand for worker outputs. The services include the supply and storage of factor inputs, output production models and market information from outside Haiti and from rural areas; the purchasing and storage of urban products; the marketing and promotion

of urban products and urban production potential in the international environment and in rural areas; the demonstration of new production techniques for existing products and the stimulation of designs for new commodities; and so on. The function of such services is to assure that local producers and outside buyers have low-cost access to the kinds of information about the greater economic environment in which they respectively operate. This would assure that the ignorance arising from isolation does not constrain increases in productivity and increases in the demands for goods and labor services.

Other than a limited degree of agricultural extension, general marketing services in Haiti are provided by the private sector, including foreign buyers, large scale trading firms, and large manufacturing industries in the export/import market; and small traders and some small manufacturers in the intra-urban and urban/rural markets. Private cooperative marketing arrangements are practically non-existent.

In Chapter 2 and earlier in this chapter it was suggested that the marketing of goods and information between the city and rural areas does not appear to be deficient. The weak counter-flow of urban commodities to the countryside has less to do with lack of knowledge about current products and more to do with low purchasing capabilities for those products. The strong migratory trend from rural areas to the city is also indicative of an adequate flow of rural-urban market information.

A major deficiency, and this should not be surprising given the relative isolation of Haiti throughout its independent history, is the marketing of goods and information between the country (i.e., the city) and the world outside. While the Government's open door policy with

respect to trade and investment has permitted a very large increase in the number of purchasers of labor services and, to some extent, locally produced goods such as handicrafts, it has done no more than permit already knowledgeable large-scale buyers to pursue their limited interests. On the presupposition that the Government is not particularly concerned with "dependency" on outside or "modern" influence, and that all that needs to be known about Haiti is not already known; then there is a case to be made for a more aggressive international promotional program aimed at making knowledge of Haitian productive potential more widely available.

By the same reasoning, knowledge of outside resources and goods, which can be used as factor inputs or as models for improved local production (destined for export or for internal consumption) can be aggressively promoted and demonstrated to Haitian producers. This is especially relevant for the small producers such as those in St. Martin. We have seen that their marketing costs are high, both on the factor and information supply side and on the product sales side. They have limited knowledge of appropriate simple techniques and technologies, limited knowledge of alternative raw materials and methods of organization to bring input unit costs down, limited knowledge of alternative outputs, markets and more effective marketing techniques, etc. Although improvements have a way of percolating down to them eventually, there is again a sense that the filtering and dissemination processes can be accelerated and made more direct.

But given the small size of activities discussed and the large number of them, it is evident that the public and private institutional

mechanisms required to more fully integrate St. Martin workers into the much broader economic environment will involve high initial administrative costs. Methods, such as the creation of manufacturer and trader cooperative purchasing and marketing systems, or the creation of an urban industrial extension service similar to agricultural extension (Staley and Morse: 1965) have little or no precedent in Haiti. Any steps taken in these directions will be experimental, but the idea of developing "appropriate" institutional mechanisms, like the idea of "appropriate technology" is not without merit.

The Government does, however, have direct control of certain kinds of internal commodity flows which impinge upon the livelihoods of a number of small traders. Changes in Government trade policy could serve to protect employment in these activities. For example, large commercial establishments serve as secondary outlets for the distribution of government controlled products such as sugar, coffee, flour, some types of imported rice, locally produced cooking oil, cigarets, matches, etc. The state fixes prices for set quantities sold at the wholesale and retail level. Since traders who buy these products from the larger operators do so in quantities smaller than those covered by law, they usually pay higher unit prices.³⁰ If large-scale operators were heavily competitive with each other, then the higher unit prices would reflect the real cost of bulk-breaking. But for the most part the larger commercial operators are not fully competitive, and it would therefore not be unreasonable to propose that the state specify the retail prices of yet smaller quantities of the commodities over which it retains direct control. A further step could require that direct state outlets permit

transactions with small traders who presently are excluded because they cannot buy in the same wholesale quantities as larger traders.

The logical extension of this would imply that everybody have access to state outlets or indirect outlets; but 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.

In any case, it should be evident that these latter kinds of suggestions are aimed at fine tuning of small-scale trade systems that seems to work reasonably well from an employment and income distribution standpoint. Major increases in the earnings of traders, given the nature of the activity, must necessarily arise from increases in demand for and flow of goods originating from increases in the incomes of workers in other sectors of the economy.

4.3.6 Training

For the purposes at hand institutionalized training can be regarded as a method of marketing information about certain elements of the broader economic environment discussed above. Theoretically, it should complement the training gleaned from day to day life and provide individuals with additional information and perspectives which would facilitate their independent subsequent mastery of their economic worlds. In this perspective training should be looked upon as a multi-dimensional method for increasing the individual and collective stock of human capital resources.

For the relatively unskilled seller of labor services there is a very definite requirement for vestment of additional productive capabilities. These capabilities can be shaped for the perceived needs of large-scale industries, commercial establishments, and Government organizations. They can also be explicitly shaped to promote independent enterprise, shifting individuals away from total reliance on wage employment and towards productive self-employment. For this latter orientation, occupational skills in building, carpentry, metal work, tailoring, machinery repair, handicrafts, etc. have to be complemented with certain kinds of marketing skills which are not usually obtained in current experience. To the extent that they exist, training must also include learning about public and private financial, marketing, and technical assistance institutions. As we have seen, traders and manufacturers are subject to high information costs, and prior knowledge of where and when to look for buyers and input sellers, and how to set up cooperative ventures and so on will reduce those costs and increase productivity more easily. These latter marketing skills are also of particular importance to individuals already involved in self-employed activities.

It is important to remember that the information costs, or the opportunity costs of participating in training rather than dedicating time to production and sales is high. Most individuals cannot afford full-time absence from market activities for extended periods. Therefore the effectiveness of training will depend not only on its content, but on the form of its delivery. Nearby community centers, mobile centers, self-help organizations, informal on-the-job extension services, educational radio and off-season program scheduling are alternatives which have to be evaluated carefully.

Thought should also be given to initiating training in much earlier years. As will be seen in Chapter 6, children usually do not stay in school a long time, for various reasons. But as long as they are in school, it is worth thinking about maximizing the value of the education which they will receive during that period. While there is much merit to inculcating literacy, fluency in French, knowledge of history and numbers in primary school, one wonders what these things are worth if schooling ceases after a year or two and children are reabsorbed into household market activities. Although it is difficult to conceive of training a 7-year-old child in the art of metal work, there would seem to be a need for training of a kind which would benefit both the individual and his household more concretely. Once again there is a demand for appropriateness, but unfortunately primary education seems to have the same structure all over the world and I have not yet found precedents which would provide specific examples.

In this regard, as was indicated earlier, it would be wrong to overstate the contribution which training might make. Participants know the market in which they operate much better than will current teachers and other training personnel, and there is a limit to how far training can complement personal knowledge. My experience tells me that relevant teachers may be much more effective if recruited from the ranks of workers in St. Martin than if recruited elsewhere and then imposed upon them. Appropriate learning requires appropriate teachers. The experimentation and development period of training programs is likely to be long.

4.3.7 Financial Services

Notwithstanding earlier reservations about the possible negative employment and income effects of increasing the universal availability of working capital amongst actual and potential traders and manufacturers, we have seen that there is a time and place for making credit more readily available. This is particularly true in the cases of successful wholesale and retail traders who have been wiped out by medical debts, and in the cases of successful manufacturers who are heavily constrained in their abilities to expand production by the high cost of borrowing. The selective nature of financial assistance needs to be stressed because we have seen that there are many other obstacles to trade and production activities. The more general question of the scarcity of credit for all purposes is discussed at length in Chapter 6. The context here has to do with commercial and industrial financial services.

Under the usual meaning of "credit to small-scale industry" there are only five or six families who could qualify for loans, and perhaps another three wholesale traders. However, it is not appropriate to denigrate this small proportion (10%) who could profit from credit. The proportion represents perhaps 600 families in St. Martin and 6000 in Port au Prince who currently must deal with interest rates on the order of 60% a month.

The interest in providing lower costs of borrowing to these families is that it facilitates productivity changes. Irrespective of the level of public investment in marketing services and training, and in Government and private sector desires to purchase from small-scale traders and producers, significant change in production and products cannot be

brought about unless there is money to pay for it. The conservatism of traders and manufacturers which was identified earlier in this chapter does not result from cultural habits, but from the very stark realities and risks associated with experimentation in untested methods and commodities.

But the risk factors can be dealt with in many ways. Efforts to reduce the overhead costs of production (i.e., of living) and to reduce environmental risks through infrastructure services ultimately increase the aggregate amount of family income which can, among other things, be invested in new or expanded market activities. It is important to recognize the possible effects of such indirect measures because the alternative, direct loan administration and supervision by Government or by private lending agencies, would involve such high administrative costs that, if passed along to the borrower, might require interest rates no different than the current ones.

Unless there is a particular interest in promoting a particular line of production, extension of "formal" financial services to small-scale activities is not advisable unless there already exist diverse institutional mechanisms such as extension agents, cooperative association, community savings and loan associations, etc. through which credit could be extended. Putting this suggestion another way, it would be more advantageous to integrate financial services together with other services which require almost identical institutional mechanisms of the kinds just identified. Alternative methods of bringing about increased capital availability through indirect means are discussed in Chapter 6.

4.3.8 Research and Development Services

While all the preceding suggestions may have some merit in theory, the fact of the matter is that current Government purchasing arrangements, public infrastructure services, marketing services, training services and financial mechanisms do not, for all intents and purposes, exist. The institutional mechanisms for program implementation, documentation and/or personnel with experience in bringing programs and institutions into existence, and the kind of information gathered and presented in this chapter about small-scale activities are also absent.

It follows that for all the optimistic discussion of appropriate technologies, appropriate intervention, appropriate execution mechanisms, etc., there is a rather weak basis for initiating any one of the many suggestions presented. Notwithstanding the obvious fact that any step taken in the future will be highly experimental and easily subject to failure, it is essential to learn more about the characteristics of the urban economy, to search the outside world for relevant and applicable intervention experiences (including technology, extension, credit, delivery institutions, etc.), to develop unique local methods of intervention when imports cannot be found, to disseminate information about successful experiences, to derive methods of pre-testing and evaluating the feasibility and social cost-benefit relations involved in any planned intervention, and so on.

Although some items, like technology, eventually become integrated into programs related to marketing services, something has to be created to discover the technology in the first place, to build mechanisms for diffusing knowledge of it, etc. Any program of intervention needs a

beginning, and after the beginning, needs a memory. This would be the purpose of creating, formally or informally, a research and development service oriented to setting the stage for public intervention.

But there is more to this. Although the suggestions presented seem simple and straightforward enough, they demand great sophistication. The only people who really know a great deal about useful programs are the recipients themselves and they, unfortunately, are not in a position to carry them out. Government personnel and foreign assistance experts, for the most part, caught up historically in "modern" experiences and conceptions of development, lack the kind of understanding and inventory of tested methods which could easily be brought to bear on the people of St. Martin. The research and development service must function also as a means to bring a closer compatibility between the concerned and the objects of concern.

At this point it seems appropriate to mention that the various programs suggested find their origins not only in the survey of St. Martin and the relevant international literature, but also in a very tangible private enterprise handicraft project with which I was involved. This is an experience of synthesis which complements analysis and which provides substance to many of the arguments presented above. The story of how \$12,000 was used to provide upwards of 500 employment opportunities at incomes significantly higher than those found in St. Martin is contained in Appendix E. Accounts of this sort are what I believe to be at the heart of the concept of appropriate research.

Obviously, no one or combination of the programs alluded to can be undertaken without some prior knowledge of the probable costs and benefits involved. Resources in Haiti are too limited to be squandered uselessly. It is also a tautology to say that any suggested program must meet the test of whether or not it is in accordance with official Government policy. And even if direct concern with the conditions of the urban poor were to become a prime concern of the public sector, there remains the question of whether or not administrative and managerial resources are adequate enough to initiate meaningful actions, even with external assistance. These questions will be dealt with more fully in Chapter 7.

Before moving on to the next chapter I think it important to underline that the non-exhaustive list of possible programs of intervention presented above are drawn from a partial perspective about "income". The implicit model in use is that of the individual worker in interaction with the market environment. Although I have discussed labor, labor intensiveness and work quite freely, I have not come around to addressing the question of how "work" is produced in the first place. In some countries the production of work can be taken more or less for granted, but this assumption is not possible in St. Martin. As will become abundantly clear shortly, the "cost of living" in St. Martin is very literally the cost of producing life itself.

If one takes a broader perspective on the environment and then, as described in Appendix A, one thinks about the relation of market and non-market activities, the concept of "productivity" begins to take on a much more extensive meaning. Reductions in the cost of producing life

and work are just as relevant methods of increasing "productivity" as are appropriate technologies. The importance of this lies not in any conceptual parsimony but in immediate practicability. It is apparent that many of the programs outlined above will require a long time to implement. The other dimension of the broader picture, which is presented in Chapter 6, after a brief evaluation of the household incomes arising from individual income sources, begins to tell us about what can be done tomorrow, and that is its importance.

Notes: Chapter 4

1. In the category of "earning money income" I placed all persons who currently were working or, if not working currently, expected to return to work whenever circumstances such as finding a job, recovering from a temporary illness, etc. would permit.

Under "household management responsibilities" I placed all persons who engaged in one or more of the following sub-activities: cooking and/or preparing food, buying food and/or running other purchase errands, obtaining water, washing clothes, looking after infants, and protecting the dwelling unit.

In the category of "other" I included those 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 go to school, could work, and could take on management responsibilities but who did not do so and did not express an interest in doing so.

2. The 198 individuals were those 14 years and over (classed in the age group 12-16) who fell into the three earnings categories, and three of the five apprentices who were earning money income from this activity at the time of interview.
3. Information on the urban population is taken from the Enquete Socio-Economique, Premiers Resultats (Avril 1970), Institut Haitien de Statistique (IHS), Mai 1975. This survey of socio-economic characteristics of the national population was undertaken partly as a training exercise for census takers and census designers who would carry out a major national census the following year, 1971. So, in principle, the data suffers from a number of inadequacies.

The difference in sample and city participation rates is explained in part by the broader reach of the IHS survey, which includes many families at higher incomes with lower participation rates. Note that the IHS survey indicates very high rates for the national average (78%) and for the rural areas (81%), which suggests that the estimate of 76% may not be far off the mark for families with relatively lower incomes.

4. Since 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 participation, 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 participation rates 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).

5. The IHS broke down the economically active population and the labor force in the following manner:

-- economically active population	100%	(i.e., 63% of total population)
-- labor force	66%	
-- unemployed		32%
-- working		34%
-- self-employed		12%
-- employer		1%
-- employed		21%

6. The conceptual framework for looking at the household, which is presented in Appendix A, 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 became very useful as I tried, with difficulty, to reconcile 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 quite used in affluent countries to asking persons who have steady jobs with steady salaries whether or not they have worked the past week, month or year. All that is necessary to define unemployment then boils down to selecting an arbitrary period of observation for which comparisons can be made in time and in space. So this is not a serious obstacle.

On the other hand, we are not at all used 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 same applies to the self-employed who are in fact small-scale entrepreneurs.

So we face the dilemma of having a term which applies only to part of the labor force, and of not having a term which conveys the same information about the other part of the labor force. 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 are able, and only insofar as we wish to make a distinction between (wage) employment and self-employment. My own

thoughts are that the distinction is not really all that useful in places such as Haiti, and that 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? In answer, I can suggest that the question is usually 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). So long as an individual remains in the labor force we can assume that he oscillates between work and searching for work. He is either selling a shoe which he has manufactured, or searching the market to sell it. What we are really interested in is the pattern of oscillation through an extended reference period and the total income obtained during that period.

However, even though I do have reservations about certain ideas of contemporary labor market analysts, I would be remiss if I simply avoided using them, for they do provide some information and do permit comparison of sample data with urban data and with observations made in other places. I have therefore decided to stay with conventional terminology as much as possible.

7. I could just as easily have removed the individuals who did not work from the labor force; and have presented an unemployment rate of 0%, or a "disguised unemployment" rate of 7%, or a host of other interesting permutations and combinations of numbers and definitions that carry little information.
8. The sectoral breakdown for the whole city is based on the information in Table 2.1.
9. The conceptual framework (Appendix A) defines all workers as self-employed, and that is synonymous with saying that they are all capitalists if we take physical and human capital as essentially equivalent (though not completely substitutable) factors of production that can be put to use with the addition of time.
10. The observation of an apparent "backward bending" supply of workdays is not unusual, and has been found in many situations. The usual theoretical explanation for this phenomenon is expressed in terms of income effects of relative price changes coming to dominate substitution effects in a "work-leisure" model of individual and family market activities. A good summary of this is contained in Friedmann (1971). However, the "backward bending" supply interpretation is incorrect for the sample. I could not identify a single worker in our sample who would not work more often at his or her current wage or at a higher one if provided the opportunity to do so. The "backward bending" relationship is sometimes a spurious empirical observation that results from inadequate thought about the heterogeneity

of the demand for and supply of labor and a carelessness in the statistical interpretation of aggregate and cross-sectional analysis.

If for reasons of social "prestige" associated with a particular set of skills, for example, many workers will work only at a relatively high day wage; and if the demand for those skills as expressed by a total wage bill is less than that which would use all the workers all the time, then the supply of workers would take the form either of a few workers working all the time or all workers working less than full-time. If this latter is the case, then we can see that the "backward bending" supply curve tells us something about the static form of supply and not anything about the whether a worker will choose to work more or less often in response to increased wages (Lewis: 1957, Miracle: 1976).

11. Note also that 5% of the workers obtain earnings from secondary jobs. The average monthly earning from these is \$8.30, and ranges from a low of \$1.00 to a high of \$25.00.
12. The F-values, correlation coefficients and R^2 values for the relationship between earnings and the replacement value of operating capital are:

daily earnings:	F = 13.37	R = .24	$R^2 = .06$
monthly earnings:	F = 39.95	R = .44	$R^2 = .19$
13. Unfortunately, the rate of "underemployment" suffers from some arbitrariness. Had a higher or lower criterion for workdays and/or for earnings been used, the estimate would have changed. More importantly though, the empirical counterpart of "underemployment" is "overemployment". Logic would compel dubious implications that suggest workdays be reduced for those who work more than, say, 22 days, and that these "surplus" days be shifted to those who work less. Few analysts would ever think explicitly along these lines, but it is implicit in the notion of "underemployment". The inherent contradictions that arise from use of the term become quite clear in the case of proposals and suggestions that call for increases in the overall demand for labor as a way to deal with the "underemployment" problem. If such demand could be increased, then it is likely that the number of workdays, holding constant wages and the number of workers, would increase for all workers -- except perhaps for those who already work the maximum number of days (and even then the length of each workday might increase). If workdays increased for all workers, then the retroactive logical assumption is that they all were "underemployed" to some degree or another prior to the increase in demand (Viner: 1957).
14. 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 I estimate that the value of food income is equivalent to between \$0.15 and \$0.20 per day. The addition of this amount to their incomes would not substantially alter their relative earnings position.

15. One of the immediate observations that comes to mind is that official private and public employment data for "modern" activities would necessarily underestimate the size of the labor force directly engaged in production, and hence employment growth estimates for "modern" jobs would necessarily be considerably out of line with reality in cases where enterprises engaged in extensive extra-legal employment and payment practices. Analysts would certainly find themselves in a better position to deal with such matters as labor absorption, urbanization and migration if the implicit assumption of "formality" among "modern" activities were to be considerably relaxed.
16. Because of the small number of cases for some of the sub-categories, the number of sub-categories in Table 4.13 is less than the number contained in Table 4.10. The F-statistic, however, refers to the complete set of sub-categories.
17. An intermediate disaggregation classification, lying somewhere between the occupational classes of Table 4.13 and the indivisible classes of Table 4.11 would have likely identified clearer sub-groups. However, the sample is too small and it would not have been possible to carry out valid empirical tests of significance.
18. This latter issue has concrete importance. In 1973 the coastal shipping port was moved several kilometers northwards from the central market. Since about 15% of all produce entering the city came through this facility, the move created many additional employment and earnings opportunities for labor-intensive transport services. At the same time it increased the prices of commodities shipped through there. For a period of several months while adjustments were taking place in the structural and spatial organization of activities (e.g., the creation of a new market at the new facility) traders who dealt in port-bound goods suffered losses in earnings because of the higher cash and time costs of goods transported to the central area. Again, in 1976, the truck transport terminal at the central market was closed to make way for expansion of the maritime port. Trucks were not provided an alternative location and were obliged to park wherever they could, and this caused considerable problems for a period of several weeks as new locations for transactions were worked out.

In 1976 the Government also began to lay plans to forbid the entry of trucks to the central market and to provide alternative locations on the periphery of the city. The object of this was to make additional room for the port expansion (financed in part by the Interamerican Development Bank) and private port-related development. This proposed action has the intended side effect of reducing the scale of operations in the central market, and considering that something in the order of 7000 traders operate in it during peak days (Locher: 1975), the financial consequences could be severe over an extended period of time for a lot of workers if execution of the plan were not handled with care.

19. The reasons why women would set up at home rather than at other places are several. 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 (Table 4.14) and would forego relatively higher and more unstable earnings. A supporting observation for this argument is that most of the newer entrants to trade who left domestic service were engaged in sales at home. 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. But only a very few women were found in a situation where it was impossible to find another member of the household, or another member of the extended family outside the household, who could be called upon on a regular basis to look after things.

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 appear to be important here are: location, residential density, layout of roads and pedestrian paths, and pricing policy for frontage and non-frontage locations.

20. I cannot say for sure whether it is ultimately 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 on. But sometimes increases in the scale of operations and in earnings can be dampened by high storage fees in the central area. Consider, for example, the woman who has capital to engage in the sale of, say, 80 kilograms of produce. If there is no one in the family to help her carry goods between market and home and back again, she requires a porter (and hence creates an employment opportunity) which would raise her operating costs by the cost of transport, by the cost of losses in transport and by the costs of reduced selling time. If she could obtain a storage space in the market at a total cost less than these, then her "productivity" and earnings would likely increase. This option would reduce the relative amount of money which she would expend in movement (i.e., reduce the capital intensiveness of the operation), could increase her net earnings and could decrease the amount of employment which she generates. In the aggregate one cannot say what the total effect might be on earnings, prices and employment, but it does seem a worthwhile avenue of inquiry. A start in this area has been set 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, at the relationships with the urban-wide marketing system.

21. There is a remarkable substantive literature of marketing systems and women traders in Haiti. Most of the recent studies have been carried out since 1971 by the Interamerican Institute of Agricultural Sciences (IICA) in Port au Prince, but only a very few have managed to become widely available outside Haiti. One of these (Locher: 1975) presents an excellent overview of the marketing system inside Port au Prince. Earlier studies that are available outside Haiti, such as Mintz (1957, 1961, 1971) deal mostly with intra-rural commercial activities and rural to urban marketing mechanisms.
22. The statistical measures of association and significance between earnings and capital, after holding constant for other variables, were: $R = .78$, $R^2 = .61$, $F = 9.60$.
23. It is worth mentioning that the women interviewed indicated that, given the opportunity, they would readily leave trade activities in favor of factory work inside a plant where they saw not only an opportunity to obtain higher earnings, but also considerably more stability in their earnings. The interest in stability becomes clear in Table 4.14 where it can be seen that the majority of earnings is seasonally unstable as compared to the earnings for labor sellers identified in Table 4.11. Moreover, factory work both outside and inside a plant has little or no seasonal variation. Failing the option of a factory job, many traders indicated that they would prefer to obtain sufficient funds to enter into certain types of wholesale marketing activities, which they felt offered sufficiently high promise of financial rewards to offset the risks involved in large-scale price speculation which is characteristic of wholesale activity. Other traders indicated a desire to open a fixed retail establishment and run a larger-scale fixed-location operation. Also, most married women indicated that they would stop work if ever their husbands earned enough, or gave them enough, to support themselves.

All the traders were unanimous in their opinion that domestic and related service activities were to be sought after only in dire circumstances, even though these activities could often provide stable earnings at levels equal to or higher than many trade activities. Part of the reason for this was said to be that it is shameful for a member of one family to work in direct servitude for another family of higher material means. The workers did recognize that by working for a factory they would be working for industrialist families, but the relation was indirect and hence acceptable. The other important reason for shunning service work was that it provided little room for income growth in general, and little room for income growth based on personal effort specifically. That is, whether service work is carried out poorly or well in the eyes of the employers, and whether or not compliments on quality of work are forthcoming, the wage remains constant. The exception to this general view is domestic service in the homes of

foreigners who offer cash wages five to ten times higher than Haitian households, who are emotionally less demanding, who provide assistance services to employees for medical care, schooling of children, etc., and who theoretically offer the kinds of contacts necessary to facilitate emigration out of the country.

