

MSU RURAL DEVELOPMENT SERIES

WORKING PAPER

THE SMALL-SCALE MANUFACTURING ENTERPRISES
IN JAMAICA:
SOCIOECONOMIC CHARACTERISTICS AND CONSTRAINTS

By

Yacob Fisseha and Omar Davies

Working Paper No. 16

1981

Institute of Social and Economic Research
University of the West Indies
Kingston, Jamaica

Department of Agricultural Economics
Michigan State University
East Lansing, Michigan 48824

THE SMALL SCALE MANUFACTURING ENTERPRISES IN JAMAICA:
SOCIOECONOMIC CHARACTERISTICS AND CONSTRAINTS*

By

Yacob Fisseha**

and

Omar Davies***

*This paper has been published as part of Michigan State University's Off-Farm Employment Project, which is financed by the Office of Rural Development and Development Administration, Development Support Bureau, U.S. Agency for International Development (AID/ta-CA-2). Funding for the survey and analyses were provided by this project as well as by USAID/Jamaica.

**Department of Agricultural Economics, Michigan State University

***Institute of Social and Economic Research, University of the West Indies

MSU RURAL DEVELOPMENT WORKING PAPERS

Carl K. Eicher and Carl Liedholm, Co-editors

The MSU Rural Development Working Papers series is designed to report the preliminary results of comparative studies of rural development in Africa, Latin America, Asia, and the Near East. The papers will report research findings on community development and rural development in historical perspective as well as studies of contemporary rural development programs. The series will include papers on a wide range of topics such as alternative rural development strategies; off-farm employment and small-scale industry; alternative farming systems; marketing problems of small farmers; agricultural extension; interrelationships between technology, employment and income distribution; and evaluation of rural development projects.

The papers are aimed at teachers, researchers, policymakers, donor agencies and rural development practitioners. Libraries, individuals, and institutions may obtain single copies of the MSU papers free of charge and may request their names be placed on a mailing list for periodic notifications of published papers by writing to:

MSU Rural Development Working Papers
Department of Agricultural Economics
206 International Center
Michigan State University
East Lansing, Michigan 48824
U.S.A.

Foreword

This paper is one of a series of reports produced by Michigan State University's Off-Farm Employment Project. The project, which is funded by the Office of Rural Development and Development Administration, Development Support Bureau, U.S. Agency for International Development, has the basic purpose of enhancing the ability of AID missions and host country institutions to identify and implement programs and policies that generate off-farm employment and income opportunities benefiting the rural poor. One of the major components of the project is the generation of new knowledge relating to off-farm activities. In collaboration with host country institutions and AID missions, detailed field surveys of small-scale enterprises are currently being conducted in Egypt, Jamaica, Honduras, and Thailand; the results of these studies will be published in this series. A second component of the project involves the marshalling and dissemination of existing knowledge of off-farm activities. A state-of-knowledge paper and special studies relating to off-farm activities will also appear in this series. Previously completed studies in this area currently available through the Off-Farm Employment Project include:

1. Carl Liedholm, "Research on Employment in the Rural Non-Farm Sector in Africa," African Rural Employment Paper No. 5, 1973.
2. Carl Liedholm and Enyinna Chuta, "The Economics of Rural and Urban Small-Scale Industries in Sierra Leone," African Rural Employment Paper No. 14, 1974.
3. Enyinna Chuta, "The Economics of the Gara (Tye-Dye) Cloth Industry in Sierra Leone," African Rural Economy Working Paper No. 25, 1978.

4. Adewale Mabowonku, "An Economic Evaluation of Apprenticeship Training in Western Nigerian Small-Scale Industry," African Rural Employment Paper No. 17, 1979.
5. Steve Hagglade, J. Defay and Bob Pitman, "Small Manufacturing and Repair Enterprises in Haiti: Survey Results," Michigan State University Rural Development Series, Working Paper No. 4, 1979.
6. Enyinna Chuta and Carl Liedholm, "Rural Non-Farm Employment: A Review of the State-of-the-Art," Michigan State University Rural Development Paper, Paper No. 4, 1979.
7. Omar Davies, Yacob Fisseha and Claremont Kirton, "Small-Scale Enterprises in Jamaica: Initial Survey Results," Michigan State University Rural Development Series, Working Paper No. 8, 1979.
8. Enyinna Chuta, "Techniques of Production, Efficiency and Profitability in the Sierra Leone Clothing Industry," African Rural Employment Paper No. 30, 1980.
9. Middleton Wilson, "Some Problems in Operating a Loan Program for Craft and Emerging Small-Scale Non-Farm Enterprises in Jamaica," Michigan State University Rural Development Series, Working Paper No. 15, 1981.

Copies of these papers as well as additional information on the Off-Farm Employment Project can be obtained by writing:

Carl Liedholm
Off-Farm Employment Project
Department of Agricultural Economics
Michigan State University
East Lansing, Michigan 48824
U.S.A.

Acknowledgment

We are indebted to several people who generously contributed towards the completion of this paper. The following people deserve special mention. Carl Liedholm reviewed the manuscript and suggested valuable guides throughout the development of this document. Herb Kriesel and Peter Kilby also read earlier drafts of the paper and gave us very helpful suggestions. Our appreciation goes to Anne Morris and Sandra Repic who cheerfully and repeatedly contributed their typing skills, sometimes under difficult time constraints.

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION.	1
1.1. The Small Scale Manufacturing Enterprise Sector.	2
1.2. Objectives of the Project.	3
1.3. Sampling Procedure	4
1.4. Analytical Presentation.	5
1.5. Bird's Eye View of Typical Enterprise Types.	6
1.5.1. Wearing Apparel	6
1.5.2. Woodwork.	7
1.5.3. Metal Works	9
1.5.4. Auto Repairs.	9
1.5.5. Craft Work.	10
II. DESCRIPTIVE PROFILE OF THE PROPRIETOR AND THE ENTERPRISE.	12
2.1. The Proprietor	12
2.1.1. Age and Sex Distributions	14
2.1.2. Marital Status.	15
2.1.3. Number of Children and Dependents	16
2.2. The Small Scale Manufacturing Enterprise	16
2.2.1. Mode of Business Acquisition.	16
2.2.2. Form of Current Ownership	18
2.2.3. Age of the Enterprise	18
2.2.4. Size Distribution of the Enterprises.	23
2.2.5. Size, Sex, and Skill Distribution of the Work Force.	23
2.2.6. Age Distribution of the Work Force.	25
III. CONSTRAINTS FACING THE SMALL SCALE ENTREPRENEUR	27
3.1. Ranking of Major Constraints	29
3.1.1. Most Important Problem.	29
3.1.2. Three Most Important Problems	30
3.2. Demand-Related Problems.	31
3.2.1. Level of Demand	35
3.2.2. Market Outlets and Policies	37
3.2.3. Sources of Competition.	42
IV. PROBLEMS RELATED TO CAPITAL CONSTRAINTS	45
4.1. Initial Capital.	45
4.1.1. Size of Initial Capital	45

TABLE OF CONTENTS (continued)

	<u>Page</u>
4.1.2. Composition of Initial Capital.	49
4.1.3. Sources of Initial Capital.	51
4.2. Demand for External Credit	54
4.2.1. Sources of Credit	54
4.2.2. Reasons for Not Applying for Credit	62
4.3. Problems in the Credit Market.	64
4.3.1. Collateral or Security Problem.	66
4.3.2. Size Limitation	67
4.3.3. Transaction Costs and Other Problems.	67
 V. PROBLEMS OF RAW MATERIALS AND PRODUCTION TECHNIQUES	 69
5.1. Raw Material Constraints	69
5.2. Production Techniques and Problems	71
5.2.1. Production Line	71
5.2.2. Mechanization	72
5.2.3. Sources of Power.	72
 VI. MANAGERIAL CHARACTERISTICS AND PRACTICES.	 76
6.1. Educational Level.	76
6.2. Participation in Seminars and Vocational Training.	78
6.3. Information Needs and Sources.	81
6.3.1. Information Needs	83
6.3.2. Information Sources	85
6.4. Record Keeping and Business Analysis	90
6.5. Personnel Management	94
 VII. SUMMARY AND RECOMMENDATIONS	 98
7.1. General Policy Approaches to Problem Areas	99
7.2. Short-Term Recommendations	100
7.2.1. Issues Related to Management.	102
7.2.2. Financial Constraints	103
7.3. Long-Term Implications	113

LIST OF TABLES

	<u>Page</u>
Table 1. Descriptive Characteristics of Small Scale Proprietors in Jamaica (Percentage of Proprietors).	13
Table 2. Mode of Small Scale Business Acquisition in Jamaica by Location (Percentage).	17
Table 3. Form of Small Scale Business Ownership by Location (Percentage).	19
Table 4. Small Scale Business Under Ownership of Present Proprietor (Percentage of Enterprises).	20
Table 5. Average Number of Years Under Present Ownership for Major Enterprise Types.	22
Table 6. Size of Enterprise Work Force by Location (Percentage of Enterprises)	24
Table 7. Average Number of Workers and Average Worker Age in All Enterprises	26
Table 8. Proprietors' Perception of Principal Problems Facing Jamaican Small Scale Enterprises (Percentages of Proprietors).	28
Table 9. Percentage Distribution for Production Levels and for Enterprise and Machinery Capacities	32
Table 10. Classification of Proprietors by Direction of Last Year's Production Volume Change and Source of Chief Competition	33
Table 11. Percentage Shares of Sales Among Market Outlets	39
Table 12. Main Transaction Types by Location (Percentage of Proprietors).	41
Table 13. Main Source of Competition by Location (Percentage of Proprietors).	43
Table 14. Average Initial Investment (Jamaican \$) Among Enterprise Groups	46
Table 15. Average Investment By Enterprise Type for Each Location (Jamaican \$).	48
Table 16. Breakdown of Initial Investment Levels: Average Share in Percentage for Different Uses.	50

LIST OF TABLES (continued)

	<u>Page</u>
Table 17. Source of Initial Funding By Location	53
Table 18. Credit Applications and Their Success Rates	56
Table 19. Distribution of Application Rates by Ownership Types Among Locations	59
Table 20. Reasons for Not Applying for Credit (Percentages of Proprietors).	63
Table 21. Proprietors Experiencing Various Credit Problems in Each Locality (Percentage of Proprietors)	65
Table 22. Percentage of Proprietors (by Enterprise Type) Who Consider Raw Materials Among the Top Three Problems . .	70
Table 23. Percentage of Enterprises Using Various Power Sources in Each Location.	73
Table 24. Classification of Proprietors by Highest Level of Education Attended (Percentage)	77
Table 25. Classification of Proprietors by Participation in Vocational Training and Seminars (Percentage)	79
Table 26. Classification of Proprietors by Expressed Information Needs (Percentage).	82
Table 27. Classification of Proprietors' Sources of Information Received (Percentage)	86
Table 28. Classification of Proprietors by Type of Information Needed and Where Information Received -- for Kingston and the E.D.'s (Percentage)	88
Table 29. Classification of Proprietors by Record Keeping Practice (Percentage)	91
Table 30. Classification of Proprietors by Productivity Enhancement Practices Used (Percentage)	95

I. INTRODUCTION

In August, 1978, an extensive survey was started in Jamaica on small-scale, non-farm enterprises (SSE). A SSE is defined as an enterprise employing 25 or fewer people.¹ The project was sponsored by the Small Enterprise Development Corporation (S.E.D.C.O.) and conducted by the Institute of Social and Economic Research (I.S.E.R.) of the University of the West Indies in collaboration with Michigan State University.

Basically, the project consisted of a series of one-shot surveys and a one-year longitudinal study on flow data for SSE inputs, outputs and credit services. The study is divided into three phases: Phase I was a one-shot survey of identification and enumeration as well as a skeletal description of the employment, mechanization and workshop structure in the SSE sector. The report of Phase I has already been published (see Davies et al., 1979). Phase II is concerned with obtaining information about the proprietor and the business environment, while Phase III is aimed at detailed analyses of production, marketing and credit situations in this sector.

This report deals with Phase II of the project. We begin with a descriptive profile of the proprietor (owner/manager) and the enterprise within the ambits of the main business constraints as perceived by the proprietors. These constraints include lack of adequate product demand, problems of finance, and shortages of raw materials and utilities, as well as possible weaknesses in production techniques and managerial capability. The report concludes with a summary and recommendations.

¹For a detailed description of the definition, see Davies et al. (1979, p. 1); henceforth, SSE refers to manufacturing enterprises only.

1.1. The Small Scale Manufacturing Enterprise Sector

With a population of about 2.2 million and an area of 4400 square miles, Jamaica has 40,000 small scale non-farm enterprises employing 80,000 people. About 35% of these enterprises are manufacturing establishments as per Department of Statistics industrial classification, which is based on the International Standard of Industrial Classification (ISIC), and they account for 37% of the employment in this sector.

The number of small scale manufacturing enterprises and the number of people they provide with full- or part-time employment have been increasing over the last few years, both in absolute and relative terms. Publications of the Department of Statistics² show that between 1976 and 1977 the number of people employed in small scale manufacturing enterprises³ rose by about 12% while that for the large scale manufacturing enterprises fell by about 7%. This resulted in the small scale employment share rising from 36% to 40% in the manufacturing sector. There is reason to believe that this trend has continued.

The cause for such a trend cannot be definitely identified at this stage, but there are several possibilities. First, the large scale establishments are relatively more dependent on imported raw materials than the smaller establishments and hence more affected by the severe foreign exchange restrictions which prevailed in Jamaica recently. Second, the larger establishments may be less efficient when forced to reduce production levels than the smaller ones and thus may find it more difficult

²See Department of Statistics, Employment, Earnings, and Hours in Large Establishments, 1977, p. 15.