24. During the interviews the majority of manufacturers indicated 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, or if competition was reduced to allow higher prices, or if the cost of inputs was lower, or if money to buy tools was made cheaper, or if information was readily available on new product lines, etc. 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. Also, many indicated 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.

25. Given the variety of ways in which manufacturers interact with the market, one would have thought that the selection of worker-market interaction classifications would provide some better means of explaining the variation in earnings.

On the demand side, for example, customers are nicely distributed between large commercial establishments (28%), small commercial enterprises (23%), and the general, broad market (47%). On the supplier side, workers obtain inputs from both large and small industrial enterprises (10%), large commercial enterprises (58%), and small commercial activities (27%). Although it is interesting to notice how our workers transform inputs obtained from large commerce into goods for use by the broad market, neither the source of inputs nor the structure of the market for outputs has much bearing on earnings.

Looking at the origin of demand in a broader perspective, it was found that 30% of goods are destined for the lower income part of the population, 25% for both higher and lower income groups, 28% for higher income and export markets, and 12% primarily for rural markets. But the locus of demand also reveals little about the variation in earnings.

26. The statistical measures of association and significance between earnings and capital, after holding constant for other factors, were: $R = .45$, $R^2 = .20$, $F = 9.18$.
27. In Table 4.17 I indicate a combined daily earning of \$1.50 for both workers. This is because of averaging their earnings across the period when they did not have a drill, and the period when they did have a drill.
28. Eight workers in six families also obtained earnings from secondary occupations. Three of these individuals had a temporary secondary source, and the rest had permanent sources.

In the first case, three brothers (two day workers and one trader) had discovered a market for straw hats for Mardi Gras festivities. The work would last no more than three weeks, during which time they would earn \$12.00 together.

The rest included a machine operator who worked nights as a projectionist for \$20.00 a month, a butcher who raised cats on scrap meats and who earned an average of \$1.00 a month, a drummer who manufactures drums and earns \$2.00 a month, a customs broker who raises pigeons for restaurants and earns \$5.00 a month, and a manufacturer of wool braids who runs a small shop selling miscellaneous goods and earns \$25.00 a month from the latter.

Besides these persons, others also raised roosters for sale or betting at cockfights. One could also surmise that some boys earn pennies now and again for car washing, car watching, etc., and that some men, women and children would engage in prostitution from time to time.

29. This is a very common practice in Port au Prince, as is the continued payment of salaries to widows of deceased workers. Also, many workers 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 true number of active public workers.

30. As a general rule, the smaller the quantity of anything bought in Port au Prince, the higher the unit price. Not only do the poorer inhabitants have less to spend, but they are obliged to buy everything in minute quantities; so they spend considerably more per unit than those who are relatively better off (and we see here the inherent advantage to produce traders of eating part of the stock of food which they sell). The increase in the unit prices arises as a result of the increasing costs of bulk-breaking and marketing ever smaller quantities. Cigarets, for example, if bought by the carton will cost 1.25¢ each; by the pack each will cost 1.60¢; and by the unit one will cost 2¢; a total increase of 60%. Again, this is a dislikeable feature of the market, but it represents that feature which provides the basis of income for most of the traders in the sample. Concern with this aspect should not be directed to the fact that it occurs, but rather to the question of whether or not the unit price increases are in line with the true unit costs of marketing.

Chapter 5: The Household Incomes Obtained

The examination contained in the preceding chapter has demonstrated that the market earnings of individual workers are the most important contributors to household income; and it might appear that the simplest method of establishing family income levels would be the summation of the earnings of workers across each family, plus the revenues from non-labor sources. Such an exercise might indicate the flow of gross income to all the members of a particular household, but it would not provide a clear indication of the net income which is available for use by the household as a unit because, as was implied in Chapters 2.5 and 4.2, many individuals allocate their earnings in part to the households within which they reside and in part to other purposes.

5.1 Individual Contributions

Of the 184 workers who were working and whose earnings and other revenue sources were used to estimate household income, 53 of them or 29% contributed less than all of their income to their households.¹ Eight of these were women and the rest were men. The distribution of these workers across contribution classes is contained in Table 5.1.

Table 5.1 Contribution of Workers to Household Income

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	94	90	184

The two men who contributed nothing were both relatively young and did not earn very much, and they 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 her husband who had been committed to a sanatorium for persons with tuberculosis.

Of the seven women in the other categories less than 100%, two were temporary residents in households who recently arrived in the city and who were trying to save money so that they could lease their own homes. The other five women were sending money to their families in other parts of the city (one case) and to their children outside Port au Prince (four cases) who were being looked after by parents and by brothers and sisters.

Seven men, five of whom were married to the women just mentioned, were also sending money to other extensions of their respective families. Four other men were providing money to other wives from whom they had been divorced or separated. It was not possible to document specifically the purposes to which the other 32 men put their non-contributions. One can surmise that much is spent on personal goods, on gambling and the lottery, on repayment of debts, on the purchase of property, on the issuance of loans, on the support of second wives and families or girlfriends, and so on. The general character of all these expenditures is that they represent uses that are no one's business but a man's own.

One important general observation is that there is a very high inverse association between level of contribution (excepting the 0% level) and the level of work earnings. The higher the monthly earnings of a (male) worker the more likely he is to contribute less to his household.

of residence. The contribution classes 100%, 75%, 50%, and 25% in Table 5.1 are linked to monthly earnings classes that are respectively \$16, \$29, \$45 and \$60.² It is as if workers decide that the obligations of immediate household support require a contribution of about \$20, and that earnings above this level can be used for other things.

5.2 Gross and Net Income

The presence of varying levels of individual contributions to immediate family welfare has significant effects upon the distribution of total and per capita household income across the sample, and it is of interest to trace these out.

The average gross household income obtained by all individuals is \$49.00 per month over the year and varies by a factor of 1.5 from \$61.00 during the high activity season to a lower value of \$39.00 during the off-season. This income is widely distributed across the sample from a low of \$10.00 to a high of \$179.00. Discounting the bias in the average created by the higher-income families, the median value of \$38.00 is a closer representation of the income level of most families. The distribution of income is indicated in the first column of Table 5.2.

Table 5.2 Distribution of Monthly Incomes of Households (\$)

Income Class	% of 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%

However, the total household income described in the Table does not tell us all that we need to know. Households vary in size and so the income measure of welfare is not the distribution of total income, but rather it is the distribution of per capita household income. This information is contained in the first column of Table 5.3.

Table 5.3 Distribution of Per Capita Monthly Incomes of Households (measured in \$ per adult equivalent unit)

Income Class	% of 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%

The average per capita monthly income for each household is about \$12.50, and the mean \$11.00. These values range from a low of \$3.00 to a high of \$37.00. If we compare the first column of Table 5.3 to the first column of Table 5.2 it is evident that the distribution of per capita incomes across the sample of families appears to be much less equitable than the distribution of total incomes; there are about the same number of households in each of the per capita income classes.

Clearly, at a given level of total income the overhead of increasing family size will generate a decrease in per capita income. On the other hand, larger families tend to have more income earners and so tend to also obtain higher total earnings. In St. Martin these opposing effects tend to compensate for each other. So while a given family would have higher per capita income if its size was reduced, it would not be accurate to say that the larger families in the sample fared worse than smaller families in terms of per capita income.

However, the relatively inequitable distribution of incomes indicated in the first columns of Tables 5.2 and 5.3 are theoretical because, as has been mentioned, many workers contribute less than 100% to their immediate households.

The second columns of Tables 5.2 and 5.3 indicate the distribution of families across total and per capita income classes after deducting from each earner or recipient of non-labor income amounts which are regularly not contributed to the maintenance of the household. The columns show a much higher frequency of households in lower classes and, by extension, a more equitable net income distribution than that suggested by the first columns of each table.

The average per capita net income, \$9.85, is much lower than the gross estimate. In the aggregate, the in-bound flow of money (or its equivalent) to the whole group of families is reduced from an average monthly gross value of about \$4300 to a net value of \$3300; a reduction of \$1000 or 23%.

5.3 Conclusions

We can see that as earnings increase across the sample of workers the rate of increase in household welfare is lower. It is hard to say whether this is good or bad. In the situations where money is transferred to other parts of the immediate or extended family outside the household, or in cases where men transfer money to other households which they "secretly" support, the effect is to bring about a more equitable sharing of earnings across a wider set of people than just those in the household of residence. One cannot judge the relative merits of a smaller number of people having higher per capita income as opposed to more people having lower per capita income.

One cannot make judgments if men invest in property or in the capital market either. If the household should fall on bad times, then these "secret" transactions will serve as a good cushion against disaster. In the aggregate, investment in the capital market is the type of thing one would like to see because such behavior is the basis for maintaining some degree of capital availability for loans to small-scale activities. The only thing that might cause concern is whether lower per capita household income is being created by "conspicuous-consumption" and "waste" on the part of men. That would involve a serious inequity within the household. Unfortunately, I don't know the proportion of earnings used in this latter manner.

The importance of these observations is that it is difficult to predict and to trace the effects of earnings increases upon family welfare. One thing seems to be certain and that is that direct effects will be felt not only by a "target" group for policy, but also by a number of other individuals elsewhere in the city and country, so that the allocation of increased earnings will tend to be more equitably distributed at the cost of a lower rate of per capita income growth.³

Related to this is the question of the appropriate medium which could be used to increase income. Clearly, household members have considerable freedom in allocating money. They would not have this degree of freedom or the opportunity of engaging in more equitable allocation if policies aimed at them were to use media, such as housing projects, which could not readily be converted into money or which could not obtain an expenditure saving that increases the availability of money. It is thus conceivable that well-intentioned public actions designed to raise in-kind incomes for a group succeed in that purpose at the unintended price of reducing the level of equity that existed prior to the action. This possibility should always be kept in mind.

It must be pointed out that the incomes being discussed here are figures which do not include household expenditures. More concretely: throughout both this chapter and the previous I have been discussing profits, earnings and income as if it cost nothing to produce the work necessary to obtain them. The earnings and income figures are net of reinvestment in capital stocks of input materials, but they are not net of the reinvestments for food, shelter, water and the like which are necessary to generate the time (or labor) with which goods and services are produced and sold. These other inputs are the subject of the next chapter.

Notes: Chapter 5

1. Gathering information on the level of contribution that each earner provides to his or her immediate household was one of the more difficult tasks of the family survey. The results in the text should not be taken to be all that accurate, but they do serve to bring us closer to "reality" than the assumption of total sharing within the family.

Cases where men and women were sending money to other family members outside the household were easy enough to deal with, as were cases where earnings of workers were so low that a contribution from them was not expected or demanded. The major difficulty arose in cases where men contributed less than they earned and had no socially acceptable means to explain their actions. By "socially acceptable" I mean that the respondents (both men and women) felt that it would be perhaps morally unacceptable for us, the interviewers, to hear that all earnings were not put into use for all members. While women would be unhappy about the fact that their mates' earnings were being used for purposes other than their families' welfare, it was regarded as an unfortunate fact of life which had to be tolerated. As long as some earnings came their way, it was better than nothing. This relationship between men, women and other households is common enough in St. Martin that there is no particular reason to keep it hidden in St. Martin. However, I was not only not from St. Martin, I was a foreigner working in the area on behalf of the state, and it is improper (let alone dangerous) to manifest less than absolutely correct conduct in the presence of a state official. Non-contribution is not officially correct behavior.

In this situation it was a definite asset to be foreign since it was an unusual occurrence for residents to have to deal with a government official embodied in a foreign form. They were slightly uncertain about how they ought to respond to that combination. I capitalized on that uncertainty in order to obtain reasonable responses to all queries. In this particular case I asked the "contribution" question well into the interview, after having established a rapport based on the fact that I began with questions on subjects of immediate concern to the respondents. I posed the "contribution" question in a manner that implied that I expected less than a 100% contribution level, that I considered such lower contributions to be "normal", and that other families had already answered the question in a manner that reflected their actual situation. Of course, the question and answer period involved many nuances, subtle proddings, and double-checks on responses -- but in general I came away with the feeling that even if I hadn't arrived at "truth" I came somewhat closer to it.

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

3. At a larger scale of observation, if a typical group of people such as those in St. Martin regularly draw something like 20% of their income to directly support others, then we can see some clear analytical implication for ideas about urban growth and about the relationship of urban income and rural income. In the former case, for example, it should be evident that if worker earnings increase, and if proportionately more of the earnings are shared by proportionately more people so that per capita income grows only very slowly, then the rate of increase in urban population will not only directly depend on the number of employment opportunities created in the city, but also directly upon the increase in earnings. Even if no new openings appear, increases in worker earnings may be sufficient to cause a direct increase in population. So when analysts seem to lament the situations where growth of the active urban population is much larger than growth of "modern" jobs which yield high earnings, it may very well be that part of the higher population growth is "caused" by the level of earnings, independent of indirect effects associated with higher worker demand for goods and services that are responded to by the generation of a supply of small independent activities. We ought also to keep in mind that the sharing of earnings also represents in part a distribution of capital to many people who otherwise could not enter into many of the small activities discussed in Chapter 4.

Chapter 6: The Uses of Income

Chapter 4 presented an analysis of the various market and non-market sources of individual income in St. Martin. In the case of earnings derived from market activities, the income figures presented for individuals engaged in wage employment were the salaries received for services rendered. The figures presented for individuals engaged in self-employed trade and manufacturing activities were the net profits obtained after reinvestments in stocks, tools and the purchase of outside labor services. These latter "net profits" are clearly an underestimate because they did not include some additional overhead costs such as those for location, storage and plant facilities embodied in the worker's housing costs. More importantly however, for both types of workers the question of the expenditures necessary to produce the time component of market participation, or work, were conveniently ignored. Because these costs of work (i.e. the literal costs of living) were not included, the earnings which were presented are not the "net" profits resulting from income production processes. There is yet no way of suggesting whether or not the individual accounts are running at a profit or at a loss. Such a determination would bring us closer to knowing what the "real" income and welfare position of these individuals are.

However, as was indicated in Chapter 2, the life agenda of individuals is not atomistic and usually extends beyond exclusive concern with personal gain; to the welfare of the extended family organization. The overhead cost of income production also includes some degree of support for other household members. It would follow that the object

of concern should be the household and its' "real" income position rather than that of the individual worker.

But in Chapter 5 it became evident that individual welfare, family welfare and household welfare are not exactly synonymous in St. Martin. Many workers send revenue to family extensions outside the household or send it to other unrelated households or use it for strictly personal purposes. It was therefore necessary to make additional calculations in order to arrive at estimates of household income used exclusively for household maintenance. Even with these more careful calculations, the various directions of money flows made it difficult to accurately approximate the "real" income status of the families interviewed in St. Martin. The "net" total and per capita income distributions of the preceding chapter should be interpreted in this context.

In any case, the objective of this chapter is to closely examine some of the additional overhead expenses incurred by individuals and households in producing various internal goods and services; including the production of work for current participation in market activities. In pursuing this objective the outward characteristics of "real" income will become manifest in the consumption patterns of households in each of the income classes identified in the preceding chapter. The meaning of poverty will perhaps then become clear.

However, I must stress that the purpose of the analysis is not simply description. As was the case in Chapter 4 regarding income sources, the object here again is to identify methods of increasing household "productivity", by reducing the costs of staying alive, the costs of work, etc.; and thereby also increasing the demand for goods

and services which, as was shown in Chapter 4, is a vital means of increasing the incomes obtained from market activities.

Before proceeding, it is essential to point out that use of the income "indicator" will be made throughout this examination. This is a convenient method of drawing equal-base comparisons between families with different material resources. However, it is very important to keep in mind that "income" homogenizes fundamental differences that may exist between households. Although the level of material resources may by itself determine different uses for income, it is not the only determinant. At the same level of income households may be composed of different combinations of adults, dependents, educational levels, sexes, ages, life-cycle stages, etc. More pertinent perhaps 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 for example, with quite different perspectives; which in turn will lead to different patterns of expenditure (Muth: 1966, Ghez and Becker: 1972).

Unfortunately, the 88 families interviewed in St. Martin are small in number in comparison to the wide range of social attributes which they each have and to the wide range of income-production combinations in which they each are engaged. Although some recourse to these life-process determinants will be made where possible, use of the homogenizing income indicator has been found unavoidable for the purposes of gleaning empirically relevant insights.

6.1 Expenditure Patterns in Port au Prince in 1970

The low incomes obtained by most families in Port au Prince limit the kinds of expenditures which they can make. A survey of urban families carried out in 1970 by the Haitian Institute of Statistics indicated that about 80% of family expenditures were concentrated on food, housing, medical care, energy, soap and laundry, clothing and schooling. Although expenditures for these items fell from 85% of income in the lower income classes, to 78% in the higher income classes, the most important changes in the pattern of spending takes place within the group of seven items (Table 6.1).

As indicated in the table, the proportion of income spent on food, energy and clothing remains more or less constant as income increases. This suggests that the demand for these items is strong at all income classes. The proportion of expenditures for laundry and housing, especially the latter, fall off quite quickly in comparison to the previous items. This suggests a decline in the priority given to expenditures for these things as incomes increase. Finally, the table shows a remarkable increase in proportional expenditures for medical services and schooling of children. As income increases from the lowest to the highest ranges, expenditures for this last pair of services increase from zero to 15% of income.

If we regard these expenditures as investments designed to generate a stream of benefit returns (Appendix A), it can be surmised that families in the lowest income category obtain highest net returns from housing, food, and energy (i.e., charcoal with which to cook food). Obviously such families would also obtain substantial gross benefits

Table 6.1: Family Expenditure Priorities by Income Class, Port au Prince, 1970

Type of Expenditure	Monthly Income Class							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%
Housing	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%	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.

from investments in medical care and schooling; but the opportunity costs of shifting expenditures away from food and housing at that particular income level are high and families are forced to limit health and education services quite heavily. The net effect is one which reduces expenditures for these services to zero.

Families in higher income classes do not live under such severe constraints as do lower income families. Since the former families spend up to eight times more on food and three times more on housing than the latter, they do not obtain as high a perceived relative return. The opportunity cost of not investing in health and education services, and/or in continuing to invest in housing and food, is relatively high¹.

So, even though the range of income classes in the table is quite limited, expenditure priorities do change rather significantly as we view across them. In broad terms it could be said that families in the lowest income grouping are really basically concerned with staying solvent (i.e., alive). The period over which they evaluate expenditures tends to be short, perhaps only a day, a week, or a month. In this context their main priority is earning as much income as quickly as possible. Food for people and a place to protect them and their goods from the climate and the social environment are the basic requirements over a very short time horizon.

Families in the higher income classes can afford to have a longer range view of things. Occasional expenditures for medical care will not starve them. Sending children to school will not cause undue hardship, and in fact, over the long-run which they can afford to perceive, schooling may even advance their financial position one day. We should

note, however, that even at the higher income level the expenditure pattern is one which reflects an interest in tangible returns that can be measured in material welfare terms. Expenditures for housing, food, and clothing are kept down, and the new investments are still basically "productive" ones. Incomes must increase rather significantly beyond the highest income classification of the table before we are likely to find substantial investments that yield more intangible returns and which are sometimes referred to as "non-productive" investments or "conspicuous-consumption".

The import of these general observations for planning should be clear. Even though all families with incomes between \$10. and \$60. each month may be regarded as "poor", they are not homogeneous with respect to their investment priorities. Movements from the lowest to highest mid-ranges of each income class involve increases that are respectively 200%, 70%, 40%, 29%, 22% and 18%. These are significant differences and it follows, as we have seen, that families in each class demonstrate significantly different welfare priorities. In an environment of very limited public and private resources where expenditures have to be made carefully, it is important to know which kinds of income uses are more important than others, for whom they are more important and why they are more important. In the absence of such knowledge, public intervention runs a high risk of being wasteful and inappropriate because, for all the good intentions which may be involved, it may not address the vital needs of the intended beneficiaries, it may not effectively increase the "productivity" of the household in dealing with its environment and it may not really bring about significant increases in income and welfare.

The following sections of this Chapter will take a closer look at three of the major items included in Table 6.1: housing, schooling, and food. It was not possible to gather valid information on the proportion of income spent on food, but other useful information on the subject which provides some insights regarding the relationship between food and income was obtained. The chapter will also look at family expenditures for water, an item explicitly missing from the table because the 1970 survey assumed that the commodity was obtained free of charge from public fountains. This was an erroneous assumption. At the end of the chapter attention will turn to an examination of the financial market with which the families of St. Martin interact. The discussion of credit is placed at the end of this chapter because credit is used to finance a number of investments among the items identified in Table 6.1, as well as investments in more direct revenue-producing activities.

6.2 Housing

Housing characteristics in St. Martin are not good. A third of dwelling units covered by the survey had concrete floors, while the rest were made of earth. While the type of floor is a useful way to compare housing characteristics with those in other cities, it is not a valid criterion for judging the relative quality of dwelling units within St. Martin. Other important characteristics include the number of holes in the roof, the number of unfilled spaces in the outside walls, the material of the outside walls (planks, crate-boards, metal, 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. These attributes are important to the residents of the community because they relate to privacy and security.

Using a combination of these characteristics, each dwelling unit was indexed according to whether it was below the average quality of dwellings in the area, equivalent to the average, or above average in quality. The proportion of homes in each of these categories was 29%, 48%, and 23% respectively. Admittedly this is a more subjective way of classifying housing characteristics, but it is more useful for analysis than saying that they are all "sub-standard" in relation to a non-indigenous criterion of what a home "ought" to be.

Table 6.2 indicates some of the simple relationships which exist between the index of housing quality and income, working capital and expenditure. As the condition of the dwellings improve, so too do the income and working capital levels of the families which live in them. Even though the average total rent and the average per capita rental expenditures increase for superior housing, the proportion of income spent on each type declines. Families with 20% to 25% higher per capita incomes² than others spend 17% more on per capita expenditures for housing. This begins to suggest that the elasticity of demand for housing may be low. This is consistent with the observations made concerning Table 6.1. But this possibility must also take into consideration size, unit price, length of residence and occupancy arrangements for housing.³

The average size of each unit lived in by the families (which is not the same as the area of space rented or owned because of subletting practices) is about 6.4 square meters, or 1.7 square meters per person.

Table 6.2: Relationship of Housing Quality, Price and Income

Item	Condition of Dwelling Unit			
	Below Average	Average	Above Average	
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

The distribution of sizes is quite large and skewed. The low figures are 1.3 meters per family and 0.3 meters per person. The high values are 48 meters per family and 9 meters per person. Three-quarters of households live in areas smaller than the average, and two-thirds live in areas smaller than the per person average. In the case of 10 families, the area inside the dwelling is so small that some members sleep outside on rotating shifts.⁴ These observations underline the general density of St. Martin discussed in Chapter 3.

However, there is no strong statistical relationship between income and the size of area which families live in. The reasons why crowding and income are not closely related are to be found to a certain extent in the historical evolution and in the institutional forms of the housing market in the area. These factors serve to increase the price of entry to housing.

Obviously the families who came to St. Martin a long time ago were able to buy or lease land or to lease dwelling units at considerably lower unit prices than those currently faced by newcomers. In the case of early arrivals who leased land and then proceeded to build their own structures on it, the rental price of land has not kept pace with current prices based on current demand and supply. Renters of land who have been in St. Martin a long time still pay about \$0.10 per square meter per month, while more recent arrivals pay between \$0.30 and \$0.40 for equivalent parcels. The reasons that longer-resident families do not have to pay more are to be found in the positive and negative personal relationships that tie land owners and renters. On the positive side, the presence of one family on a piece of land which pays its

annual dues consistently assures the owner that his title to the land is being maintained and that he can claim it at any time without fear that in his absence some other person had encroached on the parcel. On the negative side, any attempt on the owner's part to reclaim or to increase the rent of land upon which only the renters have made improvements is bound to result in conflict, legal or otherwise.

Similarly, earlier arrivals to St. Martin who rented complete units on a 6 or 12-month basis and who have remained in those units pay less (\$0.40 per square meter per month) than newcomers (\$0.90 per square meter per month), even when the dwelling units are in the same structure. In this case the relationships tie small-scale property owners or small-scale renters of land to renters of dwelling units whom they have personally known for a long time. As long as the rent gets paid and no dire circumstances require it, rents are not raised to be in line with prices elsewhere in the area. As in many types of commercial transactions in Haiti (Mintz: 1961), the benefits to be derived by maximizing rents are tempered by inter-personal considerations.

In fact, excepting the cases of anonymous transactions, rents are not increased until a family moves out of one unit and another moves in and pays higher rents.

This discussion suggests something about the occupancy arrangements that structure the housing market, and it is appropriate to look at these social institutions more carefully since they add further discontinuities to the market which negate many simple one-to-one relationships between income and such housing characteristics as size.

In Table 6.3 five basic forms of having a place to live in St.

Table 6.3 Relationship of Housing Occupancy Arrangements, Price and Income^{a)}

ITEM	DWELLING UNIT RENTAL			LAND RENT	PROPERTY OWNERS	
	BY THE WEEK	BY THE MONTH	6 TO 12 MONTHS	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.

** f statistic is significant at the .10 level.

N = 88

Martin are cross-tabulated with a number of housing and family characteristics. Families that own land or lease it on an annual basis, as well as a significant number of those who rent dwelling units on a 6 or 12-month basis, have lived in their respective homes a much longer time than families who rent units over shorter periods. Though their per capita incomes tend to be lower, they did once make major investments in land and/or buildings, and this now provides them with both secondary income sources and reduced current housing expenditures; but this has been discussed in Chapter 4. The interest of Table 6.3 centers on the three-fourths of recently-arrived families who rent dwelling units.

A family that rents a dwelling unit on a week-to-week basis is likely to be paying a high rent for the dwelling and for each square meter of it. On the average, it has a lower total and per capita income than do other families; and related to this it has a lower amount of working capital in income-producing activities. These families end up allocating 20% of their income for housing which is quite small and which is generally of below average quality.

Recalling that expenditures can be regarded as investments which yield a stream of benefits for a perceived planning period, and that lower incomes may force shorter time horizons, we can deduce a self-evident reason why a family might choose to expend such a high proportion of its income for short-term, small and inferior housing. For example, if a family 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 over for food, water or purchases of factor

inputs vital to trade and manufacturing activities. The opportunity cost of not purchasing food and water for even a few days is quite high. The short-term rental reduces the absolute cost of housing at a specific moment in time; at the price of a higher unit cost (caused by the higher transaction costs involved). The short-term supply mechanism, costly as it is, reduces the need for families to forego housing altogether by doubling up with friends and family, to sleep outside or to incur high daily commuting costs from less-expensive locales further away from the downtown area.

Of course, given the climate of the region and the low income of many families which has to be spent in many ways, one could wonder why families bother to purchase housing services at all. Some of the explanation might come from the assumption that housing offers better protection for individuals than does the public infrastructure (Burns and Tijoe: 1968); but the physical characteristics of St. Martin do not provide a convincing argument for such an assumption.⁴ A stronger hypothesis, based on the examination of plant, storage and locational attributes of housing in Chapter 4, is that private shelter is necessary in order to sustain trade and manufacturing activities. More generally, investment in housing for a given period complements family formation and household capital formation for that period. It is an investment which facilitates the accumulation of various kinds of goods. Without the ability to accumulate a family is at a disadvantage with respect to increasing its material wealth. As was discussed in Chapter 2, income growth is important. Also, as will be seen later in this chapter, accumulation of goods provides access to the credit market,

which in turn is also related to eventual increased wealth. In this regard we may note that per capita income is a less significant indicator of occupancy arrangements in Table 6.3 than is the per capita size of working capital used to generate that income. For the lowest income families housing, given the choice of being housed or non-housed, is a vital requirement and they are willing to spend a great deal for a very small and relatively primitive shelter. Note also that non-housed individuals in Port au Prince also make relatively high partial shelter expenditures. These 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.

The same kind of explanation appears to fit the decision processes that direct families to rent on a month-to-month basis rather than on a more extended (written) lease arrangement. Both these higher-income families are in a position to spend proportionately less on housing and at the same time obtain more space, lower unit prices and better "quality". Of particular interest is the observation that although long-term leasees spend less on total and per capita rents than month-to-month renters, they do not purchase more space or better quality. Once families are sheltered and have found the occupancy arrangement which minimizes their costs, the importance of housing declines relative to other things.

On the supply side, lessors of dwelling units find advantage in shorter rental arrangements because of the higher return from each square meter of their investment in land and buildings, and by the

relative ease by which rents can be increased as turnover takes place. These advantages are tempered somewhat by the higher administrative costs and vacancies that short arrangements imply. From the interviews carried out with the minority of families that rent out dwelling units, I found that units geared to weekly rentals tend to remain rented on that basis. They are in such poor shape that they really cannot be rented out over longer periods for tenants would move away from them at the earliest opportunity. On the other hand, there is a general preference to rent on a month-to-month basis. Six-month rentals are entered into only when the offer by prospective tenants is unusually high, or when lessor families need cash in a hurry.

Actually, Tables 6.2 and 6.3 do not reflect the full range of proportions of income which are expended on rent. The average for renters of dwelling units is 17%; though a bit more than half of families expend less than this proportion. The lowest expenditure is 5% and the highest is 60% for the lowest income families.

Although the proportion of income spent on housing is strongly and inversely related to income in general⁵, it is clear from the foregoing discussion that the direct relationship is tempered by such factors as perceived quality, length of residence in the house, occupancy arrangements, size of unit, unit price and so on. Nevertheless, controlling for these factors the data permitted extraction of an estimate of an income elasticity of demand for rental housing of 0.28.⁶ This is a crude estimate across a very small sample, but it nevertheless complements the earlier suggestions that interest in housing, or at least rents, decreases with higher income; and is also consistent with findings

in other countries (Burns and Grebler: 1977).

It 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 a larger and better quality housing at more distant locations.

Ownership is of course another way of obtaining housing. But at a 1975 price of \$20.00 per square meter, or \$200.00 for a 10 meter parcel, ownership in St. Martin is clearly out of reach for most inhabitants. Couple this with the cost of constructing even a makeshift shelter for \$25.00 per square meter, or \$250.00 for a 10 meter house, then even leasing of land, if it were possible to do so, would require a substantial amount of saved income to produce a house on it.

The high price of land results from the market behavior of a relatively small number of urban landowners in the city who speculate on land values; and who therefore do not commit too much of their holdings to a particular land use lest it deflate the exchange price. There is a great deal of competition for a small supply of land placed in the lower income housing market. The high cost of buildings results from a high demand for scarce building materials. Wood, crates, scrapped sheet metal, flattened cans - all these things are hard to come by. At the same time, the cost of construction workers tends to be high, and ranges from \$1.00 to \$5.00 a day as we have seen. 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.

The general conclusion which we may draw is rather clear. Shelter is of vital importance to the families of St. Martin. They demand it because it is one of the key inputs upon which income production and growth possibilities depend. Variations in the size, price, quality and occupancy institutions of the local supply mechanism provide a degree of flexibility which meets the needs of residents at all income levels. Nevertheless, the larger urban environment limits the aggregate supply of land, building materials and construction workers and creates equilibrium prices which are high relative to income. The "high" price is reflected in the large proportion of income which lower-income families spend for a minimum quantity of it, and the disinterest of higher-income families in spending much more than that which would obtain the minimum quantity. The constraint on household "productivity" insofar as housing is concerned has less to do with the physical characteristics of the dwelling unit and much more to do with the price of simply getting a fixed roof under which to live.

6.3 Water

The average per capita daily purchase of water in St. Martin amounts to about 12 liters per day, or three gallons.⁷ The lowest level encountered was 4.5 liters, and the highest was 36 liters. Half the families purchase less than the average amount. In order to give some relative scale to these figures, we can note that a single flush of a "modern" toilet facility requires five gallons.

In order to obtain this small amount of water, the average family must spend about 13.5% of its income (almost as much as housing); though some families will spend as little as 1% and others as much as 50% on a given day. The factor that causes the low level of purchase and the relatively high amount of income that must be expended is, of course, the price. All the families interviewed buy water by the bucketful (18 liters per bucket). The price for each bucket during the survey period ranged from \$0.02 to \$0.10, or from \$4.20 to \$21.00 per one thousand gallons. Again, for the purposes of relative scale, these prices can be compared to the figure of \$0.40 per one thousand gallons which is paid by the highest income families of the city who have private water connections in their homes.

The price of water is unstable because of fluctuation in supply. There is a seasonal variation caused by variations in rainfall that limits the amount of water that can be sent through the pipes of the city during various periods of the year. During the drought-related shortages of mid-1975 and early 1977, unit prices averaged \$40.00 and \$100.00 per one thousand gallons respectively. The St. Martin surveys were carried out when there was a relative abundance of water.

There is also a daily variation in price because of inefficient operation of the water distribution system. 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, etc. In these instances parts of the city are cut off for several days at a time and the price escalates quickly as water must be transported from greater distances away. This is clearly not the kind of water supply

one finds in wealthier countries. It is perhaps appropriate to describe its characteristics in order to understand the low consumption and the high prices.

Port au Prince has a mainline system much the same as can be found in most cities, and which links sources, reservoirs and about 30,000 private residential, commercial, and industrial connections. Although there are 35 public water fountains today, the vast majority of the population obtains water by either purchasing it directly from families who have connections, or indirectly from water vendors who buy from connected families and then wander the streets in search of customers (Haiti: 1976(a)).

At the same time that family surveys were carried out, separate interviews were made of 25 mobile water sellers in order to gain some insight into the operations of this part of the distribution process. All the sellers, women, lived in areas other than the ones in which they sold water, for they are looked upon with a great deal of antipathy by a populace that spends a lot of money for very little liquid. From the sellers it was learned that there are between 60 and 80 families on the periphery of St. Martin who sell water to them at prices which vary from day to day. The standard mark-up in price over that paid to families with connections is about 35%, though this varies from 25% on sales that take place near water sources, to 45% in sales that take place in the furthest interior of St. Martin. These margins were one cent and two cents during the time of the survey.

When water is relatively abundant, households are able to buy easily and directly from connected families, and business earnings

are perhaps \$0.10 per day from ten transactions. When water is scarce, the number of sellers swells. Their earnings, from an average of 20 transactions, range anywhere from \$0.40 to \$0.80 per day. This is an example of the principle of "trade during periods of scarcity" which was mentioned in Chapter 2.

At the time of the survey about 63% of sampled households bought water from the mobile sellers. If we assume an average per capita consumption of 12 liters per day, an average of 15 transactions to sell 270 liters per day by each seller, and a population of 40,000 people in St. Martin of which two-thirds obtain water from the sellers, then there might be about 1200 non-resident mobile water sellers who are active in the neighborhood. Extrapolating this out to the entire urban population which obtains water in this manner, there might conceivably be 14,000 water sellers in the city. This figure, which represents 4.5% of the urban labor force, is readily believable to anyone who has spent time in the city watching the continual flow of pedestrians carrying water and who does not adopt the preconception that these thousands of women with coins jangling in their aprons are buying water for their own exclusive consumption. For all the capital investment which has taken place over the years in the "modern" part of the distribution system, the whole distribution network from source to consumer remains a very labor-intensive operation.

The average price paid to families with water connections, either directly by the consumer families or by the mobile water sellers, 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 \$1100.00 is paid each day and \$400,000.00 is paid each year to the 80 or so families that have connections. The income derived from the sale of water to St. Martin residents works out to \$5,000.00 per year per connected family and does not include sales to residents of other areas. The expenditures required in order to earn these thousands of dollars is a \$60.00 a year fee to the municipal water authority, an original \$200.00 to \$500.00 investment to construct a concrete water reservoir, and continual private overhead payments to valve operators and other municipal employees. The water business offers a very high rate of return.

The reason that more families do not quickly enter this market, increase competition, and drive prices down can be traced to a number of factors which include lack of information and knowledge about the scale of this activity, lack of sufficient funds to invest in this activity for connections and reservoirs, and lack of appropriate personal relationships (always an important characteristic of business) with employees of the water authority.

But one of the more salient aspects has to do with the politics of water. Families with incomes of \$5,000 a year are amongst the wealthiest in the city. There is power associated with such wealth, and a concomitant interest in perpetuating both the power and the wealth.

As indicated above, private payments are made to valve operators in order that water be allocated differently than usual and hence change the price structure for a period. Similar sorts of payments are made in order to obtain a connection and cut off someone else's. Throughout the city a number of quiet neighborhood battles were observed where

various families would seek control over the local water operations. In areas such as St. Martin the result of the high rate of return is competition, but of a sort unlikely to be discovered in standard texts of business and economics.

We should note that even if these limits to effective price competition were to be removed, there is a technological aspect which would make it difficult to reduce the unit prices for non-connected families to the same level as the prices paid by those with connections in their homes. With the current labor-intensive system the maximum volume an ordinary individual can carry relatively easily is one bucket (40 pounds); and the minimum cash payment which local currency permits is one penny. Without modifications in currency, types of water containers or the degree of trust between buyers and sellers which would obviate the need for immediate cash transactions, the unit price cannot fall below \$2.10 per one thousand gallons. While this constraint places ultimate limits on the price reductions possible without technological changes, there are many other changes necessary before we need bother about more appropriate techniques. It will be a happy day indeed when the price falls and stays at one cent a bucket.

On the demand side of the distribution process the family decision whether to buy from a mobile seller or to buy from a connected seller is one that seems based on income more than anything else. Families in the former category, 63%, earn an average of \$40.00 per month and \$11.00 per capita; whereas the other 37% earn \$34.00 per month and \$8.00 per capita. This split is significant (at the .05 level) and the decision of lower-income families can be characterized as one where

labor is substituted for capital in order to minimize money outlays in the water investment process. At least among the poorer third of the population the cost of water is sufficiently high relative to income to warrant considerable effort to be made for a 35% price reduction.

During the interview period the price of water, as already indicated, would vary each day according to the method of purchase and to the distance from the periphery of the community; and per capita expenditure would vary significantly with respect to price.⁸ After standardizing for the price fluctuations and family size it was possible to calculate an income-elasticity of demand for water of 0.13.⁹

Although it is not as strongly supported by the data as the figure arrived at for housing, the elasticity does suggest, as does the proportion of income spent on water discussed at the outset, that water is vital to the poorest families. In fact, although the importance of water, like housing, falls off quickly after some minimum quantity has been obtained; the mathematical relationships between the elasticity figures of 0.13 and 0.26 for housing are such as to suggest that when money in hand is close to zero, water has a higher priority than housing. If a choice comes to one between housing and water, with no combination of the two commodities possible, families will purchase water first. Obviously the residents of St. Martin do not take the availability of water for granted; and it may be appropriate to examine why this is so.

Beyond mundane recognition that water is a biological necessity, a social necessity for the purposes of cleanliness and an industrial necessity for a number of manufacturing and trade activities such as those

discussed in Chapter 4 (e.g. food processing, dyeing of raw materials, cooling of metal works, staining of woodworks, etc.); in a society where the basic food staples are goods such as corn, millet, rice, beans, etc., water (and energy) is necessary to boil the grains in order to transform produce into consumable food. Without water it is difficult to find a means to eat; and the higher the cost of water, the higher will be the cost of eating. There is clearly a point where eating is more relevant to a family than housing, and that is the same point where water is more important. But there is another dimension too.

There is a self-evident relationship between personal and family health and the quality of water consumed. If clean water is so scarce that families are obliged to use alternative and less-safe sources for various purposes, then there is also a relationship between quantity of water and health. The area of Port au Prince contains daily examples of people washing themselves in stormwater runoff, or taking a bus or walking to areas outside the city in order to find streams for bathing and laundry. Municipal water for these people is reserved for drinking and cooking only. Many families must find an optimum between expending money for water and running various degrees of health risks associated with different levels of cost-saving. If we think of health as an investment in productive labor resources, then water is clearly a vital part of that investment package, especially since typhoid fever, parasites, and a number of other gastro-intestinal disorders can remove a large part of a family's productive labor from work activities for an extended period as we saw in Chapter 4. We also saw in Chapter 4 that

a large number of families really cannot afford to be away from work activities for very long; and in Table 6.1 that there is little room among most families for frequent corrective actions through investment in medical care services.

So, in order to eat, to stay healthy, to work and to avoid high payments for curative health services families are willing to spend a great deal. The stream of benefits accruing to a very little bit of relatively safe water is very high. As was the case for housing, the constraint on household "productivity" is the price of getting a bare minimum quantity of water.

6.4 Food

The survey method used in St. Martin was inadequate for estimating the proportion of family income that is spent on food. Some useful partial information was gathered, and also some additional information from secondary sources which furnish a context for the survey material, with reference in particular to overall consumption and expenditure on food and the corresponding nutrition levels.

The most recent surveys of commodity flows into Port au Prince indicate an aggregate structure of consumption and expenditure for food like that presented in Table 6.4. The figures concerning per capita consumption in the first column were obtained by dividing out total daily commodity flows into the city by the population; therefore, the pattern of consumption is a theoretical one that does not reflect qualitative and quantitative differences associated with various income levels. Families at high income levels will purchase more rice, and

Table 6.4 Patterns of Food Consumption and Expenditure, Port au Prince, 1975

Commodity	Per Capita Consumption (Kg. / day)	Unit Price (\$/kg.)	Per Capita Expenditure (\$/day)	% of Total Expenditure	Rate of Price Increase 74-75
Corn	.14	0.23	0.03	23%	145%
Millet	.10	0.20	0.02	15%	61%
Rice	.02	0.56	0.01	7%	44%
Beans	.07	0.48	0.04	29%	68%
Bananas (plantain)	.11	0.12	0.01	7%	NA
Vegetables	.08	0.10	0.01	6%	NA
Fruit	.14	0.10	0.01	7%	NA
Potatoes, yams, manioc, etc.	.11	0.07	0.01	6%	NA
Total (average)	.77	(0.18)	0.14	100%	--

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

those at very low levels will purchase more millet, yams, manioc, etc. At the same time, seasonal variations in supply will shift demand between products during the course of the year. We should note that purchases of meat, fish and milk are relatively insignificant compared to the eight items in the table; and that seven of the eight commodities require water for boiling.

Because of drought conditions across most of northern Haiti in 1975, certain commodity prices rose very quickly during the year, especially among the basic staples of corn, millet, rice, and beans. The table indicates annual increases of between 44% and 145% during the year for items whose prices increased by about 16% a year between 1968 and 1974. Actually, the price increase for rice was higher during the initial part of the period because stocks were attacked by rodents who could find no alternative food sources during the drought. Because rice is the staple of the higher income and more influential families of the city, the government made large purchases of imported rice at costs considerably lower than the local ones and placed these on the market at state outlets in order to keep the price of this commodity within acceptable bounds.

The majority of the population did obtain some help as a result of large quantities of emergency food supplies that were shipped into the country and transported northwards by private voluntary organizations, the United Nations, and by US AID. The shipments of food to the north increased the counter-flow of corn and millet to the city and indirectly served to keep prices of these from rising even higher than the net effect described in Table 6.4.

The pattern of consumption described in the table required a daily average expenditure of \$0.14 per adult individual in 1975; but there was considerable variation in this amount from season to season and from income class to income class. This expenditure works out to an average of \$4.20 a month per person and \$18.00 per month per family; and equals 48% of the average income of families in St. Martin. The proportion is the same as the one identified in Table 6.1 for this income class.

The level of eating that requires investment of one-half of family income does not provide much nutrition. A study conducted in Port au Prince in 1956 of several hundred families, where patterns of food intakes resemble those indicated in Table 6.4, found the per capita daily nutritional components to be as follows: 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: 1975(b), King: 1975). In more tangible terms this means that physical and mental indicators of child development will show that 20% of children will grow normally, 46% will suffer from first degree malnutrition, and 30% will suffer from second degree malnutrition. This observation, in its turn, tells us that we should not be so quick to speak of an "abundant" supply of labor resources available either to the individual, to the family, or to Haiti in general. Although there are many people, it does not follow that there is as much physical and mental resource tied up in each (Latortue: 1972, Berg: 1973).

In Table 6.5 information is presented concerning the relationship between income, types of food and their respective prices in St. Martin.

Table 6.5 Type of Basic Food Commodity, Price and Income

Commodity	% of <u>a/</u> 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

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

* Significant at the .05 level

** Significant at the .10 level

Each staple forms the basis of family food inputs for a given income class.¹⁰

There is a relationship between income and the prices which families pay for their staples. Although some price differentials may be due to different bargaining capabilities of different buyers and sellers, it is doubtful that this is an important price determinant. The basic principles of supply and demand are in effect. Among the corn items different prices are associated with the additional amount of money and time required to transform each item into food, or conversely; the additional amount of money and time which the seller has placed into the items and which will save the buyer additional effort.

The attributes of "superior", "intermediate", and "inferior" to ground corn do not refer to differences in the original kernels as much as they do to the fineness of the grind and to the amount of non-edible material to be found in a given quantity of it. "Superior" corn is fine-ground and has been carefully cleaned. Buyers of this item do not have to spend extra time separating edible from non-edible components. They can also 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 previous type, but it is so full of alien particles that considerable time must be spent pulling them out. The advantage of unground corn is that it is easy to clean (though this task is usually carried out by the seller) and the buyer can exercise quality control during the purchase of a grinding service by cleaning the machine and making sure that only the cereals enter it.

Even though it was not possible to determine the variation in quantity associated with price and income differences, the table does suggest a tendency for lower income families to substitute time for money in their commodity investment and food production processes. However, this is only one dimension of a more complicated issue. The income classes in the table are not nearly as distinct from each other as are the unit prices, and also do not reflect the full range of the income distribution identified in Chapter 5. Many lower-income families appear to buy higher-priced commodities and we must look at the reason for this.

Table 6.6 indicates the relationships that were found between type of commodity, price, income and place of purchase; and it contains some apparently unusual observations. The first feature is that the prices of each commodity are lower by between 1% and 7% in the local St. Martin market than in the central market where the goods originated.

It is more usual to expect higher prices at a local market that reflect the additional marginal costs of marketing goods at a distance away from a central point of origin. Or at least we might expect the same prices, with the advantage to sellers of their additional efforts being compensated by a larger volume of sales at a location which is closer to buyers. But the prediction of higher local market prices is predicated on the assumption that buyers, who we saw in Chapter 2 are almost invariably the adult women in the family, are located in St. Martin during the periods when commercial transactions take place. Under this assumption we might expect that some buyers at higher income levels would substitute money for time and make a local higher-cost

Table 6.6 Type of Basic Staple, 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

* Significant at the .05 level; N = 84

purchase than a cheaper and more distant purchase. At equal prices at both locations then even the lowest income buyer would make a purchase at the local market and save the trip to the center.

But in fact, as was seen in Chapter 4, most women work and only a fraction of them spend the major part of the day in St. Martin. Among the traders, for example, almost all of whom are the food-buyers for their respective families, only about 30% work in St. Martin. If we take into consideration that a woman's work activities coincide in time with her required food purchasing activities, and if we recognize the importance and time-using characteristics of the price-bargaining process of both sets of activities, then it should be evident that a woman will not usually tend to stray too far from work-place to buy food unless the farther location offers a distinct price advantage. In the case of the whole sample, most work-places are located closer to the central market than to the St. Martin market, and sellers in the latter place must offer compensating lower prices to attract buyers away from the downtown area. So, although local markets may appear to be closer to buyers, they may in fact be further away during the periods when distance is a relevant question, i.e., during the daytime marketing hours.

This observation also now explains some of the reason why a number of lower-income families purchase commodities at higher unit prices. It is because they choose to make purchases at the central market rather than in St. Martin. We may hypothesize that, even allowing for differences in tastes, the price differential for the varieties of ground corn was insufficient to draw women away from downtown places of work

and back to their neighborhood for family purchases. Time is as much a scarce resource for these workers as is money; in much the same manner as it was for many manufacturers discussed in Chapter 4 who had to allocate portions of the day to factory purchasing, transformation and sales.¹¹

It appears that effort is made to save on both money and time, and that an optimum is found between the price of a good, the time requirement for transforming it into food, the time requirements for purchasing it, and the opportunity costs of reductions in work-time activities (Becker: 1965).

In order to test this hypothesis a full disaggregation of each case was carried out. The characteristics of the women who were in lower income families and who made purchases of ground corn at higher prices in the central market confirmed the deductions. They worked in and around the central market during most of the day. If they were traders they worked alone, and they also worked with substantial quantities of goods. But the most relevant feature of these women was that although they were in lower-income families, both their total work earnings and the proportion of their earnings in total family income was higher than the averages for women who purchased at the St. Martin market. Hence the individual and family opportunity costs of spending too much time buying is relatively high in these cases where one person must take care of a number of crucial investment processes of money and time.¹²

The basic conclusion to be drawn from this analysis of food expenditure patterns and purchasing behavior is that food is a primordial

investment concern for almost all families in the sample. Although there is room for maneuvering at lower income in terms of quantity (which must be supposed since the dimension has not been examined), as zero income is approached there is continually less room for substituting time for money, and we find again that the per-unit costs of acquiring food, like housing and water, increase as income decreases. It is likely also that for the poorest families, given the evidence concerning water preferences, food takes precedence over housing. When the choice is further limited to one between food and water, there remains the option to substitute stormwater run-off, distant streams or leaks in water pipes for the latter and thereby increase the risks to health; and the option to buy prepared food like bread at a higher unit cost. A decrease in the price of food or an increase in income will certainly be helpful for families operating at the limit.