³ , The Labour Force, 1977, p. 50. Their definition for a small scale enterprise is one that employs 10 people or less. This grouping accounts for a large majority of the enterprises in our definition, which is 25 people or less.

to survive under difficult economic conditions. Finally, the relative increase in small scale employment may reflect new enterprises being established by those who have lost their jobs in either the private or public sector. (Haggblade, Defay and Pitman (1979) also found in Haiti that the small scale non-farm sector has been growing over the last few years.)

The relative rise in the importance of the small scale non-farm sector may not be a transient phenomenon that occurs during times of economic difficulties. Studies from other countries have indicated similar growth in the SSE sector in growing economies as well. Chuta and Liedholm (1979) cite evidence to support this phenomenon.

When such growth in (self) employment occurs in a country experiencing declining or stagnant economic conditions, the domestic market share for those businesses already in the market must shrink, thus creating demand problems, as will be seen later. Whether such developments in turn lead to higher enterprise dropouts cannot be ascertained at this stage. However, besides the fact that the sector is growing as indicated above, there is evidence to show that in times of poor economic environment, proprietors would rather absorb a significant part of the fixed costs rather than close down business (see Fisseha, 1981).

1.2. Objectives of the Project

The overall objective of the project is to provide benchmark information on the extent, composition, contributions and socioeconomic characteristics of the small scale non-farm enterprises sector in Jamaica. The Survey Project is divided into three phases: (a) Phase I deals with the information already discussed on page 1; (b) Phase II deals with past as well as current socioeconomic factors related to the proprietor and the

business itself; and (c) Phase III provides comprehensive information about production, marketing and credit in the sector. In particular, Phase III provides data on the two factors of production, labor and capital, and the information base for the comparative economic analysis of businesses.

Both the Phase I and Phase II data are one-shot surveys whereas the Phase III data were generated over a year of repeated and systematic visits to individual enterprises.

1.3. Sampling Procedure

For all the survey phases, the country was classified into four population strata which we call "locations." The locations are (1) Kingston, (2) the Major Towns, (3) The Rural or Smaller Towns and (4) Rural Localities or Enumeration Districts (E.D.'s). The locations or strata are defined as follows:

- a) Greater than 100,000 population (Kingston only);
- b) 20,000 - 100,000 (the Major Towns--Montego Bay, Spanish Town and May Pen);
- c) 2,000 - 20,000 (about 60 Smaller or Rural Towns);
- d) below 2,000 (about 2,250 Rural Localities or Enumeration Districts).

For more explanation on the strata and sampling procedure, see pp. 9 - 11 of the Phase I report by Davies et al. (1979).

To account for possible refusals, closures, wrong addresses, failures to make contact, business site changes and even migration and death, a bigger sample than estimated was randomly drawn for Phase II from the listing obtained in Phase I. A weighting procedure among the locations and among enterprise types was used to pick this sample. However, the effective random sample size of 710 enterprises for which data were collected resulted in a disproportionate sampling outcome. Data collection took about one and one-half ($1\frac{1}{2}$) months.

The data were collected during January and the first half of February 1979, before we began the collection of flow data in Phase III. It should be noted that in similar studies (e.g., Liedholm and Chuta in Sierra Leone) such data collection was carried out near the end of the flow-type survey. The advantage of our approach is that one gets the data much earlier for further use and there is less pressure during training and field work than when the flow-type data collection is under way. The disadvantage is that one may fail to see important relationships at this early stage and if a quick supplementary survey (corresponding to our Special Studies) is not carried out later, deficiencies in the flow-type data collection may not be corrected.

1.4. Analytical Presentation

The general pattern of analysis here closely follows that of the Phase I report (see Davies et al.[1979]). Data for the individual enterprise type (e.g., tailoring or blacksmithing) and the corresponding enterprise group type⁴ (e.g., wearing apparel or general metal work) are first discussed for the country as a whole and then differences or similarities are noted at the locality or stratum levels.

The report focuses on the problems and constraints faced by the proprietors. In all cases, these problems are what the proprietors perceive

⁴In the Phase I report, all SSE enterprises are grouped into nine major categories, seven of which (a-g) describe those in the manufacturing sector:

- | | |
|---------------------------------------|--|
| a) Food production and processing | f) Mechanical repair work, e.g., auto- |
| b) Wearing apparel, including shoes | motive and other machinery |
| and leather work | g) Other manufacturing, e.g., rubber, |
| c) Craft and related products | paper, plastic, brick, miscellaneous |
| d) Woodwork, including sawmilling | chemicals, printing, etc. |
| and upholstery | h) Distribution, e.g., groceries, retail |
| e) Metal work, including blacksmiths, | stores, wholesale, etc. |
| goldsmiths, and tinsmiths | i) Other non-manufacturing services, e.g., |
| | bars, restaurants, dry cleaning, etc. |

them to be except in the section dealing with management issues. Management weaknesses may not be perceived by a proprietor or, if perceived, may not be willingly accepted as such. Nevertheless, it is very important to carefully choose proxy variables that help to identify comparative differences in management performance. Therefore, even though management problems were not explicitly mentioned by the proprietors, we have discussed certain topics considered useful in explaining differences in management practices and capabilities. When the data for the flow-type information are analyzed, topics discussed in Phase II will be related to variables such as the income levels, labor and capital utilizations and general business practices.

1.5. Bird's Eye View of Typical Enterprise Types

This section presents a selective description of a "typical" firm within each of the major enterprise groups or subsectors. We include it here with the hope that as a result some of the statistical parameters of the SSE discussed in this report will be more meaningful. Each enterprise type was chosen because of its relative numerical importance within an enterprise group.

1.5.1. Wearing Apparel

In the wearing apparel group, tailoring/dressmaking and shoemaking are the most important enterprises. Commonly, a proprietor in one of these enterprises will set up his or her work table inside a room or under the porch of his house. The work table or bench may be taken out in the morning and retrieved at night. There may be a stool or two on which the customers sit and chat. Sometimes, two tailors or shoemakers may jointly rent a room.

Usually, there is a helper (an apprentice) who is learning the trade and doing odd jobs such as ironing finished clothes or shining finished pairs

of shoes. When the proprietor is absent the apprentice has the opportunity to deal with customers in matters concerning prices, sizes and styles.

Tailors and dressmakers usually keep small amounts of raw materials on hand -- mostly cloth linings, spools of thread, buttons, zippers and rubbery fabric bands. Occasionally they may have some cloth or fabric stored on open shelves. Shoemakers usually buy enough leather to last one week. The permanently stocked materials consist of threads, glue, nails and rubber soles. A tailor/dressmaker always has a sewing machine while a shoemaker may not, in which case he would either buy ready-made (already sewn) coverings for the tops of the shoes or else he would have them sewn by someone who has the appropriate machine.

The typical, very small tailoring and shoemaking enterprises described above are different from their larger counterparts at the opposite end of the small scale enterprise category. The larger businesses have two or three rooms, about three to five machines, and a larger stock of cloth, threads, and other materials. They often specialize in the production of one type or style of a product such as school uniforms, children's clothes, or formal suits in tailoring enterprises, and ladies' or children's shoes in the shoemaking enterprises. Sometimes shoemakers will subcontract to produce specific styles under a well-known trademark name (such as Van Del or Bata). The bigger businesses frequently employ about six to ten people and a few apprentices, who are sometimes family members.

1.5.2. Woodwork

A woodworker usually has a bigger and more spacious workshop than workers in other SSEs. He also has had at least 5 years of experience elsewhere, for the quality of work or craftsmanship is of great importance in woodworking. A woodworker may be well-known for the beds, cabinets,

tables and chairs, or doors and windows he constructs and his business depends greatly on his reputation in these specific areas.

Because of raw material shortages and the lengthy process required to obtain them, the availability of sufficient stocks of raw materials is very essential in woodworking. As a result, the amount of working capital required per purchase tends to be large.

Practically every carpenter has one or two machines -- usually an electric saw and planer. Many have bigger or more machines than they currently need, mainly to offset future inflation and possible shortages.

The main problem, as of the first quarter of 1980, seemed to be lack of raw materials, particularly lumber; but for carpenters in the housing construction industry, lack of demand was also a big problem. Among the small carpenters, whose market was entirely domestic, nearly everyone was converting to using locally produced pine and cedar lumber. A major complaint, however, is that the trees are cut young and the lumber is not well seasoned.

Unlike the typical, very small woodworking establishments described above, relatively larger woodwork shops in the SSE employ from 10 to 20 workers. There is usually a management office where relatively complete records are kept and production work is planned. The market may not be entirely domestic; many of these enterprises have had experience in exporting wooden items to other Caribbean countries and the United States. These bigger enterprises have better access to raw materials than their smaller counterparts, because they have more working capital, better access to financial institutions, differential access to imported raw materials and because their size makes it economical to import mahogany lumber.

1.5.3. Metal Works

Enterprises in this category are either very small or relatively big. Blacksmith, locksmith, tinsmith, and goldsmith enterprises are usually one person operations with very few machines. Any such enterprise may have a charcoal furnace, gas stove, a bellows, fan, anvil, hammar or soldering rod, depending on its area of production.

In blacksmith works, raw materials are not a problem because scrap metal is widely used. But the demand for blacksmithing services is so low in many places that the art seems to be dying out. This is not so strange, for blacksmiths have historically been closely associated with horse carriages and two-wheeled carts, vehicles which have nearly disappeared from Jamaica.

On the other hand, the bigger metal work enterprises in the SSE category have more machines and use imported metal rods and sheets. Almost all have an electric welder, a cutter, a bender and perhaps an acetylene welder and a sander. There is a shortage of inexpensive electric welders, as those in current use are quite old. [Raw material shortages do not seem to be as serious here as in other kinds of enterprises such as woodworking and shoemaking.] Major products of larger metal works are grilled doors, gates, windows and fences as well as metal containers; the demand for the former has increased as the level of crime has risen.

1.5.4. Auto Repairs

In recent years restrictions have been placed on the importation of new motor cars into Jamaica as a result of the foreign exchange shortage. Cars which are available are very expensive. Hence there has been a corresponding increase in the percentage of older cars on the road and also a growth in the number of auto repair establishments. The shortage

of foreign exchange has affected their operations because spare parts are difficult to purchase. This situation has led to the development of domestic substitutes.

Auto repair is different from the other enterprises in that a skilled mechanic can rent shop and equipment and run a garage without making an initial large investment in fixed assets. Mechanics need supply only a modest working capital, for customers have to pay a great part of the repair bill in advance. The demand for some specialized machines is so high, however, that credit to finance such machines is eagerly sought. As expected, the number of apprentices per enterprise is higher here than in other businesses.

1.5.5. Craft Work

The two largest craft enterprises are straw work and woodcarving. Most people who do straw work and some who do woodcarving have farming as their main occupation.

Straw work is done mostly by women and woodcarving by men. The collection and processing (curing) of the straw stalks is done by the women themselves; in a few cases they dye their own straw. Usually the various stages of work are done by different people. The ownership changes also at these different stages. For example, the woman at the farm level will knit or weave plain strips about 3 or 5 inches wide and sell them to another woman who puts these strips together into a bag or a mat. This woman, in turn, takes the bags or mats to a retailer who adds plastic or fabric linings to them and decorates them with different colors. Sometimes this last stage is carried out not by a retailer but by somebody who does the decoration at home and sells the product to a retailer. The making of a hat, on the other hand, is usually completed at the farm level. Although

the ultimate consumer is usually the tourist, information concerning product demand flows back adequately through the same channel that the craft woman uses to sell the straw strips.

Woodcarving is a craft most often engaged in by professional woodcarvers, so the role of the person from the farm is sometimes limited to the preliminary stages of carving and supplying the raw wood.

In both of these enterprises, particularly straw work, family members or neighbors begin to learn the art in their childhood. In some cases, persons will improve their skill so much that they advance to weaving hats and decorative items from sisal fibers -- products which require a higher level of skill.

II. DESCRIPTIVE PROFILE OF THE PROPRIETOR AND THE ENTERPRISE

In an attempt to expand both employment and production and to reduce the demand for severely limited foreign exchange funds, past and present government administrations in Jamaica have been readily inclined to provide effective assistance and policy measures to the small business sector (see Government of Jamaica National Planning Agency, 1978 and Jamaica Labour Party, 1980). This section attempts to highlight the main characteristics of the sector by giving a general description of the people employed and a profile of the sector enterprises.

A descriptive profile of proprietors and enterprises helps to partially explain some of the problems encountered in the sector and will aid in formulating the appropriate policy measures. It will also give rough indications of the number of people who are supported by the sector.

2.1. The Proprietor

Who is the average small business proprietor in Jamaica? Table 1 shows that on the national level, this person is a man or a woman who is about 40 years old, has 4 children and supports about 5 people. Most proprietors are Jamaican nationals. In Kingston, as well as in Major and Rural Towns, a proprietor will almost certainly be male, while in the E.D.'s female proprietors outnumber men by two to one.

A further examination of the age category shows that older proprietors (over 40 years of age) are found in enterprises traditionally known as "cottage" industries, e.g., shoemaking, straw work, tailoring or dressmaking,

Table 1

Descriptive Characteristics of Small Scale Proprietors in Jamaica
(Percentage of Proprietors)

Descriptive Characteristics	Kingston	Major Towns	Rural Towns	E.D.'s*	Jamaica
Nationality: Jamaican	99.4	99.0	99.4	100.0	99.8
Age					
30 years or less	20.6	21.8	21.6	20.0	20.3
31-40 years	39.4	31.3	26.9	21.5	24.9
over 40 years	40.0	46.9	51.5	58.5	54.8
Gender					
male	85.7	93.0	93.3	35.3	50.7
female	14.3	7.0	6.7	64.7	49.3
Martial status					
"legal" marriage	40.0	57.2	62.1	41.2	43.9
common law relationship	20.0	21.4	17.3	----	5.4
widowed	----	----	----	17.6	12.6
single	40.0	21.4	20.7	41.2	38.1
Average age	36.0	41.6	44.4	40.2	40.1
Average number of children	2.7	4.5	4.4	4.1	4.0
Average number of dependents	4.6	5.2	4.3	5.1	4.9

Source: Nationality and age categories are from Phase II data (1979); the rest is from Fisseha (1981).