For a good part of the population the methods of increasing the "productivity" of household market and non-market labor resources will have less to do in the immediate with training, appropriate technology, organization, etc. and more to do with obtaining a square meal each day.

However, unlike the situation which was described for housing and water, cost decreases will most probably benefit everybody and the impact of an aggregate across-the-board income increase (arising say, from actions which reduce housing and water costs) will be felt markedly in the aggregate demand for food. The empirical basis for making this statement is less secure than for others made in this chapter. Nonetheless, observations of the way in which great efforts are made by families in most income classes to obtain small price advantages in the

food market lead to a feeling that a fuller examination would yield approximately the same conclusion.

Unlike the supply mechanisms for housing and water, the internal food marketing system in the city, as was emphasized during the discussion of trade activities in Chapter 4, works relatively well. There does not seem to be too much room for improvements that can be obtained without a compensating loss of income and employment opportunities for market sellers; at least among the local products destined for local use.

The determinants of the price of food, as suggested earlier in this chapter and in Chapter 2, have to do with climate and the rate of increase of agricultural output. Unless changes are made to occur in this latter sector, there is a danger that actions to increase income in the city will be only temporary. If the supply response of food producers lags behind in the same manner as in the past, demand increases may push food prices to the point of bringing about insignificant "real" income changes. As mentioned in Chapter 2, urban and rural welfare are intimately tied and we see this link here in tangible form. We can also see very clearly that efforts to deal with the income issue in the city includes intervention outside the city (Streeten: 1963).

6.5 Schooling

During the interview period 71 children between the ages of six and sixteen and evenly split between boys and girls were attending school. The figure represents about 55% of all children in the age

group. Within the sub-groups between the ages of six and eleven, and between 12 and 16, the respective proportions were 65% and 45%. These students were concentrated among 30 of the 88 households covered by the survey.¹³

The proportion attending school is not stable. A month earlier 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 children were destined to drop out several weeks after the survey unless their father found some work. So a month before the survey the proportion of children in school would have been 60%, and a month afterwards it might have been 50%. Expenditure for schooling is a "luxury" which ceases whenever income suffers a major setback. Important irregular income decreases such as those associated with illness, theft, loss of salary, etc. discussed in Chapter 4 serve to make school attendance somewhat irregular.

Twelve children received transfer payments, worth about \$2.00 a month on the average, in the form of subsidized school registration fees, meals, or both, at schools run by private voluntary organizations such as the Salvation Army, the Salesian Fathers, and the Church of the Nazareen. Although important for the families that do receive subsidies, transfers are not a significant incentive for sending children to school in general.

Not including the cost of school uniforms, shoes and books, whose average annual expenditure requirement ranges from \$5.00 to \$12.00, the monthly school payments necessary for each child averages \$1.50. The range starts at a low of \$0.20 a month and rises to a high figure of

\$5.00 a month. These price differentials are not related to the age or to the degree of advancement of students in school, 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 kinds of educational institutions are \$0.40, \$2.20 and \$1.30 respectively for each child.

Public institutions, including a number of schools which have private voluntary organization affiliations but which operate as government institutions, are the preferred place to send children. Although the relative lower cost is an important reason for this preference, the basic feeling among interviewed parents is that the public facilities offer a better quality of education. However, it requires extensive personal contacts with personages of relative importance, and/or the ability to make some significant private money or in-kind payments for "services rendered" to such persons before parents in St. Martin can place their children in public schools. In the absence of sufficient leverage to gain access to state institutions, the unsatisfied demands for education in the schooling market have given rise to a large and increasing number of private facilities. Though some of these supposedly offer a quality of education equivalent or superior to that of public schools, most do not. They employ teachers whose basic qualifications are the fact that they have elementary school diplomas and are willing to teach for salaries ranging from \$20.00 to \$40.00 each month. The state is supposed to supervise these schools and assure some degree of educational quality; but administration of this task is weak (Haiti: 1976(a)).

With the heavy demand for and the limited supply of 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); of which teacher salaries represent about 12%. Education, like water supply and housing, is a lucrative business.

In a separate study conducted in 1975 concerning public transport facilities, I interviewed five fleet owners in their respective private school offices where they owned and managed relatively large establishments. In two cases these directors indicated that commercial financing conditions were so severe that they were forced into making a decision between buying a new bus or expanding their schools. Education is very clearly an investment that must be evaluated against alternatives both on the supply and on the demand side of the ledger.

The strong interest of parents in sending children to school is also reflected in the distances which the latter will walk to school each day. About a third of students attend schools in and around St. Martin. The rest travel anywhere from one-half to three kilometers each way each day. Although most families are not willing to send children to fetch water across relatively shorter distances because of traffic and other dangers along the route, they are ready to accept such risks for the purposes of education. At higher economic means, families get together and lease a taxi to transport 12 to 15 youngsters at a time each way. The St. Martin families, however, do not have such means. Another dimension in this observation is that it does not appear that spatial proximity, at least within a three kilometer radius,

is a necessary requirement for increased school attendance.

Families who do send some of their children to school have average monthly incomes of about \$44.00, and this is significantly larger than the incomes of families which do not send children to school, \$36.00. The average amount each family spends is \$3.70 a month, and the range lies between \$0.20 and \$13.00. As a proportion of monthly income, these investments can range anywhere from 1% to 40%, though the average is 8%. Across the group of 30 families with children in school, the proportion of income given over to school expenditures has a tendency to increase with income. This tendency is reflected in a high income-elasticity of demand for schooling.¹⁴

The income-elasticity, 1.15, suggests that families regard this form of expenditure in their children to be of relatively high importance. There is some empirical basis here, though weak, for suggesting that a net increase in family income will direct many of them to spend proportionately more on education than the proportionate increase in their material welfare. For higher-income families a decrease in the price of schooling, water, housing or food will likely make its effect felt in significant additional demand for education. This forward look is consistent with observations on the historical and the current trends in the private institutions market which was discussed briefly above.

It is not possible to say definitively whether education provides a return that justifies investment in comparison to other opportunities. Certainly, a full educational program from elementary years through high school completion suffers from diminishing returns the lower the

current level of family income; and it is therefore not surprising that each progressive year of schooling in Port au Prince is subject to a high attrition rate: as evidenced by earlier reference to a 65% attendance rate in lower age groups and a 45% rate in higher age groups. On the other hand, the vast majority of parents interviewed were basically illiterate and spoke Creole rather than French. At the lower limit, the vesting of literacy and capability in the official language opens doors to offspring that in the long run might otherwise remain closed: such as access to some types of higher-wage employment, access to public institutions, access to vocational training, access to credit institutions, and, most importantly, access to emigration.

Still, unless there are salient counter-arguments, the survey evidence suggests that actions designed to reduce the cost of education will benefit the highest income families first and the lowest income families last (within the range of income classes that we have been looking at). Clearly, even if school fees were zero, a family on the edge of starvation is not about to keep a child in school beyond the age when his resources could be better put to the immediate concerns of earning a day to day income that could help the family move away from the brink.

It should be kept in mind though that this statement about education refers to the means by which it is currently offered. Educational programs that are designed around family income-production processes, such as the scheduling of rural classes between planting and harvesting seasons, may not necessarily be so biased against poorer households. Further, as was suggested at the end of Chapter 4, programs to orient

the content of child education around the more relevant immediate needs of the household would perhaps provide higher short-run and long-run benefits to the investing family. Although reducing educational fees is one way of improving the cost benefit ratio of family expenditures, improving the appropriateness of education for the same fee may obtain the same kind of improvement.

6.6 Credit

Households save and hold onto a certain amount of cash in order to protect themselves against unknown contingencies such as medical expenses, commodity theft, fire and flood losses, speculative price losses, etc. and/or to invest in attractive opportunities when they arise; such as tools, materials, products for trade, openings at public schools, large-scale purchases of food, water connections, long-term housing or land rentals, etc. However, at relatively low family income levels it is really not possible to hold enough money to meet any adverse event or positive opportunity, since this would require a family to forego a significant amount of current benefit. The lower the income, the more important and the more valuable current benefits become relative to longer-term ones, as we saw in the case of housing, water, food and schooling. So, given a choice, it is probably better for a family to go into debt to meet an unexpected situation rather than save up for it. Given the frequency of adversity and the ingenuity necessary in market activities in St. Martin, this implies relatively high demand for credit and also the existence of financing institutions to supply that demand for finance (Appendix F presents a

brief overview of credit mechanisms in Haiti). At the same time, given what has been learned about the precarious nature of household finances and the proximity of many families to the survival edge, it can also be supposed that in conditions of adversity or of golden opportunity, families will show a distinct preference for immediate borrowing, and therefore would be willing to pay a premium for a loan. If loans are hard to find then this means that there is a willingness to pay a high interest rate. In St. Martin, the survey of families revealed a high demand for credit, a variety of credit mechanisms, and a high interest rate. Seventy-one families or 81% of the total had a credit history during the previous six months.¹⁵ They borrowed an average of \$7.00 from four kinds of lenders, and the average interest rate which they paid was about 29% per month.¹⁶

The accessibility to credit should not be overstated. Though the average loan is \$7.00, a quarter of borrowing transactions involved amounts of \$1.00 each, 63% involved amounts less than \$5.00, and 84% involved less than \$10.00. Loans of between \$15.00 and \$40.00, the maximum, were obtained by only eleven families. The range of monthly interest rates charged for these loans ran from a low of 13% to a high of 95%, but rates were clustered into three main groups: 20% (for 23% of loans), 25% (for 44% of loans), and 50% (for 11% of loans).

We have already noted some of the reasons why interest rates are high from the point of view of demand. On the supply side, there are also a number of factors which could contribute to these higher than usual figures. Among these theoretically possible factors we can identify the overall scarcity of capital as measured by its opportunity

costs, the transaction and administration or capital marketing costs of lending, monopolistic or oligopolistic control of the capital market, risks associated with defaults on repayments, and so on.

In one of the very few in-depth analyses of the capital lending market in rural Haiti (Lundahl: 1975 (a)), a rather strong case is made that capital for lending is not nearly as scarce as the interest rates cited for the sample might lead us to believe. The general opportunity cost of capital, it is argued, lies close to 10% a year for a safe return to an investor.

High transaction costs are also unlikely to be the root cause of the higher interest rates. In Haiti capital is rarely idle and interest does not have to cover slack investment periods. Further, lenders do not usually borrow from large-scale lending institutions. They finance the operations out of their own savings. Most importantly however, there is usually a personal relationship of one sort or another between lender and borrower. The lender has been in the credit business a long time, knows the economic situation and capabilities of the borrower (and there can rarely be more than just a few borrowers for each lender at one time), and does not really have to maintain close loan supervision to reduce risks once a credit is made. In the city where personal contacts are less extensive, the absence of intimate knowledge of borrower characteristics is compensated for by requests for security guarantees, and again there is little reason for loan administration costs to be high.

The possibility that monopolistic practices force rates upwards is remote. There are many lenders, one for every nine borrowers in rural

Haiti according to Lundahl, and there is no difficulty of entry to potential lenders. If anything, there might be a tendency for an oligopolistic credit market to exist because of the personal relationship that links lender and borrower. The personal nature of lending forces new entrants to request either security or higher interest rates because of ignorance of the credit-worthiness of the borrower. Even this supply-limiting condition is less prevalent in Port au Prince and it can be suspected that there is more competition between capital suppliers here than in rural areas.

The major explanation for the high interest rates must, by elimination, be found in the risk associated with making loans. Here we have to distinguish between loans which are secured against default and those which are not. Unsecured loans carry a high risk premium or lead to high transaction costs. Since lenders must have a very good direct or indirect knowledge of the character and solvency of borrowers, there is usually little risk of making a loan to someone who doesn't want to repay the loan. But there is a risk of lending to someone who is unable to pay. In order to cover for these circumstances, the lender must charge a sufficiently high interest rate to all borrowers which would cover the losses of principal and interest caused by defaults. 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 above) and if there is a regular default rate on 25% of total outstanding loans, then the necessary interest rate to cover this situation will be about 35% a month (Tun Wai: 1957). Although it is not possible to say whether or not the default rate in

Port au Prince is as high as 25%, the precarious nature of household finances suggests that, at the very least, defaults would not be uncommon.

If loans are secured by collateral which is readily marketable and which has a relatively stable market price, then lending risks are lowered. Some risks do remain if the value and marketability of security is overestimated. Also, defaults of secured loans increase the transaction costs which arise from the necessity to convert collateral into cash. The default and transaction costs may be carried in the interest rate, in the ratio of the value of collateral to the value of loans, or both.

Although scarcity, oligopolistic practices and transaction costs may have some significant influence on the interest rates in St. Martin, it seems that the major part should be due to the default risks which can be expected to be high in a tight-rope economy. Of course this set of arguments is based on a series of hypotheses which have yet to be fully substantiated with adequate empirical information. The important element here is that it would be false to suggest that high interest rates and the associated difficulty that households have in obtaining credit result only from scarcity, or only from monopoly, or only from administration costs. As income decreases the risk of default increases and, like all the other items discussed in this chapter, the unit price of credit (i.e., the interest rate) increases and the total amount obtained (i.e., the size of loan) gets smaller.

Table 6.7 presents some information regarding the relationship between credit mechanisms, loans and family income. Aside from two cases

where loans were obtained from other family members elsewhere in the city, the majority of loans were obtained from pawnshops and were secured by means of durable goods placed in collateral. The other loans were unsecured ones and were either obtained from "friends" or from "usurers".¹⁷

Table 6.7 Loans, Lenders, Credit Prices and Household Income

Item	Type of Loan and Lender		
	Secured (Pawnshop)	Unsecured	
		"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.

* Significant at the .01 level. ** Significant at the .05 level.

As we might expect, the table indicates a lower interest rate for secured loans than for unsecured ones; and also a lower rate for those latter which are based on personal contact. Another important distinction is that the size of credits 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 household working capital associated with each of the three types of lenders. There is, however, no simple direction to these attributes, and this requires some explanation.

The average value of security deposited in order to obtain credit at a pawnshop is \$12.00; in the form of cloth, dishware, pots and pans, watches, radios, clocks, new clothes, etc. So the deposit is worth about three times more than the amount of loan which is received; and this ratio remains more or less constant whatever the size of the loan¹⁸. Therefore a family must have savings in the form of durable assets in order to qualify for this sort of loan; and we see in the table that the average household working capital of \$34.00 is a relatively substantial figure and is a good indicator of the size of assets which are available for security.¹⁹ But in order to explain why families would commit so much in-kind capital for security on relatively small loans, it is necessary to make some hypotheses regarding the intent of borrowing.

If families are secure in the belief that they will be able to repay principal and interest at the end of 30 days, then they will have no qualms about borrowing from a pawnshop which offers relatively lower interest rates and quick service. On the other hand, if the intent of families is not to repay, but rather simply to convert goods into cash, then clearly it would be better not to use a pawnshop, but rather to sell the goods directly in the market. This presumes that time is not a factor. However, we saw in Chapter 4 that it takes a long time for traders to convert stocks into cash, it was indicated earlier in this chapter that many families may be "time-poor", and it was suggested at

the beginning of this section that lower-income families have a distinct preference for cash now rather than later. In such situations families would use pawnshops as a rapid means of transforming goods into money. The price they pay for this service, which passes on 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 deposited goods. The lender, who doesn't know whether or not repayment will be made, is tied down with idle in-kind assets for 30 days which ultimately will cost something to reconvert into cash for reinvestment in the capital market.

We should note also that if loans and collateral are relatively large the interest rate will tend to fall since the probability that a family doesn't want to pay is lower because it has tied up a large proportion of its assets; and/or because the cost of conversion to liquid by the lender represents a smaller proportion of the market value of the secured goods. In other words, among the families that use pawnshops the higher-income ones can not only borrow more but they pay less for the larger loans.²⁰

Families with lower incomes and fewer assets cannot use pawnshops and therefore must try to rely on unsecured loans for which they pay higher interest rates. However, an unsecured loan from a "friend" requires mutually satisfactory prior transactions.¹⁷ The "friends" knowledge of credit-worthiness on the one hand and the disincentive to families of default which would preclude future transactions on the other, reduce the risks of non-repayment. Together with lower transaction costs than the other two types of loans, this keeps the interest rate closer to that required by pawnshops and far less than that

required in unsecured anonymous transactions. Personal knowledge also permits relatively large loan amounts.

Though the survey did not examine closely the purpose of pawnshop loans, because the answers invariably were phrased in terms of a general "need" for money in hand, "friend" related loans appeared to be limited to dwelling unit leases, school registration fees, tools, and large medical expenses such as hospital residence fees and drugs.

In the six cases where major loans were obtained from usurers at the very high average interest of 60%, these were used by families 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. In three cases of trade, money was borrowed to purchase stocks of sugar cane and refined sugar. In three cases of manufacturing, money was borrowed to buy wood, a number of hand tools, and to place a deposit on a foot-powered sewing machine. Usurers, like "modern" credit establishments, seem to be less interested in the total economic viability of a family than in the investment potential of its specific income-production plans.

Throughout this discussion we must remember that poorer families with no durable assets and no personal contact, often resulting from a history of default, simply do not have access to credit.¹⁵ Their low income and working capital assets run hand in hand with 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 make a number of broad observations from this examination of credit mechanisms in St. Martin. We can see that the high interest rates are determined by more than just simple scarcity and by more than just the high costs of transactions. A lot has to do with the very real probabilities of financial failure and the high risks of default. We can also see that loans are not necessarily used only for work-related investments. The welfare of a family in both the short and long run is determined by a broader set of investments and credit is used for finance across the whole spectrum of these activities. Furthermore, for the sample of families, credit is both a source of positive investment to take advantage of opportunity as well as a defensive mechanism to protect against adversity. The pawnshop in conjunction with household capital formation in the acquisition of durable goods is an insurance mechanism; the only one available to the majority of urban residents.

However, discussions of improved credit to small-scale activities (e.g. Marsden: 1975) usually do not conceive of such funds to be used for things like adversity insurance, or school fees, or housing leases, etc. They are usually concerned with "productive" loans focussed on the work-market; even though we can see many cases where there are much higher productive uses in areas other than the work market. It follows that such loans have to be carefully supervised, not only to assure that use of cash or in-kind credits will be used for production purposes, but also to assure that the particular production purposes to be financed are economically sound investments. Considering further that the scale of loans for the kinds of activities which we looked at in

Chapter 4 would usually amount to less than \$100.00, and mostly less than \$25.00, one cannot avoid the conclusion that the administration and transaction costs of focusing and supervising such credit programs would, in the absence of a subsidy orientation, suggest interest rates which will not be all that much lower than those which we find today. In order to bring interest rates lower, the focus of credit programs would have to be oriented to larger-scale activities than most of those with which the St. Martin families are involved. Recommendations concerning these few families in the sample who might qualify for such direct loans were presented at the end of Chapter 4. But it is clear that credit programs of the kind which are usually discussed will not directly benefit most families in St. Martin for a long time to come.

Given the overall economic limitations of Haiti, the capital marketing system for the supply of credit, like the food marketing system, seems to work fairly well. Therefore a more useful approach to the question of credit for the majority might be better served if focus shifted away from trying to increase the availability of loans in favor of trying to reduce the demand for them, especially those adversity-related demands associated with medical care or the need to buy food in the absence of income; and also some of the opportunity-related demands for schooling, housing leases and so on. Various kinds of intervention in the areas of work-market activity, education, housing, water supply, agriculture, etc., may serve to reduce certain kinds of credit requirements and shift the demand for loans away from short-run survival necessities and towards market income-production purposes.

6.7 Conclusions and Recommendations

This chapter has looked at some of the ways in which a small group of households use the money which they obtain from work activities, and has tried to explain some of the reasons why they expend as they do. More specifically, I have tried to demonstrate that adoption of an analytical model which draws an analogy between families and firms, which expands the concept of "productivity" to relate to both the market and non-market outputs of household production, and which regards the demand for various goods and services as factor inputs to household production provides an operational understanding of the way expenditures relate to each other and to the work activities described in Chapter 4. Within this framework I have also tried to give the impression that the families in St. Martin are just about as "efficient" and "productive" as they can be given the constraints imposed upon them by the social and economic environment. The allocation of income demand for the purchase of various goods and services is carried out with care and an attention to the tangible benefits stream across the day, the week or the month associated with the time and money cost of each investment. Moreover, I have attempted to pursue the supply factors which contribute to the cost or the monetary prices of the goods in question.

For the purposes of planning, these observations of the characteristics of demand and the characteristics of supply are very important. They tell us what is important to whom and why, or conversely, what is not important. They suggest where, when and how to intervene, the extent of appropriate intervention in any one particular area, the appropriate combinations of intervention and the possible negative and

positive side effects of one or more concentrations of public policy. Knowledge of these things is crucial to formulation of effective and appropriate public actions aimed at simultaneously increasing household productivity, the demand for goods and services and the welfare of the family and its membership.

We have seen that the demand for shelter arises because it yields a set of productive benefits associated with security and location. Under the general heading of protection of people and commodities, housing is a factor input which facilitates household formation. This is the formation of social partnerships among individuals which permits simultaneous expansion of labor resources and increased productivity associated with economies of scale and the division of work responsibilities. Shelter also permits the accumulation of capital goods like water containers, pots and pans, charcoal heaters, charcoal, food staples, etc. which, in combination with each other and the available specialized labor resources yield increased productivity in the production of health, nutrition and market work. At the same time the ability of shelter to facilitate the accumulation of raw materials, tools, equipment, etc. yields further scale economies and productivity improvements in the production of market work, as discussed extensively in Chapter 4 where we noted that a house is a storage facility and an industrial plant location. Given all that it does for people, it is therefore not surprising that families make great efforts to obtain housing.

But at the same time we have learned that some preconceptions about what shelter is supposed to do and is supposed to be may be inappropriate. At the lower extreme individuals produce shelter of a

sort by combining covered public spaces to protect themselves, and various small containers to protect their goods. Reductions in the prices of cardboard boxes and decreases in the level of nighttime police harassment are effectively the same as decreases in the price of more conventional housing. At the upper extreme, we have learned that once the characteristics of housing reach a certain point its contribution to productivity and production falls off relative to other things. Given the nature of the local economy, housing can assist families up to a point and no further. Changes in construction materials and size offer diminishing returns relative to the cost necessary to obtain them. Therefore we have seen that higher-income families strive to minimize the costs of obtaining housing whose qualitative characteristics are not fundamentally different than the housing obtained by lower-income families. We have seen further that the accumulation of goods which housing permits facilitates access to certain kinds of financial services which, in turn, make possible various investments in tools, housing leases etc. leading to additional productivity changes; and rapid cash advances serving as insurance against adversity and irreparable damage to household productivity and production potential.

On the supply side we have seen that the supply mechanisms for housing work relatively well within St. Martin. At that location housing is offered with numerous physical characteristics and with several modes of rental; responding adequately to the heterogeneous demand in terms of quality and temporal quantity. The price of housing is less likely to be changed by intervention in the community as it is by intervention in the city-wide spatial and sectoral characteristics of the

housing market within which St. Martin is located. The thrust of intervention will have to deal with the spatial organization of supply and demand for land, the aggregate volumes of supply and demand for land, the availability of housing finance and the cost of construction; including materials, methods and labor.

The demand for water is strong because it too yields productive benefits to the production of labor services in the form of health and food nutrition. We have seen that beyond the immediate biological necessity of avoiding dehydration and the social necessity of laundry and bathing leading to health, the principal use of water is that of a factor input in the transformation of agricultural commodities into food. In combination with such other factors as a pot, a charcoal heater, charcoal and non-market labor, water is vital to the production of nutrition; hence life and labor. At the lower extreme of income the liquid seems to take precedence over housing when the choice is limited to a minimum quantity of either, such as the choice between a glass and cardboard box. Closer to the limit, the complementarity of water, grain, charcoal etc. is such that they all must be foregone in favor of prepared food at high unit costs. At higher income levels the interest in water falls off quickly, in similar fashion as for housing. So while reductions in the price of water will not significantly alter the productivity of higher-income families, it will contribute in an important way to increased productivity among the very poor; as will decreased prices of the other inputs such as charcoal, pots, heaters, etc.