*Enumeration Districts, see page 4.

bamboo carving, and tin, gold, or blacksmithing. The younger proprietors are found in enterprises which are relatively new to the sector and require more skills, such as auto repair, upholstery, metal works (excluding blacksmithing), cabinet making and woodcarving. However, a direct relationship appears to exist between the amount of initial investment required and the age of the proprietor, which probably indicates that before one can invest in the more expensive ventures, it is necessary to be employed elsewhere (either for someone else or self-employed in another business) in order to accumulate both the required capital and the necessary expertise. Examples of enterprises with large initial investments are block, brick, or tile production, the baking industry, sawmilling, printing, fruit and vegetable canning or the production of paper, pulp, rubber, glass or chemicals.

2.1.1. Age and Sex Distributions

The average age of the proprietors in the different locations is about 40 years. Since the average age of a SSE in Jamaica is about 13 years, it can be said that many of the proprietors started their business in their late twenties.⁵ This is especially true in the two main locations, the rural localities (E.D.'s) and Kingston, where the average ages of the small scale enterprise are about 15 and 8 years respectively. About 55% of the proprietors are over 40 years of age and another 20% are 30 years of age or younger (including 2% who are 20 years of age or younger).

While the starting age is about the same in all locations there is an increasingly higher percentage of older proprietors in the more rural areas. And a markedly lower percentage of younger enterprises (say,

⁵See Table 4 on age of the enterprise and Table 2 for the percentage of enterprises that were started from scratch by the proprietors.

less than 1, 5, or 10 years old) exists in the more rural areas. These two observations may indicate that the rate of new businesses being established in the urban areas is higher than in the rural ones. There are indications that the incidence of relatively younger enterprises in the urban areas is not due to high rates of business failures or dropouts.

At the national level, equal number of men and women are owner/operators (proprietors) of small scale enterprises, but this is caused by an overwhelmingly high ratio of women to men in the rural enterprises. It is interesting to note that the cottage industry-type of production may be one avenue by which some women are increasingly freeing themselves from the confines of the traditional household chores. The high incidence of female proprietorship is due to the fact that craft work and dressmaking account for almost one-quarter and one-fifth respectively of the manufacturing enterprises in Jamaica. Also, more than 90% of the craft enterprise and 50% of the dress-making businesses are found in the rural areas (E.D.'s) (see Davies *et al.*, 1979, pages 16, 17, 24 and Appendix V). All the dressmaking and most of the straw work are done by women.

2.1.2. Marital Status

The weighted percentage of all the proprietors whose current marital status is single comes to about 38%.⁶ The percentages for the Major Towns and the Rural Towns are substantially lower than those for Kingston or the E.D.'s; this difference may result in part because, compared with Kingston and the E.D.'s, the two other urban or semi-urban areas have a higher percentage of proprietors with higher levels of education (secondary schooling and above), which is usually associated in Jamaica with a higher

⁶This category could possibly include persons previously living in common law relationships.

percentage of married individuals. The remaining balance in the marital status category is accounted for by "legal" marriages and common law companionship (nationally about 44% and 5% respectively) and in the case of the E.D.'s by people with deceased mates.

2.1.3. Number of Children and Dependents

The average number of children per proprietor for all locations is four. But the figure for Kingston is lower (2.7), which is consistent with the figures indicating that the average age in Kingston is relatively low and that the category "single" in marital status is relatively higher here (see Table 1).

The national figure for the average number of dependents per proprietor is about five. These are family members who depend on the proprietor for more than half of their support for more than 6 months of the year. Not much difference exists among locations in this category.

2.2. The Small Scale Manufacturing Enterprise

This section deals with the entrepreneurial capacity and level of cooperative work among proprietors as well as the potential for future business growth. It must be noted that, in many instances, it is not easy to keep the attributes of the proprietor and his business separate and distinct.

2.2.1. Mode of Business Acquisition

Nationally, the overwhelming majority of entrepreneurs started their business individually from scratch (see Table 2). The only other important mode of business acquisition is inheritance, which accounts for about one-tenth of all businesses. The pattern is the same at the disaggregated locations, with those who started individually from scratch or from an

Table 2
Mode of Small Scale Business Acquisition in Jamaica by Location
(Percentage)

Mode of Business Acquisition	Location				
	Kingston	Major Towns	Rural Towns	E.D. 's	Jamaica
Started by individual from scratch	80.0	92.9	78.5	87.5	86.0
Inherited	13.3	7.1	13.6	12.5	11.5
Started in a partnership*	----	----	4.3	----	1.3
Other	6.7	----	3.6	----	1.2
TOTALS	100.0	100.0	100.0	100.0	100.0

Source: Fisseha, 1981

*This is genuine partnership and not just work in the same workshop, with the proprietors sharing the rent.

inherited business accounting for over four-fifths of businesses in the four locational strata. The only other form of acquisition of any significance in any of the locations is that of partnerships, which account for about four percent of the businesses in the Rural Towns. Nationally, however, this mode of acquisition has little significance.

2.2.2. Form of Current Ownership

As can be seen from Table 3, the dominant ownership pattern in the small scale manufacturing sector is the sole proprietorship, which accounts for 94% of all businesses in the sector. Partnerships, cooperatives and limited liability companies combine to account for less than 6% of the total number of enterprises.

The disaggregated data do not indicate much divergence from the national pattern, although a clear relationship exists between level of urbanization and extent of sole proprietorship, which increases from 84% in Kingston and the Major Towns to 89% in the Rural Towns to 98% in the Rural E.D.'s. Partnerships are of some importance in Kingston and in the Major and Rural Towns, representing 11%, 13% and 8% of the total number of businesses respectively. But this form of ownership is unimportant in the Rural E.D.'s.

2.2.3. Age of the Enterprise⁷

Nationally the small manufacturers have been in business for some time nearly two-thirds have owned their present businesses for over five years (see Table 4). In fact, over 44% of these businesses are owned by persons who have been operating them for over 10 years. Yet the disaggregated data show that the dominance of older businesses nationally results

⁷Actually, the number of years under the present owner is almost the same as age of enterprise since an overwhelming majority of the enterprises were started from scratch by the present owner.

Table 3
Form of Small Scale Business Ownership by Location
(Percentage)

Ownership Type	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Sole Proprietorship	83.9	83.7	89.2	97.7	94.3
Cooperatives	0.6	1.0	1.2	0.8	0.8
Partnerships	11.1	13.3	7.8	1.5	4.0
Limited Liability Companies (Ltd.)	4.4	2.0	0.6	----	0.7
Other types	----	----	1.2	----	0.1

Source: Phase II Survey Data, 1979

Table 4
Small Scale Business Under Ownership of Present Proprietor
(Percentage of Enterprises)

Years Owned by Present Proprietor	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
1	13.3	15.3	12.6	8.3	9.7
2	12.8	15.3	15.0	7.2	9.1
3 - 5	31.1	26.5	20.4	15.1	18.3
6 - 10	18.3	21.4	25.0	17.7	18.7
11 - 20	15.6	17.3	15.0	30.9	26.7
over 20	8.9	4.2	12.0	20.8	17.5

Source: Phase II Survey data (1979)

mainly from the situation in the Rural E.D.'s. For both Kingston and the Major Towns, well over a half of the enterprises have been operated by the present owner for only five years or less, while for the Rural Towns just under a half have been under the present ownership the same length of time. In contrast, the businesses in the Rural E.D.'s tend to be much older, with only 30% under present ownership of five years or less. Over one-half of those surveyed in the Rural E.D.'s have been over ten years in the present ownership, compared with less than 25% in both Kingston and the Major Towns and 27% for those in the Rural Towns.

The pattern emerges such that in Kingston, the Major Towns and the Rural Towns a significant percentage of the entrepreneurs are relatively new to their business (five years or less) while in the Rural E.D.'s the majority (nearly 70%) have been in the business for over five years (see Table 4).

The average age or number of years of ownership for all enterprises is about 13. The youngest enterprise groups are foods, followed by auto repair, woodwork, and metal work, each with an average age of less than 7 years. The oldest ones are craft work (17 years), followed by wearing apparel (12 years) and other manufacturing (11 years).

As a whole, tailoring, dressmaking, shoemaking, and straw work are the more stable types of enterprises (see Table 5). The rest have been late starters, except for auto repairs, whose lower average indicates a frequent change of hands rather than the age of a new enterprise.

The financial barriers to entry may not be as great in auto repairs as in the other types of bigger enterprises since renting of auto repair plants is the most common way for many people to enter this business (see Fisseha, 1981). The rate of business closure for the corresponding periods would be necessary, of course, to see the sectoral growth or decline.

Table 5

Average Number of Years Under Present Ownership for Major Enterprise Types

Enterprise Types*	Location			
	Kingston	Major Towns	Rural Towns	E.D.'s
Tailors	10.2	7.8	7.3	11.5
Dressmakers	7.0	3.9	10.1	14.0
Shoemakers	8.0	15.1	15.5	16.4
Woodwork	9.0	9.6	7.2	4.6
Metal Work	7.9	6.6	7.6	2.0
Auto Repairs	6.7	3.0	5.7	5.6
Straw Work	7.5	6.0	10.0	18.6
Upholstery	6.8	4.0	6.7	14.0
Wood Carving	6.2	6.8	13.5	5.7
				10.7
				13.0
				14.9
				6.3
				4.6
				5.6
				18.5
				8.7
				6.4

Source: Phase II Survey Data, 1979

*These enterprises were chosen because they constitute more than 80% of both the sample size in Phase II and the small scale manufacturing sector in Jamaica; for more details, see Appendix I of Davies et al., 1979.

2.2.4. Size Distribution of the Enterprises

Nationally, about two-thirds of the enterprises employed only the proprietor (see Table 6). In fact, fully 93% of the enterprises employed five or fewer workers; this figure is consistent with the findings for Phase I of the survey, where the corresponding number was 94%.

When the data are disaggregated by locations, it is seen that important variations exist. In Kingston and the Major Towns, for example, approximately one-fourth of the enterprises employed over five persons. The corresponding figures are 13% for the Rural Towns and 1% for the E.D.'s. Accordingly, the dominance of the firm with only one person employed is inversely related to the level of urbanization; the percentage decreases from 82% in the E.D.'s to 23% in Kingston.

2.2.5. Size, Sex, and Skill Distribution of the Work Force

The average size and age distribution of the work force (including the proprietor) per enterprise are shown in Table 7. Compared with Phase I results, the average size given here is about the same as for the rest of the locations, but it is higher for the Major Towns (4.2 versus 3.0). Yet not only is the national average the same as for Phase I, but the relative size position of all the locations is the same.

Except in the E.D.'s, the gender distribution of the work force is heavily biased in favor of males. The percentage of females in the work force ranges from as low as 14% in Kingston to as high as 47% in the E.D.'s -- due to the fact that nearly two-thirds of the proprietors in the E.D.'s are females. Nationally, however, females account for only one-third of the work force.

Table 6
Size of Enterprise Work Force by Location
(Percentage of Enterprises)

Size of Work Force	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
1	23.3	26.5	46.7	81.9	68.0
2	19.4	18.4	19.8	9.4	12.1
3	15.0	12.2	6.6	3.4	5.7
4	12.0	12.2	9.6	2.3	4.8
5	6.2	5.2	4.1	1.8	2.7
6 - 10	17.2	18.4	9.6	.8	4.7
11 - 20	5.7	7.1	2.4	.4	1.7
over 20	1.2	-----	1.2	-----	.3
TOTAL	100.0	100.0	100.0	100.0	100.0

Source: Phase II, Survey data 1979

Among the important enterprises, woodwork, metal work and auto repair provide the major share of employment opportunities for unskilled⁸ males. Employment opportunities for unskilled females are very low except in wearing apparel and crafts. Enterprises dependent on factory-type production provide about equal employment opportunities for both men and women.

2.2.6. Age Distribution of the Work Force

The average age for the entire work force is about 35 years (see Table 7); if the average age of proprietors (40 years, as indicated in Table 1) is excluded, the average age for the work force is 31.3 years.⁹ Again, reflecting the stability of enterprises in the rural areas, the average age for the work force rises as one moves to the more rural areas. The situation holds also for skilled males and females. For the unskilled group, the average age declines, both for males and females, as one moves to the rural areas. Indeed, with the unskilled male labor force in the E.D.'s averaging approximately 16 years, very young workers appear in some enterprises. On the whole, not much difference exists between the average ages of skilled males and skilled females either at the national or disaggregated locational levels.

Fisseha (1981) estimated that the number of years worked in an enterprise by each non-proprietor skilled worker is about 3 years; hence most of the workers probably worked elsewhere previous to working in their present job.

⁸The classification into "skilled" or "unskilled" was done using the proprietor's own knowledge and judgment as to whether a worker has some training in a given subject or had a special talent in a given field relevant to the business. All proprietors were considered skilled.

⁹This figure was extrapolated using Tables 1 and 4 from Davies et al. (1979) as well as Tables 1 and 7 in this report.

Table 7
Average Number of Workers and Average Worker Age in All Enterprises

Average Per Enterprise	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
<u>Number of Workers</u>					
Males	3.8	3.4	2.8	0.8	1.5
Females	0.6	0.7	0.4	0.7	0.7
Total	4.4	4.2	3.1	1.5	2.2
<u>Age of Workers</u>					
Males	28.4	30.2	32.0	28.5	28.9
Skilled	31.8	32.1	35.7	38.8	37.2
Unskilled	20.3	22.6	21.8	16.5	17.8
Females	26.2	32.2	27.7	24.8	25.7
Skilled	27.3	34.6	37.4	38.6	36.8
Unskilled	24.3	27.2	23.6	22.7	23.5
Total	28.5	32.1	31.8	37.2	35.3

Source: Phase II Survey Data, 1979

III. CONSTRAINTS FACING THE SMALL SCALE ENTREPRENEUR

In order to place the small scale sector in its proper context within the economy and in order to develop policy actions aimed at increasing the sector's contribution to the economy, it is important to understand the nature of the problems faced by the proprietors.

A number of questions were asked in order to identify and understand possible bottlenecks in finance, production, marketing and other areas related to the business. Proprietors were also asked to indicate the most crucial (perceived) problems they faced and rank the top three. The results of these inquiries have been integrated and summarized into nine major problem areas shown in Table 8, and they highlight the difficulties proprietors face. Because of the open-ended nature of the questions asked, the responses are much more specific than implied here. However, detailed analysis of these problems, adding our own knowledge and understanding of the issues involved, is limited only to those which were viewed as crucial by a substantial number of the proprietors. These problems mainly related to demand, finance, raw materials and production technique.

Certain constraints which are very important in conducting a business may not be perceived as problems by the proprietor or, even if perceived, may not be disclosed in an interview (Chuta and Liedholm, 1979). Problems related to management shortcomings, for example, often fall in this category. Therefore, in an attempt to relate some commonly accepted management characteristics and practices to the proprietors in the survey, a section on this topic has been added at the end of this chapter.

Table 8
 Proprietors' Perception of Principal Problems Facing Jamaican Small
 Scale Enterprises (Percentages of Proprietors)

Critical Problem Areas	Location									
	Kingston		Major Towns		Rural Towns		E.D.'s		Jamaica	
	Among Top 3	Most Important	Among Top 3	Most Important	Among Top 3	Most Important	Among Top 3	Most Important	Among Top 3	Most Important
Demand	80.6	14.5	41.4	20.0	47.9	18.6	77.6	46.0	66.7	38.0
Finance	76.7	53.6	76.8	38.9	77.2	46.1	67.7	31.0	70.2	35.8
Raw Materials	26.7	7.8	34.7	16.8	31.7	13.2	19.4	6.1	22.3	7.6
Import License	8.9	2.8	4.2	1.1	8.4	5.4	1.5	0.8	3.2	1.5
Spare Parts/Machinery	39.4	12.3	33.7	14.7	32.3	5.4	7.6	1.9	15.4	4.3
Utilities	6.7	0.6	4.2	----	9.0	3.5	3.4	1.3	4.4	1.2
Fuel	8.3	----	12.6	1.1	9.0	0.6	4.2	0.6	5.7	0.6
Transportation	3.9	1.1	5.3	1.1	10.8	1.8	41.1	2.3	31.5	2.0
Other	31.1	7.3	23.2	6.3	24.0	5.4	27.4	10.0	27.3	9.0
TOTAL	*	100.0	*	100.0	*	100.0	*	100.0	*	100.0

Source: Phase II Survey Data, 1979

*Since proprietors could respond to more than one problem area, the totals for percentage of proprietors in these columns add up to more than 100% of the proprietors.

3.1. Ranking of Major Constraints

The major problems as perceived by the entrepreneurs, ranked for the first as well as for the top three positions of importance, are shown in Table 8. The entry "other" refers to problems such as lack of adequate working space, lack of technical advice, labor problems, etc.

3.1.1. Most Important Problem

Inadequate demand for their product was perceived by 38% of the entrepreneurs as the most important problem facing them. This problem and lack of finance represent the major constraints affecting production for three-quarters of the entrepreneurs. Less than 10% of the entrepreneurs named any other single problem as important.

At the disaggregated level, inadequate demand and finance remain the major problems, but others emerge and the relative importance of individual problems changes. Finance is dominant in Kingston with over one-half of the respondents naming it as the most important problem. Insufficient demand and spare parts/equipment follow, named by 14.5% and 12.3% respectively of the respondents. The difference in the relative importance of demand and finance nationally, as compared to the situation in Kingston, is striking. While nationally the two problems are ranked almost equally, in Kingston, finance is ranked over demand as the single most important problem by four times as many respondents (54% to 14%).

In the Major and Rural Towns, finance is regarded by most respondents as the single most important problem. But the dominance of finance as a problem, evident in Kingston, does not occur in these locations because inadequate demand, raw materials, spare parts and equipment are also important. The E.D.'s represent the only location where respondents rank

demand ahead of finance as the single most important problem. But even here nearly one-third of the proprietors view finance as the single most important problem.

Locational disaggregation indicates that in Kingston and the E.D.'s raw materials are not important. However, inadequate demand is an important problem in the E.D.'s. While it is a major problem in the other three locations, in none of them is it ranked as the major problem by more than 20%, and in each of them at least twice as many respondents viewed finance as the major problem compared to demand. In the E.D.'s, however, one and one-half times the number of those who mentioned finance say lack of demand is the major problem they are facing. Hence the question of markets arises as a serious factor affecting production in the E.D.'s.

3.1.2. Three Most Important Problems

As can be seen from Table 8, demand, finance, and transportation are perceived by the small scale proprietors as the three major problems affecting business. Both demand and finance are listed by over two-thirds of those interviewed as one of their three major problems (66.7% and 70.2% respectively). These percentages are not surprising since the two problems were ranked highest when entrepreneurs were asked to list their most important problem.

Transportation as a problem displays strange characteristics in that while nationally only an insignificant percentage (2%) regard it as the major problem, nearly one-third of the respondents view it as one of the three most important problems. This means that while only a small percentage both nationally and in each location see it as the major problem, an important proportion perceive it to be the second or third most important constraint.

The importance of transportation nationally derives mainly from its ranking in the Rural E.D.'s, where over 40% of the entrepreneurs perceive it as one of their three most important problems. The combination of demand and transportation, listed by 78% and 41% of the entrepreneurs respectively, suggests that in the Rural E.D.'s there is great concern about (a) the existence of a market for products, (b) the cost of transporting raw materials from outside of the immediate vicinity, and (c) the problem of transporting finished products to the market. Obviously the problem mentioned in (c) could influence the perception of inadequate demand as a constraint to production.

Shortages of raw materials and spare parts/machinery are also important in all the locations except the E.D.'s. In these locations both are considered as a problem by about one-third of the proprietors. Lack of spare parts and shortage of machinery at reasonable prices is more serious than lack of raw materials in these locations; close to 40% of the proprietors in Kingston, for instance, put it among the top three. However, at the time the survey was carried out, the raw material constraint had not reached the critical stage experienced a year or so later.

3.2. Demand-Related Problems

One way to ascertain whether demand shortages actually exist is to look at two rough indicators of capacity levels. Present production levels could be compared with what the business could (desires to) produce, with or without machines, under normal working hours. Table 9 gives this information, which is labelled as enterprise capacity. Typical business sales' levels in the recent past are also an indicator. Table 10 presents this information (note that "last year's" sales are expected to be lower than the typical recent past). For each type of location specified in Table 9, the enterprise capacity is higher than what is called "machine" capacity, -- the fixed capital capacity utilization for those enterprises with a machine or machines. The difference

Table 9
Percentage Distribution for Production Levels and for Enterprise and Machinery Capacities

	Location			
	Kingston	Major Towns	Rural Towns	E.D.'s
1. Percentage of Proprietors Reporting Excess Capacity	64.0	70.1	40.7	55.9
2. Percentage of Enterprise Capacity Level Utilized*	55.4	59.0	62.5	66.6
3. Percentage of Machinery Capacity Level Utilized*	48.0	59.3	48.8	53.2
4. Percentage of Proprietors Who Plan to Increase Production:				
a. Out of all Proprietors	71.7	35.7	55.2	29.1
Their Production Level Last Year:				
i. Increased	32.1	40.9	35.2	24.7
ii. Constant	38.2	29.5	23.1	50.6
iii. Decreased	29.8	29.5	41.8	24.7
b. Out of only Those with Excess Capacity	87.7	38.2	75.0	32.2
				27.5
				45.3
				27.2
				43.5

Source: Phase II Survey Data (1979) except entry 3 which came from Fisseha's (1981) study

*For a description of these terms see page 31

may not be that significant, however, when the "normal" machine capacity underutilization is account for.¹⁰

The E.D.'s show the highest percentage for enterprise capacity utilized, yet at the same time show the largest proportion of enterprises with demand problems. This may be explained by the fact that many of the proprietors in the rural areas (such as those involved in craft work) especially those that own no machines or buy very few of their raw materials, find problems related to spare parts, raw materials and import licenses less critical compared with the other problems discussed previously. Therefore, given the same income levels, an equal drop in demand would be considered relatively more serious by proprietors in the E.D.'s than by those in the other locations. The effect would then be a higher percentage of the proprietors in the E.D.'s mentioning demand as the most serious problem. Furthermore, the variation in enterprise composition may be a source of variation in demand. For example, enterprises producing craft work (mainly for the tourist industry) account for 37% of the enterprises in the E.D.'s; the corresponding figure for each of the other locations is less than 16%. While this does not mean that the fall in product demand is not a serious problem in the E.D.'s, particularly since relatively more people there reported a decline in last year's production, it does give a hint as to why the level of enterprise capacity utilized there is 67%, which is higher than the 55%, 59%, and 62% for Kingston, the Major Towns, and the Rural Towns respectively.

¹⁰It is possible that the enterprise capacity utilization may have been overestimated since the enterprises were visited during or just following the Christmas season, during which demand peaks for many enterprise types; the "machine" capacity utilization information was done a year later in April.

Firms usually have excess capacity (the difference between the desired and the actual) built into their production system (Gold, 1979 and Winston, 1974). Gold estimates this to be 15% to 20% (p. 76) for the United States. Winston, quoting Murray Foss, says that manufacturing capital stock in the United States has been idle more than 75% of the time; 90% of such excess capacity was intended ex ante (pp. 1301 and 1311).

Table 10

Classification of Proprietors by Direction of Last Year's Production Volume Change and Source of Chief Competition
(Percentage)

Production Volume Change: Source of Competition	Location				E.D. 's	Jamaica
	Kingston	Major Towns	Rural Towns			
1. Increased Production	26.8	26.8	26.5	12.5	16.4	
Source of Competition:						
a. Small Manufacturer	64.6	53.9	59.1	63.6	62.8	
b. Large Manufacturer	10.4	42.3	18.2	6.1	9.9	
c. No Competition	27.1	19.2	25.0	30.3	28.8	
2. Constant Production	37.4	34.0	24.7	29.7	30.2	
Source of Competition:						
a. Small Manufacturer	59.7	60.6	61.0	65.4	64.0	
b. Large Manufacturer	4.5	27.3	7.3	5.1	6.5	
c. No Competition	35.8	18.2	29.3	33.3	32.4	
3. Decreased Production	35.8	39.2	48.8	57.8	53.1	
Source of Competition:						
a. Small Manufacturer	59.4	42.1	61.7	84.2	76.4	
b. Large Manufacturer	3.2	39.5	19.8	3.9	7.3	
c. No Competition	35.9	23.7	22.2	12.5	17.0	
Totals for Volume Change	100.0	100.0	100.0	100.0	100.0	

Source: Phase II Survey Data, 1979

NOTE: Since a proprietor could have more than one source of competition, the percentages of all the sources add up to slightly more than 100.

3.2.1. Level of Demand

In the Phase II Survey, proprietors were asked to comment on their volume of sales during the previous 12 months. Slightly over one-half felt that sales had decreased during that period while 47% responded that sales had either held constant or had increased. Of this percentage, the majority felt that sales had remained constant (see Table 10).

This somewhat pessimistic view of sales levels was influenced mainly by the situation in Rural E.D.'s, where 58% of the proprietors felt that sales had decreased as opposed to just 12% who had perceived an increase in sales. The view that sales had decreased complements the perception in the Rural E.D.'s that demand is the major problem of the enterprises there.

In each of the other locations, proprietors responded that levels of production had either increased or remained constant -- 64% in Kingston, 61% in the Major Towns and 51% in the Rural Towns. In each of these locations, roughly the same percentage (27%) perceived an increase in production during the previous twelve months. However, nearly half the respondents in the Rural Towns perceived a decrease in production levels, compared with 36% and 39% for Kingston and the Major Towns respectively.

Table 10 also shows the nature and level of competition with respect to the level or status of production achieved over the last 12 months. Except in the E.D.'s, all locations show that higher competition from small manufacturers did not seem to adversely affect a proprietor's production level. For example, among those who reported production increases over the last 12 months in Kingston, close to two-thirds of them stated that other small manufacturers were their chief competitors in the market; but for those who reported a decrease in production, about 59% of them reported the same kind of competition. There seems to be a relationship, however,

between the source of competition and level of production in the E.D.'s. For those reporting an increase in production (12%) about 64% of them mentioned other small proprietors as competitors, while the corresponding percentage for those reporting a decrease (57.8%) is about 84%.

This general pattern within locations is exactly the same among those proprietors who reported no competition at all. In other words, except for the E.D.'s, the percentage of proprietors who reported no serious competition from anybody seems insensitive to the level of production. In the E.D.'s, however, the level of production was directly related to the level of competition.

Without making more locational identification of the sources of competition, it is not possible to state conclusively the reason for this pattern. However, a possible answer is that relatively bigger SSE proprietors have started to sell their products in the Rural E.D.'s. A second possibility is that with increased economic difficulties the number of SSE's has grown, either in the E.D.'s themselves or elsewhere in the country, and this has resulted in a more competitive market and reduced sales for many of the producers. Finally, the most likely explanation is that with a general economic squeeze on and the tourist industry down, there could be reduced demand for craft work, the main product of rural enterprises; indeed, 80% of the craft enterprises said their production was low last year.

If demand is as crucial a problem in the E.D.'s as the cumulative discussions seem to indicate, then proprietors' planned production levels for the immediate future should also shed some light on this issue. This is clearly the case, as can be seen from Table 9, which shows that although they were operating at an average of 53% machine capacity and 56% of them reported one-third excess enterprise capacity, only one-third of the proprietors in the E.D.'s had any plans to increase production for the next 12 months. In Kingston, on the other hand, while excess enterprise

capacity is higher, the people seem to be more optimistic in that close to 88% of those with excess capacity had plans to increase production.