On the supply side the price of water is affected by a number of interwoven factors which limit the number of original suppliers. Besides

the unpredictability of the climate which causes seasonal supply and price fluctuations, the inefficient operation of the "modern" part of the water distribution system permits local power groups to maintain a kind of oligopolistic control of supply in the community. Under these circumstances the time costs of obtaining water are high; leading to the creation of a very labor-intensive secondary distribution network.²¹ The limited supply and the high transaction costs, exacerbated by the technological characteristics of the small size of water containers, the relatively large size of the smallest unit of currency, and the absence of public or courtyard supply stands; keeps the price high relative to income.

Intervention to reduce the time and money costs of water and household productivity cannot, under the circumstances, attempt to reduce demand. Actions must take place on the supply side and must address the management adequacy of the municipal water authority and the technological appropriateness of the current supply mechanism in St. Martin as well as across the city.

The reasons behind the demand for food grains is self-evident from the preceding discussion of the importance of water; as is the priority which food takes over housing at the lower income ranges. But we have learned that food, unlike water, is not a homogeneous commodity. Subgroups of grain, like the various grinds of corn, have different prices relating to the time-costs of transforming raw material into food. In general, the lower the level of income the stronger the preference for time-intensive grain. We can see in this the multi-dimensional response of households to possible reductions in the price of grain. From sec-

ondary information we are led to expect that more grain will be purchased which will increase nutritional inputs and household labor productivity. Larger unit purchases imply lower unit costs and further productivity increases. There may also be a shift, depending on the joint money and time constraints upon the family, to less time-intensive grains which would increase unit costs but make more time available for other purposes such as market participation. 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 kinds of positive productivity changes.

With respect to supply, one fundamental determinant of price is the level of agricultural production and the associated effects of climate. Major effects on the price of food will require intervention far away from St. Martin, either in long-term efforts in rural areas, and/or in continuing short-run imports to compensate for low output. Closer to home, the technological characteristics of labor-intensive marketing and small unit purchase quantities create high local transaction costs and higher unit prices.

The demand for schooling is reserved for those families with incomes sufficient to afford the relative luxury of a long-term planning and investment perspective; where we must realize that for many families the "long-term" is no more than a year. While the demand for child education is limited to the upper third of families in St. Martin who have proceeded well beyond the point where further expenditures in housing, water and food are critical to household productivity; it is nonetheless sufficient in the aggregate to generate a private schooling business, a public schooling brokerage service and relatively high

prices in both public and private institutions.

The analysis carried out in this chapter does not permit me to identify clearly what the benefits of education should be, or what they actually are given the supply mechanisms in Port au Prince. The evidence does seem to suggest that while schooling fees and private payments may prohibit some families from sending children to school, a substantial proportion of residents in St. Martin are prohibited by the opportunity costs of not having a school-age child participate in more immediate market and non-market household activities. This observation does not preclude intervention aimed at reducing the financial cost of education or improving the quality and relevance of the schooling services purchased, but it does tell us that ameliorative actions in the education market in the immediate future will benefit higher income families rather than lower income ones. In the longer-run, if effective actions are taken in the areas of housing, food and water, then concern with schooling for the urban majority may be more appropriate.

Finally, the discussion of credit mechanisms in St. Martin has shown that preconceived ideas about what credit is or should be, like preconceived ideas about what is or is not a "productive" expenditure, may be inappropriate in a place like St. Martin. Although there is a demand for loans of a commercial nature to facilitate trade and manufacturing activities, much of the demand is oriented to immediate non-market household production investments and insurance.

The supply of credit seems to work well in the context of an environment where the risks of default are quite high. Intervention to reduce the price of borrowing is more likely to be effective if oriented

to reducing the demand caused by adversity in the face of high prices for other goods and services. While such indirect actions may not really reduce overall demand, they may reduce the risks of default and they may shift demand further and further to productive market opportunities, thereby further reducing non-repayment risks and the interest rate. At the same time, we should remember that there is really nothing wrong with credit for insurance purposes and that actions in the housing market which facilitate eventual goods accumulation and credit access at the current interest rate will benefit a large number of households.

This summary of observations and conclusions relates only to a very limited set of goods and services. But it is clear that similar kinds of analyses for a much larger range of commodities could open the door to a far wider range of intervention opportunities. Examination of the factors determining the prices of cloth and clothing, pots and pans, charcoal heaters, charcoal, soap, etc. could, in principle, have led to identification of points of intervention relating to import monopolies, low factor availabilities, improved manufacturing technology, inappropriate import-substitution policies, and so on. Housing, food and water are not the only opportunities available for intervention, and, relative to the unstudied opportunities, they may not be the most effective areas for intervention, but I have no way of evaluating this.

However, if the choice is limited to intervention on the income generation or work side of household activities or intervention on the expenditure side, there is much to be said for favoring the latter. As indicated in Chapter 4, employment tends to be long, hard and brutal. The ideas that more people should work this way, or that workers should

work harder, or that the income arising from current efforts should be made to yield higher returns, all lack a certain sensitivity. The object of development is not employment (Jarvis: 1974), but rather a better quality of life. In this context the outcome of policy should, to some degree, result in decreases in labor force participation, in the frequency of work days and in the daily hours of work. Unemployment and underemployment are luxuries which Haitians cannot yet afford. Reductions in the cost of living which ultimately lead to observations of large-scale inactivity in the market should be regarded as a positive thing.

Of course, this observation has to be tempered by the interrelations between expenditure and employment. A single large capital-intensive factory making prefabricated homes, a public fountain at every street corner, a small number of very large supermarkets, and a bank branch in every neighborhood may reduce the unit prices of housing, water, food and credit to everyone. On the other hand, such economies of scale and capital intensiveness are obtained at the cost of tens of thousands of lost employment and income opportunities. Though the examples may be exaggerated, the point of the matter, relating to the comment in the preceding paragraph, is that there is always a trade-off between welfare improvements caused by cost decreases and the welfare losses resulting from employment and income decreases. The evaluation of any intended action must search for a short-run optimum between these counterbalancing effects. Proposals for "modernization", even through "appropriate technology", and proposals for "labor-intensive" activities each create social disbenefits if pushed too far.

As a final note before proceeding with more detailed recommendations, it should be noted that a number of implied improvements in this chapter have a redistribution agenda. The discussion suggests, for example, that it would be "better" to reduce the large incomes which currently accrue to a relatively restrained number of landowners and water suppliers. While we have seen that the redistribution of such incomes back to consumers may lead to direct improvements, there is nothing in this analysis which could tell us whether or not concentration of income in the hands of a few might lead to larger indirect improvements. Even allowing for villas, cars, foreign bank accounts, luxury imports, foreign travel and child education, there is still the possibility that the savings and investment patterns of the wealthy and the large scale of capital involved may, if used to promote exports, low-cost local commodities, labor-using industry, etc. lead to higher social benefits for everybody in both the short-run and the long run. Though "conspicuous consumption" may reduce the potential total impact of rent and water profits, the impact may still be larger. In other words, since the basic concern is the final outcome of intervention, we need to take care that the apparent direct benefits of redistribution are really larger than the possible indirect benefits of the current state of affairs. Unfortunately little is known about the internal workings of the economy and it is impossible to say whether redistribution, the status quo or a compromise solution of redistribution with growth (e.g. Chenery: 1974) will lead to a better quality of life for a maximum number of people. Still, the observations made in St. Martin call for some degree of attention and the recommendations which follow are derived from

that concern.

6.7.1 Transportation Planning

The price of land in St. Martin is determined in part by the aggregate demand for residential space in the city, but also by the specific demand for space closer to the central market and downtown area of the city; which as we saw in Chapter 4 is the dominant place of concentration of employment and self-employment sub-activities. Reductions in the price of land and the associated rentals may be obtained by actions serving to reduce the money and time costs of movement between downtown and peripheral areas where land is currently less expensive. This would serve to 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 at present explicitly kept at a level which is low but which at the same time offers sufficient returns to private investors for fleet expansion and entry, and assures the state of fixed revenues from gas taxes (Haiti: 1976 (a)). Further reductions in rates may, even without calling for direct subsidy, reduce the rate of increase of transport capacity, increase the time costs of waiting and/or walking and decrease one of the few easily administered sources of public finance. The relative advantages of intervention in the cost of public transport warrants careful evaluation.

6.7.2 Markets Planning

Another way of reducing the demand in St. Martin can involve efforts to decentralize some of the downtown activity. Under the pressure

of rising land prices some land-extensive activities, like large-scale manufacturing, have already expanded to the northern periphery as indicated in Chapter 4. Also, as indicated in the same chapter, the requirements of port expansion forced the relocation of the downtown coastal shipping wharf several kilometers to the north several years ago. Since then a major wholesale and retail market center has evolved together with an extensive surrounding residential area. This demonstrates clearly the interdependence of market location and residence.

Similar public decrees which would prohibit some kinds of trucks and animal transport modes from unloading at the central market in favor of one or more adequately planned and serviced peripheral locations could also shift the spatial demand for home locations. Additional incentives such as reduced charges for commercial and manufacturing plots, storage facilities and parking charges could also prove to be useful actions.

Large-scale intervention such as suggested will involve serious disturbance of the existing spatial system; and may involve substantial financial losses to landowners, land renters, traders, manufacturers and laborers; and increased costs of trade and production which may be reflected in increased commodity prices. Care would not only have to be taken in the selection of new sites, but also in the staging of the spatial transformation.

As an addendum to this program, one could envisage the construction of covered spaces in and around produce markets which serve the purposes of protecting people and goods during commercial transaction periods of the day and during sleep periods of the night from the heat and from the

rain. There are a number of effects which can result from this kind of project. Coverage serves to reduce the amount of spoilage of agricultural and other products; it may reduce the demand for and the supply price of private goods storage facilities; it may reduce the demand for housing by some individuals (e.g., wholesale traders) who currently cannot find adequate shelter for their goods and/or themselves; it provides a slightly better temporary shelter for individuals and families who, for whatever reasons, cannot obtain a dwelling unit, etc. Certain positive benefits on the price of food, the price of dwelling units, and the risks of ill health may result from this, especially if covered spaces are complemented with adequate water, human waste removal, solid waste removal, and vector control services. While this kind of suggestion is not the usual method of focussing on the housing issue, it represents a tangible improvement over existing conditions.

6.7.3 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 public and private land is available at the specific locations, as well as in the aggregate.

Land management services containing active sub-programs of land tenure control, land resumption and purchase, land development incentives and land taxation structures would all serve the useful purposes of modulating the supply of land for all purposes (Grimes: 1976).

6.7.4 Land and Housing Financial Services

One of the factors contributing to the high price of housing is the high cost of borrowing. This reduces the probabilities of large-scale purchases of lots and building materials and extensive long-term land and house leasing arrangements. High rents are made necessary to cover the higher unit costs associated with smaller purchases and the amortization costs associated with the high interest rate.

While improved access to lower-cost financing may increase the demand for land purchase and land prices, it also may increase the number of lots and units placed on the rental market. Although the transaction costs to formal lending institutions may prohibit the rendering of services directly to the majority of families such as those we met in St. Martin, reduced borrowing costs to higher income families may have indirect beneficial effect on the majority. The formation of cooperative mortgage borrowing associations may reduce transaction costs and further increase access to finance.

Additional aggregate benefits from increased investment in housing include more work for actual and potential construction workers. However, the degree to which private savings are directed to housing must be tempered by evaluation of the foregone opportunities of non-investment in other sectors; especially given the minimum "quality" required by residents of St. Martin.

6.7.5 Construction Materials Industry

In order to reduce the materials component of the cost of housing, the State could either directly import or could grant licenses for the

import and subsequent resale of scrap materials made up of wood, sheet metal, cardboard, impregnated papers and so on. At present Haiti does not produce enough solid garbage to maintain low cost availability of various types of building materials, does not have much in the way of timber resources and is burdened with a heavy external energy component in the local production of cement. If the cost of importing scrap materials is sufficiently low relative to the current market prices, then some reductions in the cost of producing shelter could be obtained.

Efforts could be directed at developing indigenous building materials. One possibility is "sisal craft", which consists of woven sisal twine imbedded with tar and asphalt, and which can be used as a durable roofing material. Sisal is extensively grown in Haiti and tar deposits were discovered in the southwestern regions in the early 1970's. Besides sisal, banana and palm leaves can also be converted into building components, and one local product, coir, or coconut fibre, is not used at all for any purpose.

The question of building materials is tied closely to the recommendations made at the end of Chapter 4 concerning marketing and research services. The potential multiple beneficial effects on housing, as well as on employment, income opportunities, rural development and the balance of payments should be obvious.

6.7.6 Housing Projects

If indirect methods to affect the supply and demand for housing cannot obtain desired results, then much more extensive direct public intervention may be warranted which would combine land management and

financial services into specific programs ranging from basic site and service schemes to complete middle-income tract housing units (Grimes: 1976). The latter kinds of projects benefit lower income families by providing employment opportunities and by increasing the amount of land in actual residential use. The former kinds of projects benefit the lower-income families more directly if properly located and if proper attention is given to "appropriate" lot sizes, prices, tenancy arrangements, final densities, and other characteristics which we have learned about. Indirect benefits also arise as a result of rapid increases in the supply of land for lower-income families. However, we should keep in mind that even such apparently simple projects like "sites and services" involve high administrative and management costs incurred by many small transactions, service maintenance and assurance that only low-income families have access to lots (Weisner: 1976). There is no guarantee that, in the absence of a subsidy orientation, a low-income buyer or renter in such a public project area would in fact spend less than he or she might in a non-project area with comparable locational advantages.

6.7.7 Water Distribution Management

Public investments over the past few years have assured an ample supply of water from springs and wells for the entire population for at least the next five years, and possibly for the next ten if system losses are reduced by better management, at per capita levels of use three to six times higher than today. Also, distribution lines penetrate almost every area of the city. Increases in consumption and decreases in

price will not require major new capital investment (Haiti: 1976(a)); but will require a series of actions to improve the distribution effects of the existing investment.

A first step to improvement would aim at upgrading the management efficiency of the municipal water authority and its personnel so that water is allowed to flow throughout the city on a fixed schedule which is linked to estimates of volume demands in various parts of the urban area. At the same time, improved efficiency would override localized water politics and allow all families who can afford and who want private or courtyard connections to obtain them. This would increase the number of connected sellers and hopefully reduce the price to mobile vendors and unconnected families. Since sales by connected families involve some degree of indirect subsidy by the water authority, a better managed system could also require the payment of a permit or other supplemental fee by sellers. If the fee structure is sufficiently high and the administration costs of collecting them sufficiently low, then the revenues of the public agency would increase and allow additional future investments.

If many families do not respond and/or if the sales prices of water outlets do not come down sufficiently a next step could involve a reduction in the monthly connection fee (i.e., a stretch-out of the repayment schedule for the connection) in lower income areas and an increase in such fees in higher income areas.

A third step can envisage the construction of a number of state-run selling points in lower income areas which offer water at lower prices than those which are privately charged. 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.

In all these cases reductions in the number of street sellers and their earnings brought about by an increase in supply and suppliers will be compensated to some extent by the price reductions which will permit lower income families to purchase from these women rather than directly from connected families or state operated outlets.

A final set of more costly actions can involve the construction of a number of well-managed public water fountains. A minimum facility cost about \$700.00 in 1975; and so the ratio of households to be served by each fountain has to be carefully evaluated. This evaluation has to take into consideration the balance between the loss of income opportunities to street vendors which will result from higher spatial densities of fountains and the gain in other income opportunities which may result from higher net disposal incomes; especially in the area of retail trade in food commodities and household durables. Evaluation must also investigate the impact of improved water service on the demand for housing in certain areas and the concomitant price effects upon dwelling rents.

6.7.8 Food Price Control

The key factor in reducing the price of food lies in the extent and effectiveness of intervention in the agricultural sector; both in production and rural-to-urban marketing systems. Other than suggesting that such intervention is necessary, specific recommendations concerning appropriate 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 discussed at length in Chapter 4. Intervention in this area was outlined under the heading of "marketing services" at the end of Chapter 4 and there is no need to repeat the observations here. Beyond these two factors there is relatively little more which can be done except corrective actions of limited scope. However, under certain circumstances these more limited actions may be very important for large numbers of lowest income families.

One such intervention involves the import of specific staple grains whenever drought or other disasters seriously reduce local supply and force high rates of price increase. The forms which such importation can take include public agency purchases and sales at non-subsidized prices, requests for international donations of staples for distribution through "food for work" programs or sales through state outlets, etc. These options have various foreign exchange effects and productive disincentives effects which must be evaluated (Isenman and Singer: 1977).

Also, at present the Government produces and sells flour directly in Haiti at highest unit prices in the region.²² Although bread is consumed by all income groups, we have seen that it becomes especially important for lowest income families who cannot afford to prepare food themselves. Lower unit prices for flour, while reducing Government revenues and causing certain kinds of consumer substitution effects may still be worthy of consideration.

6.7.9 Nutrition and Health Services

It is theoretically possible that traditional home education does

not provide sufficient knowledge of the most productive combinations of food items and methods of preparation which would lead to highest nutritional benefits. In this case nutritional education may be a useful program for maximizing the benefits possible from given levels of food and preparation input expenditures. The object here is to increase the "productivity" of household nutrition production. This kind of program is essentially one component of the training services recommendation presented at the end of Chapter 4. Education here 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 non-market time required for learning, and if there is a desire to maximize the immediate benefits of child education in the regular public and private school system.

We ought to note that this approach also contains 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 not only increase the productivity of the household through diffusion of a more productive technology, but also the aggregate demand for a new commodity; hence additional income opportunities (Khan: 1974).

Similar possibilities may exist for preventive health services if public infrastructure programs, such as those identified in Chapter 4, and increases in income associated with other programs suggested do not obtain desired outcomes because of inappropriate sanitary habits.

6.7.10 Savings Institutions

Interest rates are unlikely to be significantly affected by the

expedient of pumping more lending capital into public and private large-scale credit institutions. The credit available to the majority of the population does not come from these institutions either directly or indirectly. But even presupposing that it did, more money does not reduce the effect of most of the determinants of the current structure of interest. While extension of financial services, as suggested in Chapter 4, may be appropriate for higher income families with larger scales of market activity, the immediate benefits to most families will occur as a result of decreasing the need for adversity-related credit by implementation of some of the preceding recommendations.

In addition, another way of decreasing the demand for credit is the establishment of additional methods of savings. Given the very high cost of converting durable family assets (i.e. savings) into cash, it seems unlikely that the purchase of durable goods is based solely on the savings value of those goods. They must provide some useful returns other than capital accumulation or else it would be more logical to expect families to conserve cash rather than buy goods; unless the risks of holding cash such as loss by theft or fire are extraordinarily high. But the point remains that most families in the sample are able to put some income away for future use. There is a propensity for multi-purpose saving. However small, this manifest interest in accumulation might be well served by establishment of savings mechanisms which demonstrate low-risks to families, offer ready access to cash, and which involve transaction and administration costs smaller than those currently incurred and charged by pawnbrokers. The idea of paying positive interest to savers seems remote, though it may still be possible if

viable joint savings and loan 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 inventory of suggestions which can be proposed to match the issues presented in this chapter is quite long; and further analysis into such things as the current content of child education would extend the list even further. The recommendations presented in the foregoing are indicative of the kinds of projects and programs which should be evaluated rather than an exhaustive list of all things potentially useful (for an exhaustive list see PADCO: 1976).

However, the potential list of all possible actions which "should" be evaluated is generally longer than the list of actions which "can" be evaluated. While throughout this chapter I have reiterated the need for careful evaluation of the relative socio-economic advantages and disadvantages of implementing any one or combination of projects, it should be clear that choice of intervention mechanisms is further constrained by existing national development policy, by the level of financial resources available and by the extent of public technical and managerial adequacy. These are the topic of the following chapter.

NOTES TO CHAPTER 6

- (1) The relatively restrained interest in housing is consistent with some ideas presented in earlier chapters. In Chapter 2, for example, it was suggested that outward manifestation of wealth is not a proper form of social conduct, and that housing is likely to be a poor indicator of economic position for most of the population. Land ownership and schooling are socially more acceptable means of exhibiting material well-being. In Chapter 4 it was suggested that location, rather than "Quality", might be a more salient housing attribute for residents in St. Martin. Income production requires cost-minimization, and it is rather easier to continue to live in a run-down shack as income increases than to eat less. It is also more "productive" to eat better than to spend funds on additional housing which would not necessarily provide as much material return for each unit of additional investment.
- (2) Here, 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 of the sample is 5.3 individuals and 4.3 adult equivalent units.
- (3) In introducing the concept of the price-income elasticity of demand for housing I am implicitly reading longitudinal implications into a strictly cross-sectional data comparison. The translation of one kind of data base into another is fraught with methodological difficulties. It is incorrect to suggest that as a family increases its real income over time, by say, 25%, it will exhibit an expenditure pattern similar to that of another family with a current income 25% higher. The correct interpretation for a cross-sectional elasticity curve is strictly limited to making comparisons between the priorities of different families with different current incomes.
- (4) We should note here that about 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, insects, etc.; usually between \$0.20 and \$0.40 per day per square meter. "Housing" goods is clearly more productive an investment than housing people -- or so these tradeswomen appear to say. For some people at least, personal housing is wasteful.

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

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

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

where: I is the per capita expenditures for housing,

a is a 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 variables 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 : $\log I = -0.16 + .28 \log Y + Z$
($r^2 = .26$, $r = .51$, $f = 22.05$)

(7) The 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, on the basis of an assumption about the frequency of laundry days, was calculated.

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

(9) The 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:

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

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

(10) Suprisingly enough, one of the most difficult of questions to ask during the survey was the type of grain purchased and used by the family. I discovered that the basic cereal consumed was very much a symbol of prestige, and reflected an empirical and conscious indicator of material status. During pre-tests I found that an open-ended question like: "What kind of cereal do you buy these days?" ran high risks of insulting respondents because the answer is supposed to be obvious. The fact that I did not know seemed to suggest a lack of sensitivity on my part. On the other hand, I ran even greater risks if I specified a grain, as in the ques-

tion: "Did you buy commodity X today?" The risks were less if I identified commodity X to be a superior cereal to the one actually used; but the reaction to identifying an inferior commodity was such that sometimes it provoked a counter-insult and an end to discussion. People seemed to really feel that they "were" what they ate. Anyway, this dilemma was resolved by asking what, in general, was usually bought at the market; and the particular cereal came out as one item in the total shopping list.

- (11) Although 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.
- (12) This examination also underlies the reasons why the statement was made at the outset of this chapter that income serves only as an approximate indicator, and that a clearer understanding of expenditure patterns is likely to be best obtained by relating the processes associated with income-production, rather than manifest income, to investment-expenditure patterns among families.
- (13) In these results we see that one-third of households contain more than half of all children. As was seen in Chapters 4 and 5, larger families had higher total and per capita incomes. So this observation about schooling is consistent with earlier results. Also, lower income households tended to have larger family extension outside, with children located in rural areas or other parts of the city. Note that the lower income of these households resulted in part from calculations which deducted earnings sent out to family extensions. It is important not to confuse the income levels of the St. Martin household units with the income levels of the extended family of which the household forms a part.
- (14) The income elasticity calculation was made using the same format as described in footnotes 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:
$$\log I = -1.46 + 1.15 \log Y + Z$$
$$(r^2 = .22, r = .47, f = 6.25)$$
- (15) Of the 17 families who did not borrow money during the preceding reference period, a few indicated that they did not need to borrow (and one family was in fact operating a sideline credit business); several more indicated that they did not do so because they were Protestant and therefore it was not "correct" to borrow. But most of the non-borrowing households, ten, indicated that they either did not have the means or the necessary contacts to obtain financing. These families were among the poorest in the sample.

- (16) Figures 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 on 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. Assuming a compounded rate, the interest would amount to \$13.50 and the principal to \$1.00. So the annual interest rate is 300% rather than 1350%. In either case the calculation is theoretical because most loans are due and considered in default at the end of 30 days, though some can be as short as two weeks and others as long as 90 days.
- (17) There really is no fundamental difference between the two types of lenders of unsecured loans. They are both professional lenders. The distinction has to do with the fact that "friends" and borrowers know each other and loans are arranged on the basis of a personal relationship of the kind that has been discussed. "Usurers" on the other hand do not know borrowers personally, and so the high interest rates associated with this ignorance of credit-worthiness leads families to use the disparaging term for identification purposes. We should note also that because of the higher risks involved, the loans issued by usurers tend to be supervised closely. Whereas pawnshops and friends do not really care how the money will be used, usurers do. They make loans for specific purposes such as the buying of trade or manufacturing stocks, equipment, land leases and purchases, etc. Loan risks in this category are reduced by evaluation of the financial promise of the investment which the family intends to make. The higher transaction cost of such supervision is compensated for by issuing larger-scale loans; for it is somewhat cheaper to administer a smaller number of large loans than a large number of small ones. It is important to remember, however, that "usurers" and "friends" are usually embodied in the same persons; the distinction is one that comes about with respect to the degrees of personal interaction with borrowers. A usurer becomes a friend after a series of mutually successful transactions.
- (18) The r^2 statistic for the linear correlation of the replacement value of security and the size of loan is 0.73.
- (19) In order to test the assumption that the size of household operating capital was a good indicator of the assets which could be used for credit security purposes, I examined the linear relationship between value of capital and value of collateral. The relevant figures were: $r = .57$, $r^2 = .33$, and $F = 4.9$ (significant at the 0.01 level).
- (20) The r^2 statistic for the inverse linear correlation between the size of loan and the interest rate for pawnshop credit is 0.15. The weakness in the relationship occurs as a result of controlling for the size of collateral, which is also negatively related

to the interest rate.