The size of the average percentage of underutilization rises as one moves to the more urban areas -- a picture which parallels the level of mechanization among enterprises in the SSE sector. Thus, as to the question of why more urban enterprises tend to have higher average excess capacity, one needs to note that the faster prices of capital goods rise and the more restrictions are imposed on their availability, the greater the temptation becomes to over capitalize as a security for the future.

Finally, it is interesting to note from Table 9 that next year's planned production does not seem to be affected by last year's realized production. For example, an equal percentage, both from those who had a decrease and from those who had an increase in production (about 27%), said they have plans to increase production for next year. Since a large percentage of their sales volume is generated from custom made products (e.g., in wearing apparel, woodwork, repair works, etc.), it is possible that for many proprietors of the very small enterprises, this plan could mean a wish to increase sales or the desire to work harder rather than the presence of a concrete plan of action.

3.2.2. Market Outlets and Policies

With respect to market outlets and marketing policies, we will look at two important aspects of marketing which directly affect the demand for products and services provided by the SSE sector. First we will look at the various purchasers who generate demand for SSE outputs. This will be followed by a brief discussion of the marketing policies followed under the various demand situations in the four locations.

Nationally, over 87% of sales from the small enterprises were made directly to individuals, with distributors accounting for 12% (see Table 11).

This national pattern reflects the general situation in each location, except in the case of the small towns, where almost all sales are made directly to individuals and the importance of distributors declines. Distributors account for 4% of the sales of entrepreneurs in Rural Towns compared to 15% in Kingston and the Major Towns and 12% in the Rural E.D.'s.

In all cases, neither the Government nor the export sector is important. The Government's most important contribution is that it purchases 4% of the sales of the producers in small towns. It should be noted, however, that the level of sales to the export sector (either direct export or through tourism) is underestimated in that products from certain enterprises such as craft work are sold to small "distributors" (or individuals), who in turn sell them to tourists.

Table 11 does not give any indication of why the E.D.'s should have more demand shortages than the other locations; the main purchasers in all the locations are individual consumers, followed by distributors. A reference to the last four tables of the appendices in the Phase I report shows, however, a unique situation in that craft enterprises in the E.D.'s account for 37% of the manufacturing enterprises whereas the corresponding figures for Kingston, the Major Towns and the Smaller Towns are only 6%, 16% and 3% respectively. Relating this to the fact that the number of tourists coming into the country has been declining between 1974 and 1979, it is possible to conclude that this may have contributed to the low demand levels in the E.D.'s (and the Major Towns, too).

Another important topic directly related to the problem of demand shortages is marketing or pricing policies of small scale enterprises. All things being equal, the bigger the fall in demand, the higher the credit or price reductions that would be given by enterprises. To some extent this is

Table 11

Percentage Shares of Sales Among Market Outlets

Market Outlets	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Sales to Individuals	83.2	79.6	94.6	87.2	86.9
Sales to Distributors	14.6	15.1	3.8	11.9	11.7
Sales to Government	1.9	4.3	1.6	0.6	1.1
Sales to Exporters	0.3	1.0	----	0.3	0.3
TOTALS	100.0	100.0	100.0	100.0	100.0

Source: Phase II Survey Data, 1979

shown to be the case for all locations except the E.D.'s (see Tables 8 and 12). However, there is a limit as to how much prices can vary in custom made production. Once prices are established, they become common knowledge and tend to remain stable; if they were to be lowered, it would not be easy to raise them again.

Table 12 shows the extension of sales credit and discounts by proprietors to their customers. The entrepreneurs were asked what types of credit terms they extended to their customers. It will be recalled that nationally 87% of sales are made to individuals, so the credit terms offered reflect each entrepreneur's perception of what is necessary to retain his clientele and what his own cash flow constraints may be.

Slightly over one-third of the proprietors said that they do extend sales credit for a limited period (see Table 12). About 19% of these said the credit is for a month or less while 6% said there was usually no specific time period established for which credit could be outstanding; much would depend on the customer, his purchase value and the liquidity condition of the proprietor. The major portion of the credit extended (close to 30%) is for less than three months. About one-tenth of the businesses do not give credit but make discounts when necessary. However, more than one-half of the proprietors neither give credit nor extend discounts.

When disaggregated, the data indicate that the percentage of those who give credit for up to 30 days is quite significant; Kingston, the Major Towns and the Rural Towns account for 31%, 35% and 29% respectively of the total number of proprietors providing such credit. In fact, in the Major Towns this form of transaction accounted for a larger percentage of sales than did cash transactions. Also of note was that cash discounts in the Major Towns account for one-fifth of all transactions.

Table 12
Main Transaction Types by Location
(Percentage of Proprietors)

Sales Transaction Type	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Cash	52.8	33.3	32.9	57.2*	53.1
Cash discount	6.1	19.8	6.0	10.6	10.2
30 days or less credit	30.6	35.4	29.3	14.0	18.8
31-60 days credit	3.9	2.1	12.6	4.5	5.0
61-90 days credit	3.3	2.1	9.0	3.8	4.1
91 days or more credit	2.2	3.1	1.8	3.6	3.1
No specifications	1.1	4.2	8.4	6.3	5.7
TOTALS	100.0	100.0	100.0	100.0	100.0

Source: Phase II Survey Data, 1979

*The high cash sales in the E.Ds. are indicative of the fact that the enterprise mix there is highly biased towards craft work, in which case products are not sold to local consumers but to tourists through market intermediaries (see page 40).

The percentage of proprietors who sell cash (57%) may seem unexpectedly high for the E.D.'s. However, one must realize that the "distributors" of the craft products are individual intermediaries who sell them to retailers or tourists; they are not the same as the local customers of a tailor or shoemaker.

3.2.3. Sources of Competition

Nationally, the large majority (70%) of small scale manufacturers perceived other small manufacturers as their chief competitors (see Table 13). Surprisingly, nearly a quarter of all small scale manufacturers perceived themselves as having no competition. Nationally, the question of whether imported goods constituted competition did not arise at all.

At the disaggregated level the response showed interesting variations, with Kingston and the Rural E.D.'s displaying a greater similarity than usual. In Kingston, three-fifths of the enterprises identified similar size manufacturers as the chief competitors and over one-third felt that they had no real competition. In the Rural E.D.'s, three-quarters identified other small manufacturers as their chief rival and one-fifth felt that they had no rivals at all. In both Kingston and the Rural E.D.'s neither local manufacturers nor "other" sources were discerned as competitors.

The views of small scale producers in the Major and the Rural Towns are somewhat different, with close to one-third in the former locations regarding large local manufacturers as their chief competitors. Only in the Major Towns do less than one-half of the producers identify other small manufacturers as their chief competitors, although with 47%, other small manufacturers are still by far the most important source of competition within this stratum. In the Rural Towns, 60% of the producers view their fellow small manufacturers as their chief rival, while just over a quarter feel that they have no

Table 13

Main Source of Competition by Location
(Percentage of Proprietors)

Source of Competition	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Small manufacturer	60.6	47.2	59.5	75.2	70.3
Large manufacturer	4.4	30.3	14.1	3.4	6.1
Other (imported goods, etc.)	1.7	----	0.6	0.4	1.0
None	33.3	22.5	25.8	21.0	23.1
TOTALS	100.0	100.0	100.0	100.0	100.0

Source: Phase II Survey Data, 1979

competition. The Major Towns stand out because nearly one-third of the proprietors perceive large manufacturers as their chief source of competition. The relatively high percentage, 23% nationally of small manufacturers at each location who perceived of themselves as having no competition is revealing. It means that for this group, expansion of production should not be constrained by a fear of competition from any source. Rather, other factors will have to be considered in evaluating the potential for expansion by these businesses.

A substantial number of proprietors both in the Major Towns and the small towns consider large manufacturers as a source of serious competition. A closer look at the data reveals that most of these proprietors are in enterprises where competition from larger ones would be expected. Such enterprises are bakeries, brick or tile making, printing, woodwork and photo studios. Their larger counterparts have a nationwide network of sales systems which allow them to compete effectively with local producers. In the tourist resort areas, even tailors and dressmakers feel this kind of competition.

IV. PROBLEMS RELATED TO CAPITAL CONSTRAINTS

4.1. Initial Capital

Two types of capital are identified here for a small scale enterprise: capital required to initially launch the business, and capital subsequently required to maintain current levels of business activities or to allow for expansion. Information on the former is provided in Tables 14 to 17. The latter type is discussed within the context of proprietors' attempts to obtain credits and trade discounts.

4.1.1. Size of Initial Capital

Initial investment requirements may vary due to factors such as enterprise type, location, business size and future production plans. Our data show that the average initial investment for all small manufacturing enterprises in Jamaica was about J\$1410 (see Table 17). Great variations exist, however, among the different locations and among the enterprise groups within locations. Additional intragroup variations can be expected to occur because of differences in enterprise type, age of proprietor and/or business and the initial size of the work force.

The variations are large, for instance, when the different locations are compared. The overall investment level ranges from J\$5628 for the Major Towns to only J\$ 403 in the E.D.'s. The fact that the amount of the initial investment is directly related to the level of urbanization is not unexpected. Small scale enterprises in the less urban or more rural areas are smaller in size, use less machinery and are dominated by enterprises (such as straw work)

Table 14
Average Initial Investment (Jamaican \$)* Among Enterprise Groups

Enterprise Groups	Location				Average Age of Enterprise Groups**
	Kingston	Major Towns	Rural Towns	E.D.'s	
Foods	\$10,125	\$25,218	\$29,614	\$ 210	7.7
Wearing apparel	1,926	1,369	556	318	11.0
Craft	371	2,467	420	123	16.2
Woodwork	2,712	6,521	3,558	1,643	7.6
Metal works	9,386	9,382	1,868	1,600	9.5
Repair works	3,567	2,754	2,920	2,250	5.6
Other manufacturing	16,489	9,537	7,473	1,603	8.8
OVERALL	\$ 3,762	\$ 5,628	\$ 3,393	\$ 403	12.6
Locational Average Age	8.3	7.2	9.0	14.6	

Source: Phase II Survey Data, 1979

*U.S. \$1.00 = Jamaican \$1.78 currently

**We do not have the necessary capital price indices to adjust for inflation. We hope the indicated enterprise group and locational average ages will give a rough idea of investment level variations among enterprises and between locations.

that require no major capital investment. The figure J\$5628 for the Major Towns is substantially higher than that for Kingston or the smaller towns. This may be partially explained by the fact that one Major Town, Montego Bay, is a regional capital and as such may have fewer very large enterprises (like those in Kingston) but relatively more enterprises (as in wood work) which fall in the upper range of our SSE size definition (e.g. see Tables 6 and 7 for work force size). And another Major Town, Spanish Town, is an industrial suburb, very close to Kingston and hence it attracts businesses which are much larger than the average size in our SSE. For example, enterprises like tile, brick, and blockmaking, sawmills, and ice manufacturing tend to be located close to the main market and where factory space is cheap and ample. Thus, the above two towns would effectively raise the average initial investment in the Major Towns.

When enterprise groups are compared, the locational differences follow the general pattern already discussed. In the urban areas (other than Kingston), food production (processing) is the most expensive venture to start, followed by the categories labelled "other manufacturing" (which is the most expensive in Kingston) and metal works. Food processing in rural areas consists mainly of the production of bammies and condiments in small quantities.¹¹ The data indicate that craft production in Major Towns is substantially higher than in other locations, which can be explained by the fact that Montego Bay is a tourist center where a great number of wood carving, straw, basket and garment works are located. Because of the large turnover of products, (at least during the tourist season) and the need to stock up products, a fair amount of investment is required to start these businesses.

¹¹For a complete description of the enterprise groups, see Davies, et al., 1979, p. 14.

Table 15

Average Investment By Enterprise Type for Each Location (Jamaican \$)

Enterprises*		Location				
Type	Number**	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Tailors	109	\$ 792	\$ 676	\$ 680	\$ 361	\$ 465
Dressmakers	107	1,097	596	330	249	305
Woodwork	59	3,940	7,982	5,154	1,742	3,146
Garages	65	3,530	2,615	3,177	2,600	3,016
Shoemaking	68	2,670	3,243	343	302	816
Craft/Wood Carving	140	429	2,469	420	116	120
Metal Works***	26	10,708	10,557	2,628	1,050	4,785

Source: Phase II Survey Data, 1979

*See Table 5 and its footnote for the average age and relative importance of these enterprises.

**Number of enterprises in the sample.

***Includes general metal work, welding, and blacksmithing.

It is essential to point out that even disaggregation at the enterprise group level masks great individual differences. The number of enterprises that invested as much as the national average is small. For example, a close look at the data reveals that more than 75% of all firms initially invested only J\$500 or less, and that more than 90% of them invested J\$1000 or less.

Among the various types of enterprises, metal works, woodworking, and garages seem to be relatively expensive to start (see Table 15). At the opposite end are crafts and dressmaking. Of course, the level of investment is directly related to production techniques: the higher the level of mechanization required, the bigger the initial investment must be.

4.1.2. Composition of Initial Capital

In order to identify critical investment needs, it is very useful to know the different uses to which the initial investment is applied. Table 16 provides this information. The average initial investment on enterprises for each location is divided among five major investment items, for each investment item in each location, two percentage values are shown. The first provides the average percentage share over all enterprises and the second gives percentage share for only those enterprises that actually invested in the specific item listed.

The difference between the two percentages in columns 1 and 2 has very important implications. For example, while the overall percentage share of machinery/tools in Jamaica was about 34%, when only those firms that actually invested on this item are considered, the share almost doubles to 63%. The picture is similar for buildings and other items investment shares.¹² The

¹² The main items in the Other Items category are transaction costs and in a few cases "goodwill" payments. SSE in the urban areas tend to proportionally spend more on these. In any case the value for goodwill payment is less than 0.2%.

Table 16

Breakdown of Initial Investment Levels: Average Share in Percentage for Different Uses

Investment Category	Location									
	Kingston		Major Towns		Rural Towns		E.D.'s		Jamaica	
	1*	2*	1*	2*	1*	2*	1*	2*	1*	2*
Machinery/Tools	46.2	54.8	36.1	54.4	45.9	60.0	30.6	65.4	34.3	62.9
Working Capital	32.9	34.5	25.5	26.8	24.5	25.5	33.3	33.4	32.0	32.4
Furniture/Office*** Equipment	8.0	24.8	18.1	29.3	18.3	31.5	29.0	38.4	24.7	35.5
Buildings	9.2	24.8	8.6	28.7	8.9	37.6	4.0	51.9	5.3	45.8
Other Items	3.7	33.5	11.5	21.5	2.4	21.5	3.1	22.0	3.7	23.4
TOTAL, All Enterprises	100.0	**	100.0	**	100.0	**	100.0	**	100.0	**

Source: Phase II Survey Data (1979)

*Column 1 values are averages over all enterprises and Column 2 values are averages over only those enterprises that did invest on a given investment item.

**These columns add up to more than 100 since average percentage shares are relatively high as a result of excluding those proprietors who made 0% investment on the relevant category.

***There really is not much 'furniture' or 'office equipment' in the rural areas; what is referred to here are things such as counters, shelves, chairs or stools and other display structures.

implication here, especially for the E.D.'s, is that relatively few enterprises invest in buildings, machinery/tools and goodwill payments. However, those that do tend to spend a larger share of their investment on them. Also, firms might not invest in all of these items simultaneously. While the picture is somewhat similar in the urban and semi-urban areas, it is much less accentuated. From such a tabular presentation can be drawn the unique and very important conclusion that certain investment items are invariably important across enterprises and locations. Working capital stands out in this respect, averaging approximately one-third of the total initial investments nationally. This proportion holds for Kingston and the Rural E.D.'s while for the Major Rural Towns it is closer to one-quarter of total initial investment. This fact should counter the popular tendency to underestimate the need of credit for working capital uses. In Table 16 the almost surprising coincidence of the values in Columns 1 and 2 for each location supports this assertion.

The share of furniture/office equipment in the E.D.'s may seem very high (29%). The explanation lies in the fact that the average investment in the E.D.'s is low in absolute figures. Therefore, whatever is available is allocated among tools, furniture and working capital in small shares.

The general picture that emerges is that machinery/tools and working capital each account nationally for one-third of the initial investment; another one-fourth goes for furniture and/or office equipment and the remainder is divided between workshop structure and other expenses.

4.1.3. Sources of Initial Capital

In seeking to understand how small scale enterprises deal with the problems associated with capital, the entrepreneurs were questioned about the source of funds they used to start their present businesses. Personal

savings formed the basis of financing in all cases, but this was augmented by loans from relatives and friends, commercial banks, government organizations¹³ and others.

Nationally, nine out of ten enterprises were initiated with personal savings alone, no other source of financing was of importance. Those who received assistance from relatives and friends accounted for 6%, and entrepreneurs who were assisted financially by government organizations represented one-half of one percent of the total (see Table 17). These findings suggest that since entrepreneurs have relied almost totally on their own savings -- in most cases limited capital -- to begin businesses, such constraints may have limited their scope of operations and the level of technology utilized. Clearly, the length of time a business had been in operation is an important factor, for most of them were begun when far less government activity existed in the small scale sector. An examination of some recent business starts or subsequent expansions would serve to indicate whether government agencies have altered the general pattern in investments.

The disaggregated data diverge little from the national picture, although the role of commercial banks is slightly less important in Kingston than in other towns. Financing from commercial banks assisted in providing the initial capital for 6.7%, 11.2%, and 7.8% of businesses in Kingston, the Major Towns and the Rural Towns respectively. Conversely, personal

¹³The governmental organizations or agencies referred to here and subsequently are the Small Business Loan Board (SBLB), the Development Venture Capital Financing Limited (DVCT), the Small Industries Development Division (SIDO) and the Small Business Financing Scheme (SBFS). The Small Enterprises Development Corporation (SEDCO) was formed late in 1977 to absorb the activities of many of these agencies. In mid-1980, the Small Industries Finance Company (SIFCO) was formed, combining the DVCT, the SBLB, and SEDCO.

Table 17

Source of Initial Funding By Location*

Source	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Personal savings (alone)	84.4	75.5	84.2	92.8	89.9
Personal savings plus relatives and friends	5.6	9.2	6.6	5.7	6.0
Personal savings plus commercial banks	6.7	11.2	7.8	0.4	2.5
Personal savings plus government agencies	2.3	3.0	----	----	0.5
Personal savings plus others	1.0	1.1	1.4	1.4	1.1
TOTALS	100.0	100.0	100.0	100.0	100.0

Source: Phase II Survey Data (1979)

*Percentage of Proprietors

savings alone, although representing the major initial funding for enterprises in the Major Towns, is comparatively less important than in Kingston and the Rural Towns, where it provided over 84% of funding in each. The combination of these two facts is of interest and once again demonstrates the point which we have made concerning the nature of the SSE's in the Major Towns. However, it should also be noted that in these locations nearly one-third of the enterprises were started two years ago or less. The possibility is strong that the newer businesses are more likely to deal with financial institutions to help in establishing operations, although the fact that Government assisted financing is insignificant, even in these locations, cannot be escaped.

4.2. Demand for External Credit

To determine the opportunities and perceived needs for additional financial resources from external sources, proprietors were asked if they had ever applied for a loan, regardless of source. If so, they were then asked where they had applied and if they were successful. If they had not applied, the reason for this was also requested. The information for these responses is shown in Tables 18 and 20. Those people who actively sought financial aid were also asked to name the major problems faced, and this information is shown in Table 21.

4.2.1. Sources of Credit

To determine the perceived need for additional financial resources from external sources, it is important to distinguish between those who were deterred from applying and those that did apply. Figures in Table 20 indicate that about half of the proprietors who did not apply for credits actually wanted to apply. Thus, when this group is combined

with those who actually applied (Table 19), we estimate that the national figure for those who perceived a need for external additional finance is about 58%. The remaining 42% said that they had no need for credit or had never thought about it.

Table 18 provides two types of information: rates of application and the rates of success (granted loans) from such applications. Nationally, just over half of the applications were submitted to various governmental financial agencies, close to one-fourth were requests to relatives and friends, while another 12% were submitted to commercial banks. Thus, a large number of proprietors look to the government for some source of financial aid; this is especially true among the rural towns and E.D.'s.

At the various locational levels, great differences exist in the overall rates of application to the different potential sources, with the widest differences appearing between the other locations and the E.D.'s. In the former group, nearly 40% of the proprietors applied for credit from various sources; in the E.D.'s, the percentage drops to 12. Reasons for this difference are not obvious but, as Table 20 indicates, close to 60% of the proprietors in the E.D.'s said they did not need credit or had never thought about it (an additional 16 percent did not know where to apply); the next highest corresponding figure is found in the Major Towns where 45% of the proprietors answered similarly.

As for different funding sources, about 40% of the proprietors in the urban and semi-urban areas (i.e., excluding the E.D.'s) applied to the commercial banks and about the same percentage applied to government financial agencies. On the other hand, the rates of applications from E.D.'s to these same sources were about 1% and 56% respectively. Thus, a strange pattern emerges: almost no proprietors from the E.D.'s approach

Table 18
Credit Applications and Their Success Rates

Credit Sources	Location									
	Kingston		Major Towns		Rural Towns		E.D.'s		Jamaica	
	Appl- cation Rate ^a	Success Rate ^b	Appl- cation Rate	Success Rate	Appl- cation Rate	Success Rate	Appl- cation Rate	Success Rate	Appl- cation Rate	Success Rate
Commercial Banks	39.8	54.3	43.2	48.0	43.5	66.7	1.2	---	12.4	15.8
Government Organization	40.9	22.2	36.2	38.1	40.6	25.0	55.9	36.8	51.4	34.0
Relatives and Friends	8.0	85.7	10.3	50.0	11.6	62.5	29.4	60.0	23.9	62.9
Others	11.3	20.0	10.3	66.7	4.3	33.3	2.9	----	14.0	9.5
All Sources Combined	42.2	39.8	44.9	46.6	37.1	47.8	12.5	38.2	20.4	39.8

Source: Phase II Survey Data (1979)

a/ This is the percentage of those who applied from the total number of proprietors in each location.

b/ This is success rates out of the total applications made.

the commercial banks, yet they apply to government agencies by a higher percentage than do proprietors in the other locations. Another important potential source of credit for the rural areas (close to 30%) is relatives and friends; the corresponding figure for the urban and semi-urban areas is only about 10%. The remaining 10% of the enterprises outside the E.D.'s apply to other sources, such as credit unions, insurance companies and retailers; such sources are unimportant in the E.D.'s.

Information from enterprise group loan applications shows that the bigger the enterprise and the more closely its production and organizational structure resemble that of a factory, the higher the chances that it will look to the commercial banks for credit. Wood and metal works, auto repairs and the other manufacturing enterprises fit this category.¹⁴ On the other hand, small and/or rural enterprises such as those making wearing apparel, crafts and some woodwork look more to governmental agencies rather than commercial banks.¹⁵

Thus, the general picture that emerges is that enterprises in the E.D.'s (which are small yet constitute the largest majority) and the smaller ones in the other locations perceive governmental sources, and to a large extent relatives and friends, as their chief sources of credit. The enterprises in urban and semi-urban areas, particularly those which are bigger and well organized, look mainly to the commercial sources and, to a significant extent, to governmental sources.

Age differences do not seem to influence loan application rates. For example, 20% of those 30 years old or younger applied for a loan, while

¹⁴Their rates of application to the commercial banks were 38%, 30%, 39% and 23% respectively as compared with applications rates of 8%, 25%, 25%, and 5% respectively to the governmental agencies.

¹⁵Their respective rates of applications were 60%, 96%, and 45% to the former as compared with 17%, 2%, and 26% to the commercial banks.

about 22% of those in the 31-40 year age category and 19% of those above 40 years of age requested such loans. This general pattern holds within each age category of each location.

The type of ownership under which an enterprise is organized may have an influence on whether or not a loan is requested. Although the number of enterprises with non-sole proprietorship amounts to less than 6% in Jamaica (see Table 3), and thus contributes relatively little to the overall picture, the rate of application rises rapidly as one moves from sole proprietorship to partnership and then to limited liability companies (see Table 19). The rate of application in the latter group is about 91% or almost 3 times that found for sole proprietors (28%) and about twice that for partnerships (52%). The rate of application for cooperatives is only 17%.

Education has a very strong influence on the rate of application. At the national level, about 18% of those who had some primary education applied for loans. This percentage jumps to 27% and 42% respectively for those who had secondary and tertiary educations. Except for the Major Towns, the pattern is similar, and the percentage jumps even higher as one moves to the more urban areas. In Kingston, the percentages for the three levels of education (primary, secondary, and tertiary) are 37, 48, and 89 respectively; the corresponding figures for the Rural Towns are 31, 48, and 71; and for the E.D.'s, 11, 20, and 33. The main reason for such differences and patterns may be the level of general awareness of loan availability among the proprietors.

The rates at which applications were successful are shown also in Table 18. At the national level, about two of every five applications are successful. Generally, enterprises in the E.D.'s are less successful than their counterparts in the other locations.

Table 19

Distribution of Application Rates by Ownership Types Among Locations*

Ownership Types	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Sole Proprietorship	34.8	42.7	35.6	12.0	27.6
Cooperative	----	----	----	50.0	16.7
Partnership	55.0	53.8	53.8	25.0	52.0
Limited	87.5	100.0	100.0	----	90.9
Over All Ownership Types	42.2	44.9	37.1	12.5	20.4

Source: Phase II Survey Data, 1979

*Percent of proprietors in each ownership form making applications in each location.

When the volume of loans involved is not considered, proprietors seeking credit from relatives and friends have the highest success rate at 63%. The high figure is commonly attributed to the fact that relatives or friends know the applicant well and want to help. This high rate of success is common in all the locations. Proprietors seeking loans from governmental agencies rank second in their success rate at 34%. However, because they account for half of the total loan applications compared with about 1/4 for relatives and friends, they play the most important role at the national level.

Overall, commercial banks are the most important sources in all the locations outside the E.D.'s. Not only are their success rates higher there (57%), but relatively more people apply to them for loans. But commercial banks show a very bad record in the E.D.'s, with very few proprietors applying to them for loans and even fewer succeeding in getting credit. Thus, the two most important sources of credit for those in the E.D.'s are governmental agencies and relatives and friends.

Finally there is the category labelled "other" in Table 18. It includes credit sources from credit unions, insurance companies and retailers (merchants). At the national level about one-half of the applications in this category succeed.

The data show that the government plays a very important role in providing credit to the small rural enterprises as well as to most of the small urban ones. Yet because information about applicants is gathered at relatively higher cost by government financial agencies, and because paperwork for small loans is more expensive, public institutions may not be as efficient in extending credit as commercial banks and the informal sector. Such observations should not discourage public credit officials

nor preclude efficient administration of public credit funds, but simply serve as a reminder that at least some overhead costs may have to be absorbed.

In most cases, little information is available to determine the full costs to both borrower and lender of loans given by relatives and friends. Hence not much can be done other than to make information about other potential credit sources more accessible to proprietors so that they can make more informed decisions.

At the enterprise group level, those organized on factory-type bases have the lowest failure rates (usually less than 10%) in their formal loan applications. These include food processing, metal works, and bigger auto repair services. However, the failure rates in wearing apparel and woodwork enterprises are of the order of 75% and 50% respectively. For the craft enterprise group, the numbers that applied and succeeded were much too negligible for comparison.