- (21) While the presence of 80 or so suppliers might seem like a sufficient number for effective price competition, it is insufficient with respect to the technological characteristics which place thousands of buyers in contact with less than a hundred sellers. Firstly, these sellers try to cut each other off. So on any given day there are less than 80 operative suppliers. Secondly, the size of reservoirs and the time required for each commercial transaction create queues and implicit time-costs for both mobile vendors and household buyers. Every supplier on a given day has more than enough buyers waiting in line and willing to pay whatever the going price is instead of waiting or searching for another queue. Time is valuable to mobile sellers. The same reason compels higher income families in St. Martin to buy from mobile sellers.
- (22) Information 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 US AID under the PL480 Title I program (US AID: 1977) in order to assist the Government in finding counterpart local currency funds to match external assistance grants and loans.

Chapter 7: Policy

The analyses carried out in the previous three chapters have concluded with a large number of interrelated recommendations for ameliorative action. Throughout, I have underlined the constant need for careful evaluation of the relative economic costs and benefits involved. However, we have not yet come to grips with some fundamental issues concerning the practical feasibility of implementing any one of the recommendations. In a place such as Haiti, the historical, economic and social characteristics described briefly in Chapter 2 make it unwise to take the willingness of Government to deal directly with urban poverty, the financial resources available for programs and projects, and the technical, administrative and managerial resources required for planning and implementation for granted. Knowledge of these characteristics is as vital to the design of appropriate policy as the detailed analysis carried out in St. Martin (Bruton: 1974, Gotsch: 1974, Edwards: 1974).

In the following sections I shall briefly describe the current national development plan and its meaning, the public financial resources allocated to Port au Prince by the plan, and the public sector human resources currently available to execute the plan. The discussion will be more indicative than comprehensive, but will nonetheless serve to focus the broad range of recommendations which have been presented down to a much narrower and more tangible set of actions. The "data" upon which the discussion is based is taken in part from secondary sources, but mostly from two years of experience working inside various branches of the Haitian Government.

7.1 The National Development Plan

In the recent past Government development policy has been manifested in a stated desire to achieve "balanced regional growth" and a "decentralization" of the population and the economic activity of Port au Prince. However, the types and scale of public investment that have been made in the city (e.g., water supply, electrical energy, port facilities, airport installations, an industrial park, etc.) relative to the limited scale of investments that have been made in the rest of the country, have actually led to the concentration of private investment and the extraordinary economic growth of the city described in Chapter 2.

In order to understand the apparent contradiction between intent and action one must understand the differences between what is perceived as socially "desirable" and what is perceived as politically and economically "practical". As indicated in Chapter 2, the public official in a decision-influencing position is likely to be simultaneously an industrial or commercial entrepreneur. Though he may have a compassion for the plight of the "proletariat" or the rural "masses", his view of the world is also influenced by his political and economic positions. Setting aside the question of use of public office for private gain, an official who is a "modern" businessman will have a bias in favor of "modern" and efficient investment which will attract more modern and efficient private investment. The incentive for this form of investment is added to by the inherent visibility of such projects in space and on economic accounts. Large-scale and capital-intensive public works and modern-looking private development make eminent political as well as business-like sense.

In 1968, when this process of development began in earnest, foreign technical assistance was also caught up in the paradigm of growth and industrialization. The idea that the allocation of public resources to benefit several million people could be made using the same model as the efficient allocation of resources in a firm still had considerable currency. There was a strong desire to see positive large increases in the GNP indicator irrespective of the form of distribution of income increases across the population. The desire to see rapid improvements in the per capita income statistic also led to a focus on industrialization and "modernization"; manifested in technical assistance and loans for relatively capital-intensive public projects and service delivery systems and formulation of very attractive incentives for expansion and relocation of major import-substitution and export-oriented enterprises to Haiti (Gatz, Godet and Petrou: 1971).

The concentration of industrialization in Port au Prince was brought about because public agencies, international assistance agencies and private investors regarded the capital as the only efficient location for additions to supporting infrastructure and the construction of manufacturing plants.

So little public and private investment had been made outside the city in the past that provision of the infrastructure necessary to attract industry had become very expensive. Very few such investments could pass rudimentary tests of market and/or social costs and benefits. Use of the very limited Government revenues from internal sources to make non-agricultural investments in other towns might have provided some benefits in the long term, but heavy apparent opportunity costs in the

short term. The country was not perceived to be in a financial position to engage in potentially high risk ventures and at the same time forego the considerable amount of bilateral aid which would be withheld from projects that were not clearly viable, and the large amount of private investment that would not be forthcoming if disincentives such as reduced public spending in the city were not to keep pace with "modern" entrepreneurial requirements.

The implicit policy of "growth at all costs" shared by Government and external agencies at the time did not permit evaluation of alternative policies appropriate for the region (e.g., Lewis: 1958, Demas: 1965), did not permit examination of the risks involved in promoting import-substitution (e.g., Power: 1966) or investigation of the opportunities to maximize employment in export promotion (e.g., Tyler: 1976) or the possibilities for general labor intensity in industrialization (e.g., Barnett: 1974) or the appropriateness of the technology being imported (e.g., Khan: 1974). But at the same time it was apparent that the population of the city was increasing very quickly and that the growth was composed almost entirely of "slum-dwellers" in crowded and unsanitary conditions. The potential political implications of this kind of growth was not lost on public officials or on international agencies. The plight of the "proletariat" was becoming very apparent and visible and clearly something had to be done about it. To demonstrate that intention visibly, the "balanced" growth and "decentralization" policy was set forth explicitly in the national development plan document as the fundamental goal of Government.

If we reexamine the apparent contradiction between intent and action we can readily see that none exists. The policy was "grow now"

and "redistribute later". This resolves the dilemma of the public official by combining political and economic rationality and social compassion; and the dilemma of the foreign economist by combining efficiency and equity.

However, it was not until six or seven years later that serious attention began to be paid to the actual redistributive effects of the de facto policy and to the possibilities of modifying that policy along lines previously overlooking (IBRD: 1974, IBRD: 1976a). It was becoming evident to some Government and external agencies that continued lack of thought and foresight about the combined effects of the projects upon the population was a serious omission. At the same time, it was generally recognized that the structural imbalance of the economy, described in Chapter 2, which was created by recent public actions could now serve as a logical starting point for more effective programs outside the city and in other sectors. This rationalization, already suggested for other countries (Streeten: 1963), resolved any local or foreign technician dilemmas about shifting direction.

According to the current 1976-1981 Development Plan, the basic economic emphases will be on agricultural and rural development, decentralization of industrial infrastructure, education and vocational training (Haiti: 1976c). Other elements of the overall strategy aim at the maximization of employment by promotion of labor-intensive techniques in industry and public works, and also diversification of rural activities to include creation of agro-related industry. The explicit purpose of these actions is aimed at obtaining a more equitable distribution of income and a large internal market for goods and services.

It is a process of redistribution through growth. All these things reflect an intent to deal seriously with the "income" issue. The recommendations proposed in Chapters 4 and 6, for the most part, are consistent with the overall objectives of the plan. Stated public policy may limit available resources and may shift priorities among the earlier proposals, but it does not reject the object of dealing directly with the low incomes of the population. This is somewhat important.

However, the allocation of investment for the forecast period is composed of: 48% directed to the transport sector including a new mechanized container port facility, major capital intensive roads and air transport investments; 23% directed to agriculture including the capital intensive construction of major irrigation works; 6% for the capital intensive construction of urban and rural water supply systems; 8% for the construction of a new power plant in Port au Prince; 3% for the construction of a new resort hotel; 4% for construction of schools; and 2% for industry.

The industrial program, ostensibly aimed again at "decentralization", includes extension of the industrial park in the capital (23% of its allocation), construction of a mineral resource transformation factory in Port au Prince (10%), construction of a textile weaving and printing factory in the capital (8%), construction of a number of canning plants and rice mill in the capital (36%), and construction of an agricultural tools factory in the city (7%). Either in the aggregate or in the specific example of the industrial program, the allocation of expenditures once again does not appear designed to meet the stated intent of policy.

The reason for the current inconsistency may be traced in part to the continuing desire to promote large GNP increases and "modern" development. However, this time there are several additional factors which undermine what I believe to be a sincere, if limited, desire to deal with income issues directly.¹ One factor is the limited coordination between public agencies and between different external assistance agencies.

Based on my experience in assisting the Government to prepare the plan, I can point out, for example, that the local and foreign technicians who prepared the policy statements are still not the same ones as the clerks, accountants, and local and foreign engineers and economists who prepared the sectoral investment programs. They still do not communicate well with each other.

Although some projects do conform to the explicit intent of policies, most projects and investment decisions preceded the plan, or were decided upon by the various sectoral agencies independent of any national guidelines or coordination. Even though some foreign technical assistance was provided to help formulate the plan, other foreign experts representing other agencies proceeded with their various sectoral programs and projects without thought to overall "national" policy.

Another factor is the level of technical adequacy of local agencies and the appropriateness of external assistance. Most of the projects identified in the plan are lists of items which various agencies would like to do. Programs and projects were accompanied by cost figures which lacked substance and which were never made subject to rudimentary tests of economic or financial feasibility or implementability, let alone examined in the context of national objectives. Many of the expenditures

envisaged for the next five years are pure conjecture. I shall have more to say about institutional adequacy subsequently.

Still another factor is the quasi-total absence of the basic kinds of information about the majority of the national populace which would facilitate understanding and identification of specific projects in the first place. Information such as that contained in earlier chapters and which yield clear directions is not being gathered extensively. In this instance, even if an agency wanted to initiate an ameliorative program, it would not know what to do, how to do it, or when to carry it out. The historical cleavage which separates the state and the majority of the population has led to a situation where the technicians who constitute the state know very little about their "clients" beyond learned preconceptions. Since few if any local technicians and foreign technical assistants have spent any length of time in places like St. Martin, it would have been surprising to find many projects in the plan which resemble those in Chapters 4 and 6.

These observations are not intended to denigrate the development plan. Several years from now, with enough practice and learning, it may come to resemble what a plan is supposed to be. The current plan is somewhat better than the last, and the next will likely show improvements as well. The important observation is that within certain prescribed socio-political limits there is room for implementing some income-related programs.

For the foreseeable future, the key to bringing about social and economic changes will not be the "development plan" or the policy statements and programs listed within it, but rather the implementation of

specific projects which have direct or indirect agendas related to poverty, irrespective of whether or not they seem to fit into an overall plan (Waterston: 1965, Singer: 1965).

7.2 Public Financial Resources

Estimates of the public resources which might become available for urban programs of the kind recommended earlier are made difficult because of the absence of a concrete and realistic plan which is likely to be closely adhered to, and by the complexity of Haiti's fiscal machinery which includes fiscal and non-fiscal accounts spread across a number of autonomous tax-collecting agencies. It is nonetheless possible to arrive at some order of magnitude.

Receipts from all national sources in 1974/75 amounted to about \$170 million. Of this amount, \$58 million was labelled as "Special Funds" which are described as "acquisitions of goods and services by certain agencies of the public sector and other expenses made by the Government which are not accounted for in ordinary accounts" (Haiti: 1976c). Most of these special funds are returned to a "Development Budget" or are used for national defense purposes and debt service. The estimate of the size of revenues which are never officially accounted for range from \$6 million to \$14 million (IBRD: 1976a). The non-fiscal receipts that constitute this fund and which are drawn from luxury taxes, export taxes, and a series of "special" taxes have grown at an annual rate of 6.3% since 1970.

The fiscal receipts, about \$112 million in 1975, have grown at an annual rate of 12% since 1970. These funds are obtained mostly from

income taxes. The revenues are mostly disbursed in the form of salaries and maintenance expenses in the Government's current "Operating Budget".

The "Development Budget" which is used to finance major public investment projects represents less than 20% of all government receipts and amounted to about \$37 million in 1975. This expenditure category also covers the cost of pre-investment studies, training costs, and operating costs of the projects, or about 35% of the total development program. This financing base has been growing at a rate of about 5% since 1970 and represents roughly 6% or 7% of GNP.

These numbers mean that total government receipts permit a maximum expenditure of about \$34. per capita today. Of this amount about \$2.30 is unaccounted for; another \$2.30 is reserved primarily for national defense; \$22. goes to salaries and overhead costs of day-to-day operations; and \$7.40 is left for new investment. Of this last, \$2.60 is spent on salaries and overhead expenses of new projects, and \$4.80 is allocated to capital projects (Haiti: 1976a).

Minor independent municipal revenue sources also exist and are primarily obtained from built-up property taxes, transaction taxes, and cemetery fees which provide a total of \$825,000. today. In addition, the city is granted an amount of about \$460,000. in national revenues from the Ministry of the Interior, the Department of Public Health, and the Department of Public Works. So the total municipal budget is about \$1.3 million and most of that is used to pay salaries and purchase equipment and fuel for garbage collection and street cleaning. This budget allows little room for large shifts in expenditure emphasis, for it does seem to cost almost \$2.00 per capita to collect garbage in parts of the city

(Haiti: 1976b). These Government revenues and expenditures are supplemented by a relatively large amount of external aid: \$65 million in 1975, or almost twice the amount of local development revenues.

About \$25.5 million in external aid in 1975 took the form of reimbursable loans for the building of roads and the port of Port au Prince (75%), the provision of public health facilities (12%), and the construction of irrigation works and agricultural feeder roads (10%).

These are the capital investment components of foreign aid and work out to \$5.10 per capita for that year. Another \$27.2 million took the form of non-reimbursable grants to pay for technical assistance and the preparation and management of the capital projects and related programs.

These were allocated to education and vocational training (20%), health services (16%), community development (13%), agriculture (11%), transport (10%), and emergency food supplies (25%). Except for the last category, the vast majority of the grants, almost \$20 million, took the form of salaries and overhead expenses for several hundred foreign technical personnel (UNDP: 1975a, UNDP: 1976a, UNDP: 1976b). The "labor" component of official foreign assistance represented almost 40% of the total of \$10.60 per capita expended.

Finally, \$12.3 million was brought into the country by private non-governmental organizations involved in rural development projects. The salaries and overhead expenses of the foreign and local personnel in them are far lower than in the bi-lateral and multi-lateral agency programs. Out of this grant of about \$2.50 per capita, less than 20% took the form of salaries and expenses of foreign personnel.

Therefore, in 1975 the total public and quasi-public expenditure capability to improve the country was about \$100 million or \$20. per capita. Looking into the future, the Development Plan for the period 1976-1981 has assumed an average expenditure of national funds for development of \$37.6 million, and a foreign aid component of \$66.4 million each year; representing a constant per capita public expenditure of \$20.² In addition, the Plan goes on to suggest that private capital investment for the period will average \$56 million a year or \$11. per capita. That level of investment will depend of course on how the government and foreign agencies actually intend to spend their resources.

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 I could make a guess that something in the order of 20% of public revenues might be allocated to Port au Prince during the planning period. This limits total expenditures to about \$105 million for the next five years and per capita expenditures to about \$26. per year, or about 30% higher than the national average.

This figure might appear small, but we should keep in mind that expenditures outside the city which serve to increase the supply of food may have significant beneficial effects upon the urban population. Also, the estimate of per capita expenditure is equivalent to 25% of the current level of income of people in St. Martin. In principle it is more than adequate to bring about significant change. The important question is not the amount of resources available, but rather the way in which the resources will be spent.

For example, the plan has earmarked a number of capital projects

for the city which total about \$90 million in the areas of water supply, stormwater drainage, moderate income housing, health facilities, electricity, industrial park expansion, telecommunications, tourism, urban roads, etc. (Haiti: 1976a, Fass: 1977). This leaves a residual of \$3.70 per capita per year for additional programs.³ Although a number of earmarked projects may never be implemented, others are well underway and we must understand that they ultimately lead to some indirect and direct benefits for the majority.

In the aggregate, the planned projects may serve to increase further industrial expansion and tourism and hence the local demand for various goods and services. Even small increases in water supply, land and health facilities are beneficial, and there is a very direct benefit to health possible with reconstruction of the drainage ravine which passes through St. Martin.

The question is not whether the projects are appropriate, but whether the planned level of expenditure for each and all programs can maximize benefits to the majority. The cost of a 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 unit cost for land for a moderate-income house is the same as for a low-income house. The differences are the effects. On the other hand, the effect of using a local technician to prepare a project may be the same as using a foreigner. The inadequate training of the former may be compensated for by the inappropriate training of the latter. The difference is the cost.

In general, however, these observations concerning the availability

of financial resources underline the need to restrain ideas about the kinds and scale of actions which are valid to propose for Haiti and the need to focus attention and care in the evaluation of how each dollar is spent. This latter concern is of particular importance also in the evaluation of the effectiveness of expenditures in the day-to-day "Operating Budget" which draws almost 70% of local revenues. Although this subject was discussed in part in Chapter 4 concerning Government purchasing arrangements, it is appropriate to reiterate the matter here where we begin to sense that "development" may have less to do with financial resources than with the human resources that manage them.

7.3 Public Institutional Resources

The conditions of Haiti, Port au Prince and St. Martin which I have 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 socio-historical separation of the state and the population explains much of the reason why conditions were not perceived as "problems" and hence why little attention was paid to them by public institutions.

In recent years, however, the growth of the urban population and the extent of foreign attention upon Haiti has made it difficult for Government to continue to ignore the conditions. As indicated earlier, "problems" have been identified and the desire to deal with them has been expressed explicitly and, I think, seriously. Earlier observations of relatively weak public responses to the problems suggest that the capabilities of national administration and management are not up to

to the challenges which they face. Public intervention is no better than the public capacity to act, and this tautology merits a close examination.

Over the last 20 years, during a part of which the GNP of Haiti fell 7%, the institutions of Government deteriorated because of the absence of financial resources, technical resources, and political conditions that would have permitted normal development of their activities. Partly as a result of this, many qualified professionals left the country, and in so doing reduced national management capabilities. By the time the economy started moving in 1968 and heavy demands began to be placed on administrators, the rural population had increased by 25% and the city had doubled in size, while public administration was weaker than it had been ten years earlier.

Institutional weakness is demonstrated by various sector agencies (e.g., Agriculture, Public Works, Education, Industry and Commerce, Finance, etc.) in their current inability to develop basic functions such as planning, identification and evaluation of projects, preparation of budgets, implementation and coordination of actions of key sub-agencies (e.g., Water, Electricity, Industrial Credit, etc.) and coordination with other agencies. To compensate for the vacuum, the National Planning Council of the Ministry of Finance (CONADEP) which contains the largest proportion of qualified planning technicians in Government has taken over many of the responsibilities that properly belong to the sectoral agencies. Further, since CONADEP is a highly centralized institution whose technicians really do not have enough sectoral knowledge to prepare specific proposals, almost all technical activities concerning

the preparation of plans and projects and implementation have been allocated by CONADEP to international agencies and the foreigners whom they hire. This is considered necessary in order to accelerate the arrival of investments which would promote desired economic growth (Fass: 1977).

The occupation of Haiti by foreign nationals would not necessarily be bad if there were grounds for believing that multi-lateral and bi-lateral collaboration in the preparation of plans and projects could serve as an effective vehicle for upgrading the capabilities of local agencies and individuals. But the degree of improvement depends to a great extent on the existence of productive work environments fundamental to informal "on the job" training, the actual number of local individuals available and, partly related to these, the "style" of assistance being rendered.

With respect to work environments, we must remember that foreign contractors and employees are expected by their clients (e.g., international agencies, CONADEP, etc.) to deliver specific "goods" on specific dates with a given amount of money. Although a training clause will usually find its way into a contract, it is a secondary item. Contract performance is evaluated more in terms of "hard" output than on the effectiveness of counterpart upgrading. The qualifications of foreign personnel for work in Haiti is based on technical competence and not on training capability. Furthermore, since counterpart local staff is almost invariably less-trained and less experienced with the particular project at hand, the foreigner is obliged to use these individuals in non-essential "back-up" roles or else run the risk of

defaulting on the contract. Consequently, local technicians are rarely found filling functions that could ultimately be institutionalized and form the framework of an ongoing local activity. At the same time, being used for non-essential tasks does not provide a local technician with much of a challenge or much of an incentive for being particularly interested in his job. His salary (usually less than \$200. a month) is about one-tenth that of his foreign counterpart, and there is little material incentive for putting in a full day's work and thereby miss the opportunity of using the rest of the day to fill another low-paid Government post or private employment.

The various conflicting agendas, related to some extent to the "growth and investment" syndrome mentioned earlier, create a vicious circle. Public offices echo with complaints by foreigners about the apparent incompetence of local staff and complaints by local staff about the apparent insensitivity of foreigners to their needs.⁴

As noted earlier, foreign assistance has a heavy "labor" component. About 40% of it takes the form of salaries and related overhead expenses which amounts to approximately \$50,000 for each expatriate advisor. This is expensive and the object of transferring knowledge to local technicians so that they could one day carry on the required work has definite advantage. Even though the transferability of "know-how" has limits associated with the transfer of inappropriate methods (e.g., Seennilson: 1964, Oldham: 1968), the problem here is that the working environment is inappropriate for any kind of effective transfer of project planning and execution capabilities.

There are of course a number of formal training programs in the

city and abroad which are designed for rapid knowledge transfer, but much of the gain is lost by the counterproductive work situation.

The second issue has to do with the number of individuals being discussed. Scale can be provided by looking at the number of Haitians in agencies which would usually be called upon to take part in the carrying out of urban intervention.

In CONADEP there might be perhaps 25 individuals who have the basic training to take part in the preparation of a crude economic and social development policy. Most of these are agronomists, architects and engineers. One is a regional planner and two are economists. Few know how to carry out a basic cost-benefit analysis, and fewer can trace the effects of any policy action. None of these individuals, even though they all have joint appointments in other Ministries, knows very much about project financing, implementation organization, or day-to-day management.

The technicians of the Ministry of Social Affairs (one), the Ministry of Industry and Commerce (two), the Haitian Institute of Statistics (two), the Haitian Institute of Agricultural and Industrial Development (two), the Haitian Institute for the Promotion of Coffee and Export Goods (one), the municipal water authority (one), the Ministry of Public Health (one), and the National Housing Office (one) are all included amongst the 25 in CONADEP.

In addition there are two in the Ministry of Education, two or three at the National Institute for Vocational Training, two in the National Office for Literacy and Community Action, two in the Old Age Pension office, and the Mayor of the city. So there are roughly 35

local persons out of a rough total of 200 upper echelon government workers who can make plans for the city. That number is probably sufficient for the purposes of general planning. Unfortunately most of the rest of the staff below this group of technicians and the rest of the 200 top administrative employees are accountants, messengers, chauffeurs, clerks, typists, etc. A middle-level management capability does not exist.

Some might argue (Herbert: 1975) that it is necessary to quickly have large numbers of highly skilled and highly motivated professionals from all disciplines in order to meet the problems of urbanization and "poverty". As in the case of financial resources, it is of course better to have more than less; but administrative talent has its limits, and represents a constraint which narrows the range of possible Government responses to meeting its urban and rural improvement needs. It is probably sounder to work with what is available than to worry too much about what is not.