The Phase II questionnaire did not inquire about the amount of the loan, how it was used, the interest rate charged, nor the payment schedule. However, answers to managerial questions raised in subsequent interviews with the proprietors (Fisseha, 1981) indicate that loan amount ranges from J\$500 to J\$65,000, with average and modal values in the neighborhood of J\$7,000 and J\$2,500 respectively. Loans were granted primarily for the purchases of raw materials and machinery. Value-wise, more than 2/3 of the credit was likely used for the purchase of raw materials by large enterprise types such as garment production, woodworking, metal working, and shoemaking.

The interest rate has risen considerably, from about 7% in 1975 to anywhere from 13 - 18% by 1980. The governmental agencies were charging

much lower rates than the commercial banks (SEDCO charged about 11%). However, not many proprietors seemed aware of the amount they might ultimately be paying for interest.

The period for which the loan is granted varies from one year to 15 years; the most common was 3 to 4 years. Although it is not known exactly how many proprietors paid up at the end of the loan period, indications are that a very large number of them have their debts in arrears -- see the conclusion and summary section.

4.2.2. Reasons for Not Applying for Credit

As Table 18 shows, about one-fifth of the proprietors did apply for some kind of loan. Thus, for the country as a whole, close to 80% did not apply for a loan for various reasons, as shown in Table 20. The main reason for not applying was "never bothered" or "never seriously thought about it," which accounted at the national level for about 1/3 of all the non-applying proprietors. Another 15% said they did not know where to apply -- an answer which presumably considers only formal credit applications. A substantial percentage, close to 20%, said they had no need for credit. If the reason "never bothered" could also be broadly interpreted as lack of perceived need for credit, then the number of proprietors who possibly saw no need for credit could be slightly more than one-half.

The remaining 1/3 saw the need to improve the business through external credit. However, due to a number of perceived problems, they did not apply. The major deterring factors for this group were collateral requirements,¹⁶

¹⁶This problem is mentioned at the national level by about 1/3 of the proprietors who wanted to apply for a loan (and knew where to apply) but did not do so due to the reasons given in Table 20. We will also see later, in Table 21, that 40% of those proprietors who applied said they experienced some problems in the process because of the collateral problem.

Table 20
Reasons for Not Applying for Credit (Percentages of Proprietors)

Reasons	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Never Bothered	20.6	16.7	14.6	39.6	33.6
No Need for Credit	18.6	27.8	19.4	18.7	19.3
No Knowledge of Source	5.2	3.7	23.3	16.5	14.9
Collateral Problems	15.5	13.0	11.7	8.7	10.1
Afraid of Financial Risk	19.6	11.0	12.6	5.2	8.1
Low Demand	16.5	13.0	10.7	4.8	7.3
Expensive Process	1.0	7.4	1.9	----	0.7
Other Reasons	3.0	7.4	5.8	6.5	6.0
TOTALS	100.0	100.0	100.0	100.0	100.0

Source: Phase II Survey Data (1979)

fear of financial risk or debt, and the low market demand for their products. Very few people mentioned high interest rate as being a deterrent. In fact, the "expensive process" was mentioned by less than 1% of the proprietors and of the 6% remaining, an overwhelming majority said they did not apply because they thought their loan requests would never be granted.

At the locational level, there are some interesting differences. For example, lack of knowledge about where to apply is a very important reason in the Rural Towns and the E.D.'s, which account for more than 80% of all the SSE manufacturing enterprises in Jamaica. The proportion of people in the E.D.'s who never thought about applying is relatively large; part of the explanation could be that this reason is not clearly distinguishable in some proprietors' minds from having no knowledge of where to apply. The remaining major reasons (collateral problems, financial risk and low demand) become more important as one examines data from the more urban areas.

The problem of collateral, for example, is mentioned by about 16% of the proprietors in Kingston but only 9% in the E.D.'s. As can be seen in Table 21, collateral is perceived as a very important problem also for those people who applied for a loan. In fact, close to 14% of all the proprietors, both those that applied and those that did not apply, perceived collateral to be a major problem. There may be two aspects to this problem: applicants do not have the necessary assets for collateral or they are unwilling to submit their assets as collateral.

4.3. Problems in the Credit Market

The perceived problems faced by proprietors who did not apply for loans are displayed in Table 20. Table 21 shows the problems encountered by those proprietors who applied for credit. The combined results from

Table 21

Proprietors Experiencing Various Credit Problems in Each Locality
(Percentage of Proprietors)

Problem Areas for Loan Applicants	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Collateral	45.8	26.2	26.2	26.7	29.1
Profit Viability Doubted	5.6	4.8	6.6	16.7	13.7
Lack of Contact	4.2	7.1	4.9	10.0	8.6
Loan Granted too Small	2.8	7.1	3.3	10.0	8.3
Time Consuming Process	9.7	11.9	4.9	6.7	7.2
Others	2.7	4.8	11.5	6.6	6.4
No Problem	29.2	38.1	42.6	23.3	26.7
TOTALS	100.0	100.0	100.0	100.0	100.0

Source: Phase II Survey Data (1979)

these two groups should indicate the overall picture of the perceived problems associated with applying for and obtaining credit.

Table 21 shows that for all locations and enterprises combined, a little over one-quarter said they faced no problems when applying for a loan. Although the situation will vary by enterprise type, size and location, it is quite interesting that close to three-quarters said they encountered some problems when they applied for credit. The percentage of people who said they had no problems is consistently higher for those who applied to the commercial banks rather than governmental agencies. For example, the percentage of people who applied to commercial banks and had no problems was 48% in Kingston, 71% in the Major Towns and 58% in the Rural Towns; the corresponding locational percentages for those who applied to the governmental agencies were 19%, 17% and 21%. This is not unexpected however, as the governmental agencies tend to cater to the less viable or smaller enterprises and those who apply to them may include those who think they have no chance of success in obtaining a loan from the commercial banks.

4.3.1. Collateral or Security Problem

The largest percentage of complaints is accounted for by the collateral requirement, with the problem being more serious in Kingston where one-half of the applicants expressed this complaint than in the other locations, where roughly one-quarter of the applicants expressed such complaints. Collateral is also a more serious problem among people who apply to governmental agencies rather than commercial banks. Almost no applications were made to the commercial banks from the E.D.'s; therefore, considering only the remaining locations, about 45% of those who applied to the government agencies mentioned collateral as a problem compared with 30% of those who applied to the commercial banks. Even in the E.D.'s, about 27% of those applying to the

governmental agencies said it was the most serious problem. Thus, when all SSE's in all locations are combined, about 14% mentioned collateral requirements as the most serious problem.

4.3.2. Size Limitation

Nearly 14% of the proprietors who applied said that creditors doubted the viability of the enterprise, allegedly because of the small size of the business; as a result their loan applications were turned down. This problem becomes greater, as expected, as one moves progressively from urban to more rural areas. For example, close to 17% of the proprietors in the E.D.'s think this is a major problem as opposed to a maximum of 7% in the other locations.

4.3.3. Transaction Costs and Other Problems

The amount of time spent in trying to secure a loan and the frequency of loan officers failing to honor appointments, or just the difficulty of contacting them, were two other major problems mentioned. Loan transaction costs are even higher for proprietors who must travel long distances to apply for credit. The costs are even greater for those small proprietors who usually apply to governmental credit agencies, none of which have branches outside Kingston.

The other problems mentioned as important by the remaining proprietors included inability of some enterprise types to qualify for a (presumably government) loan, high interest rates, disagreement among business co-owners, etc. But these problems comprised a very small percentage of all problems -- less than 1%. As concerns high interest rates, it appears that the small proprietors, particularly those in the countryside, are not fully aware of the costs related to the interest payments. Fisseha (1981) found

that some proprietors did not quite realize the effect that the interest rate would have on their overall credit costs. Once interest rates were calculated for applicants, using their desired credit needs and payment rates, they were surprised to learn that interest would be so high. As a result, some proprietors said they were no longer interested in applying for credit.

It is important to note the complexity of the collateral issue, both from the creditor's point of view and from that of the applicant. To a banker, the availability of assets for collateral is primarily a sign that his future loan investment is likely to be secure and also that the potential debtor has the ability to work hard and accumulate some wealth -- as indicated by the past performance of the applicant. Especially when those requesting loans are highly mobile, the need for a secure loan is, of course, the most overriding reason for the collateral requirement.

From the applicant's point of view, there are several reasons why he doesn't want to commit his assets as collateral: he may be too advanced in age and doesn't want to risk his lifelong savings; he may want to take chances with someone else's resources but not his own; or there may be other parties who have ownership interest in his assets and he thus needs their full consent.

V. PROBLEMS OF RAW MATERIALS AND PRODUCTION TECHNIQUES

5.1. Raw Material Constraints

About one-fourth of the proprietors placed the problem of raw materials among the top three; about 8% considered it as the most serious one (see Table 8), thus making it third in the category of single most serious problems. Obviously, however, the raw material problem is closely connected to other problems such as the working capital, the availability of transportation and the demand situation.

The importance of raw materials varies among locations and enterprise types. For example, the rural areas consider raw materials less of a problem than the other locations, primarily because enterprises in the E.D.'s are dominated by craft and other enterprises for which the main raw materials are locally produced.

The differences among enterprise types are not great (see Table 22). At the national level, while only 5% of the proprietors in straw work considered raw materials among the top three problems, in every other enterprise raw material problems were ranked among the top three by at least one-quarter to one-third of the proprietors. The situation is even more serious among upholsterers, shoemakers, tailors and the larger woodwork enterprises, all of which depend on imported material for at least one key ingredient in their input mix.

The survey did not include questions related to the proportion of imports in the input mix, for it was recognized that proprietors may have difficulty in distinguishing between imported and non-imported inputs. Yet it would not be

Table 22

Percentage of Proprietors (by Enterprise Type) Who Consider
Raw Materials Among the Top Three Problems

Enterprise Types	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Tailors	26.5	38.5	38.5	35.5	34.9
Dressmakers	14.3	30.0	17.2	28.3	27.0
Shoemakers	50.0	55.6	41.7	31.3	36.5
Woodwork	19.0	36.4	30.8	28.6	27.5
Auto Repair	18.8	22.2	20.0	40.0	26.6
Metal Work	23.1	30.8	30.8	----	29.6
Straw Work	----	----	----	5.4	5.4
Upholstery	40.0	100.0	14.3	100.0	59.4
Wood Carving	16.7	28.6	50.0	33.3	30.6

Source: Phase II Survey Data, 1979

difficult, in general, to identify essential input mixes without asking the proprietors. Enterprises such as tailoring, dressmaking, garages, metal working, upholstering and part of the shoe industry use mainly imported materials. On the other hand, craft industries (which account for close to 30% of the manufacturing sector) and a proportion of the wood business use mostly indigenous raw materials. Aside from these major enterprises, others such as bakeries depend totally on imported raw materials and as a result were hard pressed during the 1979-80 period.

5.2. Production Techniques and Problems

Detailed analyses of factor intensity, productivity and alternative production techniques cannot be treated in this report; this data will be forthcoming in our Phase III survey. Additional information that would be useful in investigating production techniques might include case studies on the physical layout of the plant and its effect on time and motion-related efficiency. Given the available data, problems related to machinery and sources of power will be emphasized here.

5.2.1. Production Line

Specialization in its strictest sense does not exist in the small scale manufacturing sector in Jamaica. Many proprietors produce a diversity of products and also repair old ones. Occasionally some may even carry a retail store on the side. For example, a person who repairs household appliances may also sell new ones; a person who operates a metal work enterprise may produce furniture, construction materials, and car body pieces, and even manage a repair service as well. Similarly, a worker in leather produces bags, sandals, belts, boots, and saddle straps and also repairs many items. Repair services may arise in part because proprietors

face a low level of demand for a given new product, and in part because they are attempting to make more efficient use of scraps or test new products.

5.2.2. Mechanization

It is commonly accepted that small scale manufacturing enterprises are labor intensive. Data are presented in Davies et al. (1979) concerning the kinds of machinery used in the SSE's and their relationship to the work force.

Table 8 of this report shows that problems related to the high cost or unavailability of new machinery and spare parts comprise the fourth most crucial problem nationally. Except for the E.D.'s, most proprietors in the remaining locations rank the problem in third place. The question becomes more serious as one moves to the urban areas, reflecting the intensity of mechanization. The most crucial problem becomes the unavailability of machinery spare parts. The demand for new machines is not as serious as the demand for spare parts. Some of the demand for spare parts comes from using machines which are very old or inefficient by present standards.

5.2.3. Sources of Power

Forty percent of the small scale manufacturing enterprises questioned used only manual power in the production process. Electricity from the Jamaica Public Service Company (JPS) was the next most important power sources, providing power for just under 30% of the enterprises, followed by wood, which was the power sources for one-quarter of the enterprises. The general picture is shown in Table 23.

The data, when disaggregated spatially, provide very interesting variations in the pattern of power sources used. In Kingston, electricity

Table 23
Percentage of Enterprises Using Various Power Sources in Each Location

Power Source	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
Electricity	81.1	55.8	52.4	14.7	29.0
Electricity and Gas	----	6.3	4.3	0.8	4.3
Kerosene and/or Diesel	0.6	----	3.0	3.7	2.8
Wood	----	4.2	1.2	33.2	24.4
Others	6.1	8.4	3.1	1.2	2.7
Manual	12.2	25.3	36.0	46.4	39.8
TOTALS	100.0	100.0	100.0	100.0	100.0

Source: Phase II Survey Data, 1979

provides power for over 80% of enterprises, "manual" or "other" account for just under one-fifth of the power used, and wood is not used. Wood is also of limited significance in both the Major and the Rural Towns, where electricity accounts for just about 60% of the power used. The categories "manual" and "other" account for 40% and 46% in the Major and Rural Towns respectively.