This leads to the third issue which is concerned with the "style" of assistance being rendered to specific institutions and to the relatively limited number of individuals within them. There are several interrelated questions here. Should assistance be oriented to the preparation of plans? Should it be oriented to implementation of projects? Should it be oriented to the requirements of day-to-day management of current public services? Should it be oriented to the preparation of people? What combinations of planning, implementation, management and people are appropriate? These questions are complex and the answers are crucial to effective institutional upgrading and to the probabilities

of ever executing many of the kinds of recommendations proposed in earlier chapters. Three examples may serve to illustrate the issue of "style".

a. Assistance to Housing Sector Institutions

There are three institutions which have some relevance to the housing market. The first is the Department of Public Works which occasionally builds the structures of intermittent small public housing projects. Its relevance is that it has experience in execution of the physical components of some types of housing. The second institution is the National Office of Housing of the Ministry of Social Affairs. Its current prime responsibility is the administration and collection of mortgage payments for a worker-housing project built in 1955 (200 units). Its staff of accountants and engineers do not propose, plan, execute, or evaluate anything having to do with future housing projects. Its importance is simply the fact that it exists, and that it can be improved upon when interest in expanding public actions in the housing sector become manifest. The third institution is the Housing Bank, which exists on paper only.⁵

There exists no formal institution which directly or indirectly controls the use of most private lands. There is no complete cadastre and there is no land tax other than one based on length of frontage in certain areas, and which is collected on behalf of the municipality by the Tax Service of the Ministry of Economic Affairs. There is no official agency which controls the use of public lands.

Technical assistance in the housing field, as part of an overall package of technical assistance in urban development, was provided to

the Department of Public Works and to CONADEP by the U. N. Center for Housing Building and Planning throughout the 1970's, and much of the effort was concentrated between mid-1973 and late 1975 with the purchase of services from a foreign contracting firm. The assistance did provide some training of local technicians, did bring out some awareness of the urban housing "problem" and did lead to the identification of a services upgrading program for St. Martin (to be financed by the U. N. Capital Development Fund) and the possibility of constructing a small "site and service" project. However, a combination of early Government disinterest in low income housing projects, the requirement to produce high quality and sophisticated technical reports, and the exclusive training of technicians in planning-oriented agencies has served to limit the effectiveness of this assistance.

Although the Department of Public Works would be the likely agency for the physical execution of housing and land works, and although CONADEP would have something to say about the allocation and form of public resource allocation for housing and land development, the agencies which would have the most to do with housing actions never benefitted from any direct assistance.

The Tax Service of the Ministry of Economic Affairs, which retains at least some control over fiscal measures dealing with land; the National Housing Office which has the responsibility of managing the few public housing works that have been built during the past 25 years; and the Housing Bank which would have to be created as the main financing institution for many types of housing programs, were not at all involved in any aspects of the technical assistance program. After six

years of assistance and after the expenditure of one million dollars, the only real thing to be shown for these efforts is a series of reports containing many potentially useful project proposals which, even if there were high public interest in carrying some of them out, could not be executed for lack of land management capabilities, lack of housing program management capabilities and lack of any major financial mechanisms for concentrating demand into the area of housing.

b. Assistance to the Municipal Water Authority

Up to the present time external technical assistance to the water authority has come from two places. The first source is the joint World Health-Pan American Health Organization (WHO/PAHO). Reflecting its title, this organization has been concerned with assuring that the quality of urban water meets adequate international health standards. To this end the organization maintains an expatriate engineer at the water authority. For years this assistance position was supposed to be filled by someone who could help the water agency upgrade its management and system maintenance capabilities and thereby assure safe drinking water. As we saw in Chapter 6, this assistance has had mixed success. Management of water resources by ground level personnel such as valve operators and area supervisors leaves much to be desired. On the "positive" side, public fountains have not been built. WHO/PAHO in Haiti does not consider water which is delivered by mobile vendors or by public fountains as appropriate methods to meet quality standards. Therefore there has not been any incentive either to recommend more fountains or to investigate the indirect price-related negative health effects of not building fountains or other non-pipe delivery mechanisms.

The second source of external assistance has been obtained from a foreign consulting firm which has been paid by technical assistance grants from the Interamerican Development Bank (IDB) and which has been used to plan, implement and supervise the construction of major capital projects which have been financed by bank loans to the Government. The side agenda for the firm has included a mandate to train water authority personnel on the various aspects of water project identification, evaluation, execution and management so that future projects would not require as much import of expertise.

However, the firm has been in Haiti on an almost continuous basis since 1964. After thirteen years of assistance planning must still be purchased outside, and management has not shown much improvement. This primarily results from the private firm's focus on getting projects completed on time for its clients. The water authority wanted reservoirs and pipes, not invisible administrative competence.

In this example we see the outcome of a number of interrelated factors: inappropriate technology caused by import of standards, inappropriate focus of WHO/PAHO on office management rather than on field management, inappropriate contracting conditions leading to non-transfer of "know-how", etc. One is led to wonder whether it might not have been better to leave the authority to its own devices for a while. A forced import-substitution of expertise may have higher long-run benefits than continued imports in some cases.

c. Assistance to Industrial Development Institutions

The promotion of manufacturing and agro-related industry in Haiti is spread over a large number of local institutions with direct and

indirect responsibilities. The more important ones are: the Department of Commerce and Industry (DCI) which sets investment policy and incentives for local and foreign large-scale enterprises, and which gathers data on production, exports and employment; the Institute for Agricultural and Industrial Development (IDAI) which administers the industrial park in Port au Prince, provides industrial and agricultural credit (see Appendix F) and which carries out limited kinds of industrial research (Fatton: 1975); the Haitian Institute for the Promotion of Coffee and Export Commodities (IHPCADE) which sets export tax incentives for manufactured articles composed of indigenous agricultural materials such as sisal, which gathers data on agricultural prices for export-oriented goods and which offers credit for the production and transformation of those goods; the Tax Department which collects industrial and commercial property levies; the Customs Office which collects import and export taxes on specified articles; the Tobacco Control Board (Regie des Tabacs) which sets and levies import and export taxes for the "special funds" described earlier; CONADEP which allocates budgetary resources to many of the agencies identified; and the National Bank which administers the accounts of most of the agencies, which examines the trade and currency effects of current policy and which operates certain public industries in the country. Although there are several other agencies, these eight more or less independent institutions are responsible for various components of the planning, implementation and management of policy. It should be clear that the institutional component of industrial development is complicated and coordination essential to effectiveness. Also, since industrial development was non-existent up until 1968, we cannot assume too much about technical adequacy.

Up until quite recently foreign technical assistance was obtained from the International Monetary Fund, which kept a representative in the National Bank to assist in monetary management and another expert at the Customs Office to assist in setting tax policy (even though tax policy was not set exclusively by the Office); the Interamerican Development Bank which financed the industrial park for IDAI; the United Nations Industrial Development Organization (UNIDO) which provided one long-term expert to the DCI to assist in data gathering, and several short-term missions to identify constraints upon industrial development; and the United Nations Development Program (UNDP) which provided a development economist to CONADEP to prepare overall macro-economic development policy. This assistance was clearly aimed at the higher echelons of public institutions.⁶

More recently, assistance has begun to be focussed on much more tangible projects and programs rather than on broader issues. For example, in 1975 an expert from UNIDO set about to evaluate the kinds of tools used in rural areas, and to identify modification to existing tools and the adaptation potential for new implements. He proposed and designed a number of interesting things. These included new types of hoes, plows, rice mills, corn mills, kernel extractors, a shovel with wide flanges to maximize human digging strength and save wear and tear on bare feet, a new kind of yoke to maximize the pulling strength of animals and even a new kind of charcoal heater which would cost about 50% more to manufacture, but which also would save 30% to 40% in charcoal during normal cooking operations. These were all useful ideas. Unfortunately, his recommendations focussed exclusively on the purchase

of half a million dollars worth of modern equipment to manufacture the tools in a factory in Port au Prince.

The current U. N. plan calls for extension of this project in a four-year program beginning in 1978 and providing for two experts until 1982 (UNDP: 1976b). The idea of building a factory remains part of the intended program.

If followed through as planned, the first tools will not arrive on the market before 1982. While we see here an appreciation of the concept of "appropriate" technology, we also see the presence of a potentially inappropriate method of producing the appropriate product.

From the analysis of Chapter 4, where we found a number of independent metal workers active in St. Martin, and from the examination of the organization of carpet production described in Appendix E, it is possible to imagine some kind of production guidance, some increase in the availability of raw material supplies (such as the wholesale import of scrap materials which have transformation possibilities) and some assurance of a stable market which could combine in a fashion that would permit small producers in the city to produce a set of tools perfectly appropriate for agricultural purposes. Admittedly, if tools can be produced more cheaply with "modern" industrial methods, then the disadvantages of smaller direct employment and income opportunities to production workers must be compared to the advantages of increased production and productivity in agriculture. But an "optimum" solution requires a preconception that there are many ways to produce tools. This is not evident within the current assistance program, and so may never be transferred into the thinking of local technicians either (further examples of this problem with IDB and USAID proposals are described at the end of Appendix E).

Among the factors which may contribute to this kind of oversight and potential lost opportunity are the import of preconceived concepts of production techniques and the related absence of information on alternative techniques such as described in Chapter 4. If it is the latter, then the future holds some promise of bringing about a greater sensitivity among foreign and local technicians than that which is presently the case.

The International Labor Office (ILO) has programmed a two-year assistance project to CONADEP in human resource planning and employment development. Based on the assumption of a 50% national "underemployment" rate, the basic objectives of the project are to carry out employment surveys and to identify labor-intensive public works projects. This information-gathering program may have some long-term beneficial effects in reshaping public and foreign ideas about the operational characteristics of the urban economy.

Also, UNCTAD proposes to send one expert to Haiti during the period 1979-1981 to help the Department of Commerce and Industry⁸ formulate international trade policy and improve its information gathering and disseminating capabilities (UNCTAD: 1976c). UNIDO proposes to send two experts for the period 1979-1982 to the Department to identify and develop new types of industrial enterprises with high rates of labor utilization and highly marketable export products, and to identify new international markets.⁹ The presence of three more foreigners in the offices of the Department of Commerce and Industry may serve to build on activities undertaken to date and by 1985, hopefully, the institution will be in better shape to redirect industrial development efforts. But, if

foreigners are doing the work for CONADEP and the DCI, what will remain when the ILO, UNCTAD and UNIDO leave the country?

These three case examples of assistance to local development institutions contain a number of important messages.

First, there are many local institutions and individuals involved in the sectoral planning and management process. Their operational capacities and their interrelations must be understood in order to identify the appropriate agencies and levels within agencies which are to be assisted.

Second, resources for assistance are limited and so the effectiveness of assistance must be maximized. This includes especially the identification of "who" will be assisted.

Third, some kinds of assistance are out-and-out substitutions for analyses which should be carried out by local personnel. If experts are continually brought in to identify projects and programs for the Government, how and when will local technicians ever be able to carry out this function?

Fourth, adequate information upon which to base adaptation of imported technologies or development of indigenous technologies and products or the formulation of appropriate forms of external technical aid does not exist. If the compartmentalization of knowledge continues, when will the historical gap that separates the governed from the Government and its foreign assistants ever be narrowed to a point where public intervention coincides to some extent with the private interest of the St. Martin resident?

Fifth, external assistance continues to be accorded to Haiti with the presumption that public institutions and local technicians are basically the same as those to be found the world over, and that all that is lacking is technical planning capability. Governance means more than technical analysis. It requires a capacity for learning about the full counter-productive effects of one action upon a set of other intended actions so that the outcome of intervention yields desired social benefits. Transaction between agencies, between individuals in agencies, between foreigners and locals are a necessary condition for governance whatever the actual level of technical capacity (Friedmann: 1973). When will foreign experts with sensitivity to this aspect of assistance be brought to Haiti? When will the import of people become the transfer of adequate managerial "know-how" (Bauer: 1967)?

Sixth, the creation of institutional adequacy to take on the full responsibilities of the public sector will take a long, long time.

However weak institutional capabilities may appear to be at present, the most important factor regarding the possibilities of effective intervention in the future lies in the fact that the Government explicitly admits to its own shortcomings and has made institutional development a prime focus of attention for at least the next five years. The National Development Plan speaks plainly of human resource inadequacy, notes that public servants are insufficient in number and insufficient in qualification, and specifies that they lack sufficient dedication to their tasks and to their civic responsibilities. While this admission does little by itself, at the very least it opens a door and invites more imaginative assistance and more effective means to create functioning public institutions.

While 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, a more direct approach may yield considerably more long-lasting effects. One positive example worthy of mention is the kind of assistance being provided to the Department of Agriculture by the Interamerican Institute of Agricultural Sciences (IICA).

Most of the assistance package of IICA is explicitly oriented 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 subprograms 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 are then picked up by the Department when the agronomist is reassigned to an independent managerial role at the Department.

Responsibility for all analyses, projects and actions rests ultimately on the shoulders of local staff in the Department's various sections. By foreign standards, outputs of the various sections are totally inadequate to meet the challenges of rural and agricultural development. But 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 is available in Haiti today, whatever its shortcomings, was 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. The number of them 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 a good thing. This kind of program is not without problems, but it deserves replication to some degree.

7.4 Quasi-Public Institutional Resources

Much of the previous discussion of planning and management capability contains the implicit assumption that the execution of policy can only be processed through the personnel and institutions of Government and the international agencies with which they work. While this may be a necessary political or practical assumption in many countries, it is not an absolutely necessary one in Haiti.

There are about one hundred non-governmental organizations (NGO's) with private foreign links sprinkled throughout the country, especially in rural areas. As indicated earlier, these organizations contributed approximately 20% of total external aid to Haiti in 1975. This aid was channelled into four areas where other external donors and the government did not have major interest. Thus, NGO's contributed 56% of education and vocational training, and 38% of rural public health aid, 56% of aid for community development projects, and 27% of emergency food supplies.¹⁰ In addition to this direct contribution many bi-lateral and multi-lateral projects, especially those with "food-for-work" components, were executed and managed by the personnel of the NGO's.

All NGO's work in the country with the approval of government, and each has been accredited a "Public Interest" status by the state which, in principle, also means that they are responsible to the state and act as an informal arm of the state under jurisdiction of the Ministry of Social Affairs. While there are numerous conflicts between state officials and NGO's, there are many points of close and increasing cooperation, especially with the extension service and rural education service of the Department of Agriculture and the National Office of Literacy and Community Development.

Although a large number are engaged in distributing cash and in-kind subsidies, and although many of the smaller ones aim at proselytizing the populace, many NGO's have explicit economic development objectives. Up until recently these objectives were met in practice by the promotion of community efforts to independently finance, build and maintain flood control dams, roads, schools, health centers, latrines, simple irrigation works, etc.; to engage in programs of soil conservation, reforestation, improved crops, better organization of markets, improved techniques of household budgeting, savings and loan associations, better health and nutrition habits, etc. More recently the NGO's have begun to expand the horizons of their actions into the marketing of agricultural produce and into the production and marketing of non-agricultural outputs and inputs. Under the former heading, activities have centered on the formation of marketing cooperatives, transport networks, and the pursuit of national and international markets, and the wholesale purchasing of agricultural inputs. In the second category they have begun to provide technical and capital assistance to small-

scale urban and rural manufacturing activities, have formed larger scale and profit-motivated urban and rural industries that transform agricultural base materials, have engaged in quality-control programs and have located national and international markets for these goods (e.g. Appendix E).

There are many interrelated motives behind these recent actions. In discussions with the members of a number of NGO's, I found that they 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 also dissatisfied 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. Also, the 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 NGO's.

The impact of these projects at the scale of Haiti are invisible. The important thing is that the NGO's have, as we can see, a capable trained personnel of secular and non-secular employees, both foreign and local, who work at the level of the national majority, who understand the "grass-roots", who understand the immediate economic environment surrounding the communities where they operate, who show initiative, and who may outnumber the government personnel with equivalent planning, execution and management capabilities.

In addition to these foreign-based quasi-public institutions there exist many independent community and regional governance institutions which have arisen and which have been maintained, as described in Chapter 2, because of the limited penetration of public institutions into the lives of the population. While most of these institutions of self-governance are primarily located in rural areas, several exist in Port au Prince and the seed of one is evolving in St. Martin (see Note 4, Chapter 2).

Recent efforts of some external assistance agencies have focussed on trying to help both the NGO's and the independent organizations and also on trying to bridge the gap that separates the state and the public.

One U. N. expert, for example, works directly with existing cooperative organizations of the NGO's and the community councils, or assists in the very difficult task of creating cooperatives (Schaedel: 1975, Etheard: 1976). His effectiveness and the rate of formation of cooperatives in general is limited by the fact that he is just about the only technician with expertise working in the country.

Actions in this area have been carried out at a much broader scale by USAID, and future programs tentatively proposed include a complete inventory of the number and evaluation of the qualifications of quasi-public institutions and the rendering of qualified technical support from Government to the institutions when they need it (USAID: 1977). One explicit agenda in the latter program is to provide a vehicle for linking public institutions of the state to the public institutions of the people.

Although expansion of quasi-public institutional capability and

integration with public institutions is likely to be slow, it is a beginning and opens a door heretofore closed.

7.5 Implications

There are three basic dimensions which have been discussed in all the foregoing chapters:

One dimension is the description of the condition of life in St. Martin and Port au Prince which calls out for attention and for enactment of ameliorative action.

The second (and implicit) dimension is the body of research and experienced knowledge about the multiple array of ways and means to bring about some kinds of positive changes. From the perspective of a small place like Haiti there appear to be unlimited outside resources of applied expertise embodied in individuals, and transcribed knowledge embodied in documents concerning employment, industrial development, housing, service delivery systems, agricultural development, etc. On one side there seems to be an inventory of problems and on the other side there seems to be an inventory of solutions.

The third dimension which sits between the first two and which is manifested in the current operations of Government and external assistance agencies is supposed to transform knowledge of problems and solutions into meaningful actions.

The third dimension does not seem to work well. Given all the international expertise and research and given the Haitian situation, the ineffectiveness of the processes of transformation of knowledge into practice is of paramount concern. It is therefore not appropriate to follow the more usual procedure of "Policy Implication" discussions

which either set forth grand strategies of development policy, or which extract from the large inventory of documented "solutions" and match them up against each and every technical "problem" identified in the course of analysis. Exclusive recourse to either mode would not do justice to the examination which has been carried out, or to the fundamental obstacle of institutional inadequacy which slows the way to progress. There is a lesson to be learned from the U. S. occupation of 1915-1934, from the international assistance program of 1948-1957, and from the machinations of current external aid efforts in operation since 1968.

The lesson is a unifying theme which pervades everything in this study. It has to do with the need to create a "Government" which governs in the usual sense, the need to build the mechanisms of governance embodied in instruments (e.g., Chenery: 1958) and in people (Stewart: 1974), the need to suggest to external assistance organizations that many preconceptions which lead to the current styles of providing aid (Streeten: 1966) may not lead as much to improvement in the life of Haitians as it may to a permanent sense of frustration (Singer: 1976), the need to suggest the full meaning of "development" (Meier: 1970) and the full meaning of "adaptation" to both Government and external agencies (Lele: 1976), and the need to point out concretely that the "development" of theory is quite different than the "development" of practice. These are the "basic needs" of Haiti.

While these needs ought to be addressed quickly, it is unwise to make the assumption that they will be or that others will necessarily agree with my opinion. The current orientation to development is not

caused by a homogeneous body of local and foreign institutions and individuals, but rather by a heterogeneous set of agencies and persons each of which, as we have seen, operates in directions set by their own interests; which also include their perceived impressions of the "problems of poverty" and the "proper" means to deal with it. To be realistic, proposals for feasible actions must be designed around limited financial resources, limited human and institutional resources and also around the various politics and agendas of external assistance and Government organizations.

Clearly, this implies an incremental and marginal approach wherein we accept that many current programs and projects will simply continue unchanged into the future. The object in the short-term is to identify those programs which can be re-oriented to simultaneously yield immediate benefits for the population and long-term effects on managerial capacity which could sustain the delivery of those benefits long after the current colonial period comes to an end. The aim of this kind of approach is towards "balanced" development. In much the same manner as we would think of the balance between urban and rural areas or between productive sectors in economic development, we also have to think of the balance between economic development and institutional development; and the balance between today and tomorrow. The following examples are illustrative of the kinds of actions, drawn from the list of recommendations presented in earlier chapters, which are appropriate and which may directly or indirectly assist families such as those in St. Martin now and later.

7.5.1 Infrastructure

Public institutions are incapable of collecting garbage effectively, of clearing the city of rodents and other vectors of disease, of distributing water properly, of finding methods of human waste disposal, of controlling the population and health of domestic animals such as pigs and goats which thrive on garbage, of maintaining the effectiveness of the urban storm drainage system, of delivering effective fire protection services, etc. Public financial and human resources are limited and so one cannot readily call for exclusive reliance on the public sector to deliver those services, nor can one insist that all these services be improved and/or expanded. However, selective improvements which yield substantial short-run and long-run household productivity changes seem in order. One fundamental area of intervention is in the distribution of water.

A rapid impact project with relatively high visibility has already been proposed for Port au Prince (Haiti: 1976a, Haiti: 1976b). It involves the construction of 100 public fountains a year in certain parts of the city and areas expected to undergo urbanization in the near future. The program is expected to cost approximately \$70,000 a year and is designed to minimize the negative effect on the income opportunities of mobile vendors. Intended effects include 40% to 60% decreases in per capita expenditures for water by low-income families, 20% to 30% 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.

Besides the possibility that higher housing and food prices may

offset the benefits of redistribution if appropriate actions are not taken elsewhere. The program suffers from the fact that it was developed by foreigners in an agency (CONADEP) which does not have responsibility for water management. There is no assurance that the program will be implemented, monitored or modified by the appropriate agency in the future. More importantly, the effectiveness of the program will be only as good as its day-to-day management. There is need for more aggressive attention to current management upgrading.

The Municipal Water Authority, WHO/PAHO and the Interamerican Development Bank must decide that attention shift from capital-intensive expansion to labor-intensive management. This includes repair of leaks, coordination with the agency responsible for urban planning to identify the spatial distribution of the population, gathering information on consumption levels and prices across the identified distribution, allocation of water through system pipes based on the distribution of spatial demand, rigorous supervision of valve-operator activities to assure regular allocation, rigorous supervision of employees responsible for making and 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 which would facilitate increased suppliers in the former area and still assure cost recovery, coordination with the Police Department to protect water personnel from neighborhood gangsterism, coordination with the Public Health Department to monitor health effects of water quality and water quantity in various parts of the city, coordination with the Public Works Department for the purposes of designing an appropriate

public fountain or community standpipe method of water delivery which minimizes losses and maximizes delivery at each point, evaluation of the cost, employment, income and price effects of alternative spatial densities of public outlets, evaluation of the effectiveness of fountains for reducing fire hazards, evaluation of alternative fire prevention methods, and so on.

This is a major program and a very difficult one to carry out. It will take several years of intensive effort and expense to become operational. If it requires the presence of ten expatriate and appropriately qualified management technicians for a five-year period, the cost will come to about \$2.5 million, or about 3% of external aid forecast earlier for the city.

The program implicitly assumes that the urban planning agency, the Police Department, the Public Health Department and the Public Works Department are capable of picking up their respective ends of the required coordination process. Such an assumption is not valid. They need upgrading as well, and additional resources may have to be expended just to enable them to coordinate, let alone take on their separate responsibilities.

Another rapid impact project has also been proposed for improvement of the garbage collection and disposal service of the Municipality. The project is intended to assist the Mayor's office in using the current inventory 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 this service, the proposal includes the vesting of necessary programming capability to the Municipality, as well as all the kinds of activities listed for the water authority above. The cost over a five-year period was estimated at \$1.6 million; 2% of forecast foreign aid and 25% of the city's current budget (Haiti: 1976b).

In 1976 the Mayor approached several multi-lateral and bi-lateral agencies in search of assistance in carrying out the program, but met with no success. However, the office of the President did support the idea and allocated some funds to the city. In the absence of assistance which would have helped evaluate the most effective use of funds, the money was used to import trucks and mechanical street-sweepers. Though highly visible, the proposed program did specify that such use of funds would be highly ineffective. This was a case of inappropriate capital-intensiveness brought about by managerial weaknesses which precluded the possibility of identifying or evaluating alternatives. Reconsideration of earlier refusals by WHO/PAHO and the UNDP to assist the city is warranted (Fass: 1977).

Effective stormwater drainage is another effective means of reducing health hazards and also reducing the risks of flood-related material losses, especially in St. Martin, as we noted in Chapter 3. Improvement of the urban drainage system is an earmarked project involving the Interamerican Development Bank, the Public Health Department and the Department of Public Works. At an estimated 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 recon-

structing the ravine through St. Martin is approximately \$3 million (Haiti: 1976b).

The effectiveness of drainage canals is only as good as the speed with which garbage is removed from them before the rain, as noted in Chapter 3. Given the high cost involved with capital earthworks, the focus on garbage collection is all the more important. In addition, we may note that removal of waste accumulation may in fact obviate the need for extensive earthworks. A labor-intensive approach may be just as effective in reducing health hazards but at a much lower cost. The \$3 million may not be necessary.

Another dimension to this issue is that the density of St. Martin and other areas is such that waste cannot be collected everywhere. During rains families take pains to sweep garbage onto the mud footpaths in the hope that it will wash into the ravine. The cleansing effect of rain is the prime incentive for the current community action to pave the earth pathways (see Note 4, Chapter 2). A very specific action to facilitate community action in neighborhood improvement is the apparently simple expedient of having the Public Works Department assign one worker with the part-time task of assisting the community organization in the method of construction and in facilitating a reduction on the tax paid for cement. 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. This kind of interaction between the state and the people which increases the productivity and serves the interests of both deserves more attention and support.

At this point it is necessary to point out that the people of a community will very often assist in the implementation of state projects when such projects address their immediate 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. 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 willingly participate in the construction of water fountains. If they build some and water does not flow, as in one or two cases I 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. But 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. We may speak here of the increase in effectiveness and productivity which changes in "class consciousness" among public and external agency decision-making personnel might bring about. Such changes, however, will take a long time to evolve.

7.5.2 Information

The capacity to identify potentially useful programs, to evaluate the costs, the potential effects, the methods of implementation, the mechanisms of "appropriate" adaptation, and so on depend to a large degree on the extent of knowledge which is available for these purposes. The productivity of public service delivery, the productivity of

external assistance and the productivity of an independent manufacturer in St. Martin are all constrained by limited information resources and the preconceptions, assumptions and inappropriate "consciousness" which ignorance tends to reinforce.

There is of course no limit to the amount and types of information which ought to be obtained. Information on social and economic characteristics in the country began in earnest in 1968, after an 18-year halt to the process, and most technical reports about the country understandably begin with reference to a "lack of adequate data". Looking the other way, there is very little information in Haiti about other places and experiences from which Haiti could learn. These are less reflections on the absence of documents as they are on the current practices of "know-how" transfers and the unwillingness of local and external officials and technicians to spend time interacting with the majority of the population.

Like everything else which requires expenditures of human and financial resources, the opportunity costs of only spending effort to find out about things leads to diminishing returns and compromises the ability to engage in a number of other activities. We saw this in the specific case of a manufacturer (Chapter 4) who could not take time away from selling in order to find out about improved production techniques, and in the broader case of the U. N. Center for Housing, Building and Planning assistance program which expended so much effort on data collection and report preparation that implementation capacity was never improved. It is not easy to identify the point where "enough" quantitative and qualitative information has been obtained, but it should be

evident that the kinds of public infrastructure services proposals which have been described above could not have been easily identified without the types of information that was gathered in St. Martin, in the offices of local and external agencies and from documents about experiences in other countries.

Current efforts at information gathering are concentrated in the areas of demographic characteristics, migration, urban residential mobility, family and social structure, nutrition, basic commodity flows and prices, urban rents, large-scale commercial and industrial employment and wages, school enrollment, health indicators, etc. These are being gathered by local and foreign institutions, both public and private. Unfortunately, the information does not directly address questions related to the feasibility of implementing a number of the programs recommended in Chapters 4 and 6.

In order to know what goods and services the Government could purchase, the types of information services and goods to be included under a marketing services program, the training which would be appropriate for adults and children involved in small-scale activities, the kinds of external and internal technologies to be included in a research and development program, the location and composition of new markets, the types of materials to be evaluated for the housing construction industry, the form of financial services to be rendered, the possibilities of creation of cooperative savings institutions, etc., it is necessary to have a lot more information about income-production processes, outputs, inputs and current marketing mechanisms than that which is currently available. The information gathered in this study is indicative

of the kind which is necessary, but by itself is inadequate for the purposes of program formulation at a large scale.

It would be appropriate therefore for the Haitian Institute of Statistics (IHS) in cooperation with the International Labor Office which is currently rendering certain assistance services with the Department of Commerce and Industry which has responsibility for industrial programs, with the Institute for Agricultural and Industrial Development (IDAI) which has parallel responsibilities, with USAID which has requested several millions of dollars (USAID: 1977) for programs in simple and intermediate technologies, small-scale enterprise development and assistance to economic programs of NGO's, and with the Interamerican Development Bank which currently shows interest in development of small handicraft industries, to begin to take steps to find out more about small-scale business activities in the city. The outward purpose of such a project is to obtain data, and this will be difficult because there is little institutionalized experience in Haiti on how to carry out surveys such as the one in St. Martin. But, the more important purpose is to sensitize local and foreign institutions and individuals to the economic characteristics of the urban majority so that they begin to "know" what to look for and pursue avenues of inquiry which open new doors to potentially useful public actions. This is important because there is nothing quite as useless for planning as a "datum" without someone qualified to interpret its meaning or to devise methods to act upon it.

In this program I conceive of a core of 10 to 15 staff members of IHS who already have experience in field survey work, complemented with

several expatriates drawn from current ILO, UNIDO, UNCTAD, and USAID programs who ostensibly have interests in the subject matter, to begin the process of developing and executing permanent business surveys. At first they would all be in the field experimenting to devise appropriate methods. After the process is institutionalized and deemed effective the first group would take on analytical functions and a new group of field workers brought in from various local and external agencies. The next stage envisages reassignment of local staff to the Department of Industry and Commerce, to IDAI, to the Education Department, etc. so that data-gathering and appropriate analytical capabilities are decentralized to those agencies ultimately responsible for sectoral program implementation and management. Such a program might cost approximately \$300,000 in external assistance each year until the Government is able to take up full responsibility. While seemingly elegant on paper, this kind of program will also be difficult to organize and implement, but it already has been turned into regular practice by the Interamerican Institute of Agricultural Sciences in Port au Prince. Therefore it is not an impossible task.

Whatever the difficulty, nothing short of this concrete type of approach will yield the information and the personnel necessary to carry out most of the direct and indirect income-related programs identified in earlier chapters. It too will take a long time to become effective, but once it does, many opportunities for intervention will open in areas which are now closed.

7.5.3 Housing

Various kinds of land management programs such as stronger fiscal

control and reconstitution of the cadastre must be regarded as very long-term methods of intervention in the housing market. The political conditions wherein much urban land ownership is concentrated in the hands of a relatively few people who are simultaneously members of the Government or closely allied with the state preclude effective action in this area. In the nearer term, actions concerning the supply of housing are limited to use of certain types of public lands, use of public resources for the purchase and resale of private lands and spatial reorganization of produce marketing centers. Implementation of any one of these programs will not be easy because information concerning the location and extent of public land is not available, because institutions for management of land and/or public housing programs are weak and because housing for low-income families is not a priority interest of the Government in either the National Development Plan or in fact. The inconsistency of other planned projects notwithstanding, housing for low-income urban families is regarded as counterproductive to the object of stemming the flow of rural to urban migration. At the same time, many public officials maintain the viewpoint that low-income housing is a subsidy, either because of an assumption that such families are unwilling or unable to pay for housing, or because the state should not require the poor to pay for housing. Such projects as have been built in the past (about 1350 units since 1955, of which 150 since 1970) have been given to selected families as "gifts" of the Presidency.

Other than suggesting that there is an inherent contradiction in promoting industrial expansion in the city while aiming for reduced migration to it, one cannot really argue with the disinterest in housing

as it relates to the "urban-rural balance" portion of the current development strategy. On the other hand, the idea that the poor cannot or will not pay is not consistent with the observation that almost everybody pays and, in relation to income, are willing to pay a great deal. If appropriately located, designed and managed, low-income projects would not only lead to cost recovery, but also to decreased per capita expenditures and net fiscal revenues to the Government (Haiti: 1976a). Like everything else, implementation is also constrained by inappropriate ideas concerning the urban majority. There is nonetheless a small interest in housing manifested in a program financed by the U. N. Capital Development Fund to build a 1000 unit "sites and services" project on the periphery of the city, and it can serve as a vehicle for institutional upgrading, changing public official opinions and thereby permitting larger-scale efforts in the future.

Although at the time of writing the local agency responsible for implementation of the above-mentioned project has not been finally determined, in all likelihood it will fall to the National Housing Office which has legal authority over public housing matters. However, the Office has never had, as mentioned earlier, any experience whatsoever in planning, programming, finance or construction. It simply administers about 2000 units across the country and collects monthly mortgage payments on about 400 middle-income units constructed 20 years ago. Even the small sites and services project, which was conceived and planned at CONADEP, is more than the Office can manage with its current resources and experience.

Over the next several years it will be necessary to vest the

Office with certain management capabilities in hiring, salary and finance policy, explicit accounting of revenues and disbursements, auditing of accounts, methods of mortgage payment and/or rent collection, sales and rental pricing policy, methods of negotiating local and external loans and grants, procedures for payments to other local and private agencies for goods and services, letting of contracts, design and supervision of contracts, land acquisition procedures, coordination procedures with other agencies such as the Housing Bank (yet to be made operational), the Water Authority, the Municipality, the Public Health Department, the Public Works Department, etc., identification of selection methods and criteria for lot and house purchasers and/or renters, and so forth. These are required areas of minimum competence, and external assistance limited to two expatriate "experts" in these areas would amount to \$500,000 over five years, which we can compare to the current local payroll of the Office of \$60,000 a year.

After the management program is well underway and applied to the small sites and service project, it may become reasonable to shift the planning, programming and data-gathering capabilities vested in CONADEP by the U. N. Center for Housing, Building and Planning to the Office in order to finally obtain an agency which functions as an adapted facsimile of its counterparts in other countries. Then housing programs may become more ambitious.

Another near-term opportunity for redistributing the spatial demand for housing and land follows from a current interest by the Inter-american Development Bank (IDB) to evaluate the impact of its port expansion program upon the central produce market which is immediately

adjacent. Implementation of the multi-million dollar port facility involved, as indicated earlier, closing and relocation of the coastal shipping port and relocation of truck parking facilities. Simultaneously, the large-scale sector private response to the port project was the purchase or leasing of large tracts from the state on the north side of the market and the construction of concrete walls around the properties, forcing central market activities to adjust by expanding into the municipal garbage dump. The indirect health hazards of proximity to refuse and the movement of commodities around the port area are sufficient reason for thinking about decentralization of some components of market activity.

In 1976 and 1977 the IDB requested assistance from the urban planning division of CONADEP and from one of the U. N. sub-agencies attached to the latter to carry out a feasibility study of this subject, but for various reasons nothing was ever arranged and the IDB, at last word, was about to undertake the analysis independently.

The current conditions in and around the market are, I think, sufficiently urgent to warrant immediate attention, both for the negative effect of current concentration and the potential positive and widespread effects of an alternative spatial organization. Further attractiveness of this kind of program lies in the fact that there is a convergence of Government and external interest in the idea, and that it is a project which is supposed to render an effect for a long period and which, as a whole, does not require the kind of specialized day-to-day management capabilities discussed earlier. Implementation requires acquisition of an area at a specific location, building a roof over

over part of it, designating uses for different areas of it and shifting the current personnel of the Municipality, Police Department and Health Department to it from the central area.

The major effort in this case must be directed to planning and programming of the shift to a very carefully selected locale. It will have to draw on and coordinate the resources of the urban planning section of CONADEP, the respective traffic and market management sections of the Police Department and the Municipality, the civil design and construction sections of the Public Works Department, the sanitation sections of the Public Health Department, the Water Authority, the data gatherers of the Haitian Institute of Statistics to identify the spatial relationships between market-work places and homes, the office of the President to allocate a public parcel for the market and the authorization for execution of limited cadastre updating in areas surrounding alternative sites by the Tax Department, the newly formed marketing section of the Department of Agriculture, and so on. External technical assistance for the project might be obtained from the IDB, WHO/PAHO, the Interamerican Institute for Agricultural Sciences, and perhaps a rekindled interest from the U. N. Center for Housing, Building and Planning.

The direct agenda for the project is simply the staged creation of a new urban wholesale market. One indirect agenda is a redistribution of activity which obtains a spatial distribution of demand for land yielding a balance of decreases in required housing expenditures for low-income families, net increases in "real" income and productivity and minimum losses during the transition period. A second indirect agenda is the use of the project to build up the inter-institutional

planning and coordination activities in the city. The third indirect agenda related to the first is to make peripheral land, where the National Housing Office could envisage future housing projects, more attractive to low-income families than is presently the case.

While a market-relocation project seems simple enough to propose, it is clear that it requires a great deal of technical sophistication to carry out properly. It may require relatively large-scale import of appropriate expertise for several years, perhaps six expatriates over a three-year period (almost \$1 million), and the urgency in this case may even demand continuation of the practice of outright substitution for local expertise in some cases.

A million dollars buys a lot, "slum-quality" houses for 30,000 people for example, but from what was learned in St. Martin and in other studies I participated in the Port au Prince, use of external assistance in the suggested manner may have much longer-lasting and widespread effects than a number of other current and proposed types of uses.

7.6 Conclusions

The types of programs suggested in the three areas of infrastructure, information and housing are indicative of a style of intervention. There are possibilities for similar kinds of programs in other sectors of the urban economy and it would be incorrect for me to suggest that the external assistance requirement of \$7,500,000 for the next five years exhausts the possibilities for immediate action. Nevertheless, from the perspective of the hundred thousand poor families in Port au Prince this \$3 per capita annual assistance, representing an amount less than 3% of

annual per capita income may not seem like a significant amount. From the perspective of the total local and foreign public resources available for all purposes the figure may seem even smaller, for it is less than one half of one percent of these resources. It is difficult to reconcile such paltry effort with the kind of misery which I have described in St. Martin, and which represents the life of the urban majority, and which in turn is a better material life than that which the rural and national majority has had for several generations.

The conditions under which these families live propel an understandable desire for quick and large-scale action yielding rapid and dramatic effects. It is wise, however, to retain a historical perspective on these conditions as well as a current perspective. The people of Haiti have been "poor" a long time and have long since learned how to deal with it directly. They will continue to deal with it as long as the environment of their lives remains unchanged, as it has for the last 200 years.

While the object of our concern rests ultimately with the poor, the more immediate focus should be on the seemingly static environment. This is not the first time the "poor" have been described, it is not the first time that a relatively concerned Government has been in power, and it is not the first time that huge international assistance has been offered and accepted. There is no assurance at all that this time effects will be any more effective or long-lasting than all the previous times.

In this study I have attempted to pinpoint a number of the reasons why things have not changed for a long time. At the outset I presented the chronology of historical events in which we saw brief periods of

political stability, integration with the international economy, development-oriented public investment with 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". One cannot predict how long the current "forward" steps can last.

In parallel with these historical events, I have attempted to show that the social structure determining the governors and the governed which was inherited from the early colonial period has remained virtually unchanged. The social, political, economic and cultural cleavage which separates the "haves" and "have-nots" has not closed. It has yielded among the former a set of ideas about the latter which continually compromises such sincere and serious efforts to deal with "poverty" as have been made, and which are being made today.

External assistance embodied in foreign workers is not excluded from this phenomenon. Armchair conceptions of the "proletariat", the "masses", the "marginals", the "underemployed", the "homogeneous labor force", the "informal sector", etc. have less to do with rigorous theory and practice than with cultural biases which reflect opinions about observations measured against criteria developed in external learning situations and in external personal experience. The most insidious conceptions are those which assume that "Government" is like that to be found anywhere else and hence capable of implementing everything, or which assume that it is incapable of anything and hence must be substituted for by foreigners in traditional colonial fashion.

So while it was possible to draw from the analysis of Chapters 3 to 6 a seemingly unending stream of ideas concerning relevant types of

intervention for the "poverty problem", I have argued that the "problem" does not lie in the direct conditions of life of the poor, but rather in the absence of the appropriate social, institutional and intellectual mechanisms for understanding the conditions and then acting upon that understanding.

Under these circumstances the agenda for any kind of relevant program becomes increasingly large and increasingly difficult to design for the "designers" must themselves become an explicit part of the design. The difficulty, and the care which is necessary in formulating programs with agendas related to many things besides the "poor" severely limits the range of action immediately possible. I think that ultimately the poor can be assisted more by how sensibly a given amount of resources is expended on their behalf than by how much. Viewed in this light, the small scale of programs proposed may appear more relevant and useful. Their most important attribute is that they specify very concretely the organizations responsible for taking the first marginal step.

We, the "rich", the foreign academic and professional experts and the individuals who constitute national public institutions have never had to deal with poverty directly. We have dealt and continue to deal with it through our preconceptions, our assumptions, our theories, our models and our social indicator statistics and these are not the same as experience. We must remain conscious of this because we cannot afford to persist in confusing our perception of "poverty" with the poverty being perceived (Peattie: 1975). However concerned we may be and however much we may desire to bring about change, we will never have to absorb personally the consequences of errors of omission and errors of judgment

in the same way as the families of St. Martin. We will never have to answer to them for the consequences which our actions may cause, good or bad. We are part of the environment of poverty, not independent of it, and we may properly focus attention upon ourselves as parts of the "problem" rather than as parts of the "solution" (Cleaver: 1968).

When we have fully come to grips with this problem, and have come to understand the economics of survival and our symbiotic relationship with it, then we may find justification in the belief that our deliberations and our actions will lead to a better quality of life for others.

This observation extends well beyond the confines of Haiti. I think that it is as valid in places where the "poor" are the majority as it is in places where, like the United States, they are a relative minority. The method of analysis contained in this study which focusses on a low-income neighborhood of a city, which extends outward to examine its relationship with a broader environment and particularly with the environmental mechanisms of understanding and intervention, and which then draws from the investigation enough basic material with which to design very concrete steps which can and should be undertaken "tomorrow", may be useful in many places: St. Martin in Port au Prince, the favelas of Rio de Janeiro, the Kampongs of Djakarta, La Perla in San Juan, Watts-Willowbrook in Los Angeles, Bedford-Stuyvesant in New York. There is a sameness to urban poverty the world over.

Notes to Chapter 7

1. Officials always "wish" they could help the lot of the "poor", and they "wish" that Haiti's natural resources could provide a basis for setting up a massive social redistribution program in the form of housing, water supply, irrigation, health services, etc. They cannot yet deal with the possibility that the "poor" are quite capable of taking care of themselves and that small, relatively invisible programs could do more than massive and visible programs. I remember, for example, working with a number of them, who are now much higher in the government structure than they were in 1974, and arguing back and forth regarding the "marginality" of an income increase of \$20.00 per capita per year. They would say that such an increase meant nothing (since they themselves earned over \$3,000. a year on the average) and I would counter that it represented a 20% increase over the current average and would mean as much to the average worker as a \$1,000. increase to them. While they recognized that 20% could make a difference, they could not see the significance of moving from a \$100. a year budget to a \$120. a year budget; life at that level was "marginal" and hence projects whose output maintained general "marginality" served no useful purpose.
2. The 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.
3. These estimates assume no significant changes in the currently weak fiscal machinery that operates in the city. A substantial increase in public revenues could be obtained by upgrading the mechanisms. For example, property taxation yields about \$400,000 annually. If all urban properties, excepting those occupied by low-income residents, were to be taxed at 0.5% of their market values, public revenues could easily reach \$1.6 million per year. Similarly, if user charges for private water service were increased from \$0.10 to \$0.25 per 1,000 gallons (which is far less than the \$4.00 to \$20.00 per 1,000 gallons currently paid by low-income groups), revenues could increase from \$500,000 to 2.5 million a year. These two changes alone, which more than offset additional administrative charges, would increase gross public urban resources by 15%.
4. It should be noted also that most foreigners in a country have a hidden agenda aimed at extending their contracts or finding additional ones. This requires that the senior member of a contracting team or an independent foreign employee spend a great deal of time negotiating simultaneously with decision-making institutions and individuals of Government, and with international agencies. There is no room in this process for local staff, by definition. Yet the kinds of negotiations, discussions and coordination which extending a contract requires is probably one of the most important operations

which the staff of any future sectoral planning office may be required to learn. It is also one of the most important ways in which the roles of local staff and the sectoral agency in which they work could be institutionalized in the eyes of higher levels of Government and external aid organizations. Thus the search for contracts, which would be equivalent to the search for a "go-ahead" by a sectoral agency to start new programs or projects, works against providing essential experience and leverage to local agency staff.

5. The Bank has some undeposited authorized capital under law. The Organization of American States (OAS) in 1974 and 1975 proposed to finance part of the Bank if a significant proportion of loans were to be given to lower-income families and if counterpart Haitian public and private funds were deposited into the Bank. Since many public agencies were assured of higher rates of return from deposits in other accounts, nothing was promised to the Housing Bank.

One example of this last was the decision of the National Office of Old Age Insurance, the social-security agency, not to place several hundred thousand dollars in the Bank. The latter could offer a 6% rate of return, whereas the agency for electricity, trying to match a loan from the World Bank (at an interest rate lower than that of the OAS) was prepared to offer a 9% return. So the social-security funds, in the face of external agencies working at independent purposes, went to finance the electrical project.

6. In this context it is very important to recognize that the development policy which has been pursued, as described in Chapter 2, was the easiest one to follow. It did not require much in the way of institutional capability. This is implicit in a laissez-faire attitude. Also, it was the easiest route from an external assistance point of view. The administrative and experimental costs and risks of making loans for major infrastructure facilities like ports and industrial parks, or for technical assistance to speed the flow of public acceptance of foreign investment proposals are standard procedure in wealthier countries from which assistance is obtained. The industrial development policy was just about the only one that could guarantee immediate results without institutional change and get the economy moving quickly.
7. The subject of industrial inputs to agricultural production is sufficiently important to warrant some additional discussion, for in recent years some solid opportunities regarding tools have been lost, and a number of others may soon be lost unless rapid reorientation of government and external aid agency thinking takes place.

At present, the most important tool used by the vast majority of farmers for all purposes (planting, digging, cutting, harvesting, etc.) is the machete (Lundahl: 1975b). Up until a few years ago all machetes had to be imported. Then, the Institute for Agricultural and Industrial Development built a small factory in Port au Prince in order to produce them locally in a modern and capital intensive

manner. These are sold at a price which is lower than imported goods only because of the protective tariff barrier which was imposed to protect this infant import-substitution industry. Farmers now pay more for machetes than they did before, and pay more than they would have to had there been less concern with balance of payments and modern industrial development. In this instance national industrial policy compromises national rural development policy. Actually, the effect has less to do with the policy orientation than with the method of carrying it out. The high local production cost arises from the need to amortize new and expensive machinery and the high cost of electricity needed to run them. No one has as yet figured out whether the balance of payments effect of importing equipment and energy is really less than importing finished goods from equipment and energy-rich countries. In any case, human energy techniques, as in the use of foot-powered grinding equipment which is used extensively in Haiti for machete maintenance purposes, could possibly have reduced some of the capital costs sufficiently to offset the additional labor costs, and it might have been possible to locally produce the machetes with higher direct employment effects, lower international trade effects and lower final prices. Although it may well be that the current factory is "better" in all respects, the problem is that the option was never investigated and the effects on agricultural development were not evaluated. This is unfortunate because of the increasing importance being ascribed to "appropriate" industrial technology, and because, as we saw in Chapter 4, there do exist a number of indigenous workers and methods which produce metal products from scrap, such as buckets and charcoal heaters, that make even "appropriate" technologies seem overly sophisticated for today's Haiti.

8. One of the rapid observations of the United Nations assistance program in Haiti was that the planning capability of the Dept. of Industry and Commerce was far weaker than most other groups. A mission was dispatched in 1976 to work out an upgrading assistance program. The mission proposed a two-year assistance package with five elements: the preparation of an information base on exportable commodities and markets for them; the formation of a local capability to promote exports of local products, the preparation of commerce and export policy, analysis of usefulness of foreign intermediate technologies, and an examination of internal and external transport charges and costs. While all these elements seemed warranted and useful, subsequent evaluation suggested that even these basic measures were premature and too sophisticated for present Haiti. In any case, the Department was not able to evaluate the offer of assistance, was not able to take it to higher levels for evaluation and decision-making and, in fact, was not able to respond at all to the proposal without assistance from CONADEP.

Another mission was sent in 1977, from the International Trade Center, and set about to scale down the assistance project to more manageable

levels. One of the first results (informal) was a decision to expand an existing ILO vocational training program, which was already established in the city, as a vehicle for beginning to upgrade Industry and Commerce Department capacity to deal with fundamentals like evaluating aid proposals. In fact, many aid agencies that have been in the city for a while have learned, the hard way, to think small.

9. The UNIDO Plans are obtained from "Programme des Nations Unies pour le Developpement, Programmation par Pays, Haiti 1977-1981". This is a preliminary document and is subject to change with time as financial resources and allocations to Haiti increase or decrease. In addition, various short-term missions from the International Trade Center in Geneva have visited Haiti in 1977 and the chances that current plans will further change is large. Nonetheless, the nature and scale of technical assistance will remain substantially unchanged.
10. Eighty per cent of the NGO emergency food program originated from U. S. AID under the PL 480 program, Title II.