The E.D.'s display a totally different picture from the urban areas; wood is the power source for one-third of the establishments and "manual" for nearly one-half. Therefore, the combination of wood and "manual" provides the power for four-fifths of the small scale manufacturing enterprises in the E.D.'s, with electricity, the major power source elsewhere, accounting for only 15% of establishments in these locations. The large number of establishments in the E.D.'s influences the distribution of power usage in that, despite the relative unimportance of electricity as a power source here, E.D.'s still contain as many establishments using electricity as does Kingston. The E.D.'s dominate in all other major categories and account for virtually all establishments using wood.

The fact that less than 30% of all manufacturers utilize power from the public power supply raises interesting questions about the potential role of small scale enterprises in the industrial development of the country. Either the overwhelming majority of small businesses is involved in production activities which are inherently manual, or these businesses are utilizing inefficient technologies where more modern ones exist. In either case, the question of whether the sector should be helped to develop and expand must be raised and justified vis-a-vis other development priorities.

Several problems must be addressed simultaneously. The first is whether public power sources should be made available, if this is the constraint. If

so, the next problem concerns the need to train proprietors and workers in new production techniques, utilizing power machines. Finally, there would be the question of financing the purchase of these machines -- a process which must be justified in terms of increased market sources.

Problems related to electricity (and water) were included in the general problem area labeled "utility" in Table 8. Few of those surveyed regarded sources of power as a major problem. For those citing it, the main complaint was that costs were rising fast. Evidence later showed that many of them were trying to cut electric use. For example, tailors were pedaling their sewing machines instead of using electricity, and working primarily during the day in order to reduce electricity consumption at night.

VI. MANAGERIAL CHARACTERISTICS AND PRACTICES

Management capabilities and techniques is a complex topic and our treatment of it is somewhat cursory. We will first discuss the formal and informal training background of the proprietor, the level of bookkeeping and business performance analysis, and information needs and sources; we will then comment briefly on marketing and personnel management.

6.1. Educational Level

It has been shown that those with higher levels of education are not necessarily better managers in the SSE sector. Chuta and Liedholm (1979) found this to be the case in Sierra Leone. But it is true that the ability to read, write and work out basic mathematical problems enhances one's potential ability to carry out improved managerial practices.

Information by educational level among the different locations is shown in Table 24. Almost all of the proprietors had primary or secondary level education, with about 2% (most of whom are found in the E.D.'s) having no education and another 2%, mostly outside the E.D.'s, having some post-secondary education. The data also show that when only those who have actually finished the highest grade in any level are considered, there is a big difference between the E.D.'s and the other locations. Only about one-third of those who are in primary education finished this level in the E.D.'s as compared with 63% or more for the other locations. Of those who have actually finished the secondary level, the rate is four times as many (about 8%) for the other locations as compared with the E.D.'s.

Table 24

Classification of Proprietors by Highest Level of Education Attended
(Percentage)

Educational Level*	Population Size Strata				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
No Education	0.6	1.0	----	2.7	2.1
Primary	77.2	73.5	70.5	79.2	77.8
Secondary	17.2	25.5	25.3	17.0	18.3
Tertiary	5.0	----	4.2	1.1	1.8
Totals	100.0	100.0	100.0	100.0	100.0

Source: Phase II Survey, 1979

*Note, at the national level more than one-half of the proprietors (53%) have actually finished the highest grade in the primary level although they have not attended any level beyond it. The corresponding figure for those who have finished the highest grade in the secondary level (but are still classified as attending this level) is 3.2%.

Some proprietors had been trained at agricultural and teacher-training colleges and others had gone through the University. For those who had at most only 3 years of education, 4.1% were from Kingston, 5.1% from the Major Towns, 7.0% were from Rural Towns, and 16.0% were from the E.D.'s. Hence, education among proprietors rises as one moves to the more urban areas.

At the individual enterprise level, proprietors in woodworking and auto repairs show a slight edge in higher achievement over tailors, dress-makers, shoemakers and craft workers. Among the ten or so major enterprise types, shoemakers have the lowest percentage of proprietors with secondary education while auto repair people have the highest.

With 96% of them having been through the primary or secondary levels, SSE proprietors have a higher level of education than the general public, which has a corresponding figure of 84% (see Department of Statistics, 1978). The difference between the two groups is even greater for those who have finished secondary level education -- 18% for the SSE proprietors and 8% for the general public.

6.2. Participation in Seminars and Vocational Training

Nearly two-thirds of the proprietors said that they had some kind of vocational training (Table 25), a surprisingly high percentage. However, a large number of the proprietors may have been trained under an apprenticeship type of arrangement without pay -- a partial explanation, perhaps, for the high percentage of persons with vocational training. For example, some technical high schools in Jamaica have an arrangement with some businesses whereby students are allowed to work briefly for training before they graduate.

Table 25
 Classification of Proprietors by Participation in Vocational Training and Seminars
 (Percentage)

Participation	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
1. Vocational Training	79.9	44.9	46.3	64.8	63.9
2. Seminar Attended	14.4	11.2	11.4	6.0	7.9
a. Production Techniques	78.6	81.8	100.0	100.0	96.2
b. Management	17.9	9.1	----	----	2.8
c. Other topics	3.6	9.1	----	----	1.0

Source: Phase II Survey Data, 1979

Table 25 shows that nationally, the percentage of proprietors who attended seminars is about 8%. The level of participation rises as one moves to the more urban areas. Almost all of the proprietors who attended seminars did so to learn something about production techniques in their line of trade. Subjects ranged from learning how a new machine works to getting information on what one should produce for export. It is interesting to note that proprietors in the Rural Towns and the E.D.'s participated in production seminars only, while those in the urban areas (Kingston and the Major Towns) attended seminars dealing with production, management, and other topics as well. Thus, in Kingston more than one-fifth of the proprietors attended seminars which focused on topics other than production techniques. Management seminars, for example, included bookkeeping, personnel management and marketing strategy. The difference in subject emphasis between the urban and rural locations may be due to the size differences among enterprises. The bigger the enterprise, the more important become features other than production techniques.

As the ages of proprietors rise, their level of participation in seminars falls markedly in the two rural areas (and hence at the national level, too). Thus, for those 30 years or younger, the levels of participation in the Rural Towns and E.D.'s were 22.2% and 17.1%, respectively; for those 31 to 40 years old and for those above 40 years, the corresponding proportions were 4.4% and 7.0% and 10.5% and 2.6% respectively. In the two urban locations, however, little difference exists, if any at all; the 31 to 40 year age category has slightly higher rates -- 21.1% for Kingston and 12.9% for the Major Towns. At the national level, about 17% of those 30 years or younger attended seminars, while proprietors in the higher age categories participated at rates of 8.9% and 4.5% respectively.

The data reveal a direct relationship between seminar attendance and the level of education. For example, outside the E.D.'s the percentage of proprietors with post-secondary education who have attended seminars is more than 40%. The relationship is much less marked in the E.D.'s. And except for the proprietors with secondary education in the Rural Towns, higher levels of education in all other locations are directly associated with higher levels of seminar attendance.

At the individual enterprise level, there are some differences. Metal work proprietors show the highest level of attendance followed by proprietors in auto repairs, tailoring, woodworking and dressmaking, in that order. Shoemakers show the poorest attendance.

6.3. Information Needs and Sources

In order to increase proprietors' awareness of improved techniques of production as well as new business trends, it is useful to know not only what types of business information proprietors need but also their present source of this information. Since acquiring information has a cost, providing it to those who can least afford it has an implication for the growth and development of the sector.

In the survey, proprietors were asked to indicate the most vital types of information needed on a continuing basis to run their businesses effectively. This information is shown in Table 26. While proprietors could mention as many types of information as they felt were important, most mentioned only one; the average was less than 1.2 in all the areas.

Proprietors were also asked to indicate their chief source of information; Table 27 shows the results of this inquiry. Again, the average number of sources of information per proprietor was less than 1.2.

Table 26

Classification of Proprietors by Expressed Information Needs
(Percentage)

Information Type*	Location			
	Kingston	Major Towns	Rural Towns	E.D.'s
Product Market	27.6	13.7	25.0	60.7
Raw Material	37.4	58.9	43.8	29.8
Financial Aid	11.5	1.1	12.5	6.1
Production Type or Technique	2.9	4.2	3.1	7.6
Machinery/Parts	9.2	6.3	8.8	1.1
Management	5.2	1.1	1.2	3.0
Other Topics	2.9	3.2	1.2	1.1
None	19.0	12.6	13.8	6.5
				50.5
				33.7
				7.1
				6.4
				3.1
				3.0
				1.5
				9.1

Source: Phase II Survey Data, 1979

*The average number of information-type needs per proprietor in Kingston, Major Towns, Rural Towns and the E.D.s were respectively 1.2, 1.0, 1.1 and 1.2.

6.3.1. Information Needs

At the national level, one-half of all proprietors regarded product market information as the single most important need -- a concern consistent with the demand constraints faced by the small industrial enterprise sector (SSE). It was pointed out earlier that close to 40% of the proprietors pinpointed lack of adequate demand for their products as the single most critical problem they faced, and two-thirds of them put it among the top three problems. This problem results primarily, of course, from the declining real income level of the average Jamaican over the last few years. Thus, as consumers' purchasing power shrinks, proprietors must spend more time searching for styles, trends and markets. It is not surprising, therefore, that the small proprietor's chief source of competition comes from other small proprietors (see Table 13).

Information concerning lower prices and/or the availability of raw materials was the second most important need mentioned by one-third of the proprietors. A distant third was information about financial aid or credit, followed closely by information about techniques/types of production. Few proprietors mentioned information about prices, availability of spare parts/machinery, and management techniques. About 9% of the proprietors stated that they had no particular or pressing information need.

Some differences exist at the locational level. In the E.D.'s 60% of the proprietors mentioned that information about demand is the number one item of importance; the highest corresponding figure in any other locations is only 28% for Kingston. In locations other than the E.D.'s, information about raw materials is the most dominant need.

Information about production techniques/types is again more important in the E.D.'s than in the other locations; yet the reverse is true for

information on machinery and parts availability. The likely explanation is that as one moves to the most rural areas, production is more labor intensive and as a result there may be relatively higher percentages of proprietors who want to know about new techniques of production. In the urban areas, however, proprietors already know or have access to the new techniques of production and thus their interest lies in finding ways to obtain and finance the machines and parts to be used in this technique.

At the enterprise group level, in all the locations except the E.D.'s it is the search for raw materials and obtaining them at a reasonable price which is the most important need. This holds for all the groups in Kingston except crafts and metal works; even in the latter, the problem ranks second. In the Major Towns it holds for all enterprise groups except food, where information on techniques of production is the most important need. It also holds true for all the enterprise groups in the Rural Towns. In the E.D.'s, however, information about demand or product market is the most important need for all enterprise groups -- except auto repair and foods enterprises, which again have the need for information on raw materials in first place.

The age (business experience) and educational background of the proprietor appear unrelated to information needs and level of utilization. Both in the age and education level categories given in Table 1 and 24, the ranking of information needs remains, for the most part, the same as that shown in Table 26. Product market information is the number one need -- with a percentage very close to 50 -- at the national level in all age and educational level categories. Raw material information is second in all categories (except at the tertiary educational level) for both age and education, with a percentage close to 30 -- again as in Table 26.

At the post-secondary or tertiary level of education, production techniques rank second instead of raw materials, which rank third. The locational variation in ranking information needs for both product market and raw materials is almost identical to that shown in Table 26.

Nationally, the relative importance of the information needs listed in Table 26 is dependent on the prevailing economic situation. If the economy were on the upswing, it is likely that the search for new production techniques would dominate product market investigation. But given the economic constraints that Jamaica now faces, it is inevitable that shrinking demand and raw material shortages predominate. It would be interesting to see how information needs on short-term loans, production, and management techniques would be ranked under less restrictive economic situations. These variables are important because, for long-term development policies, they are the variables which are usually given priority attention in the short run in order to enhance the effectiveness of the small enterprises. More than anything else, programs incorporating such variables are chosen because of their cost effectiveness vis-a-vis limited public funds and the relative ease with which they can be administered.

6.3.2. Information Sources

Table 27 shows proprietors' information sources for the types of information needed. Less than 15% of the proprietors indicated more than one chief source for any single need.

Nationally, more than one-third of the proprietors mentioned friends as a source of vital information; friends were especially important in the E.D.'s. The second most important source of information was business people and this source increases in importance as one moves to the less urban areas. These business people are chiefly other small proprietors.

Table 27
Classification of Proprietors' Sources of Information Received
(Percentage)

Information Source	Location			
	Kingston	Major Towns	Rural Towns	E.D.'s
Friends	25.5	31.4	18.9	42.5
Other Proprietors ¹	14.2	15.7	21.0	22.0
Purchasers ²	19.9	8.5	20.3	15.1
Own Effort	8.5	15.7	37.6	13.5
Suppliers ³	21.2	30.1	13.0	10.6
Media	23.4	8.5	8.7	9.0
Government Organizations	2.8	2.4	2.9	2.5
				37.6
				20.5
				15.8
				14.2
				13.3
				10.8
				2.6

Source: Phase II Survey Data, 1979

¹Small (16.6% at the national level) and large business proprietors (3.9%)

²Distributors (3.9%) and individual customers (11.9%)

³Including brochures (8.6%)

(In fact, six times as many proprietors mentioned owners of other small businesses rather than large businesses as a major source of information.) The next three major sources of information were customers or distributors, suppliers and the media. Of these, customers were the most significant source (16%), followed by suppliers (13%) and the media (11%). Customers are equally important in all areas. Finally, government agencies or organizations are cited as a source by an insignificant percentage, and about one-seventh of the respondents said they relied mainly on their own efforts and experience for whatever information they needed.

In order to understand the roles of the different sources of information, it is useful to relate different sources to the types of information required. Table 28 shows this information for Kingston and the E.D.'s, the two locations of greatest contrast. Friends, for instance, are sources of information for everything but production techniques in the E.D.'s. In Kingston, they are important for obtaining information on product market and/or prices, and on different techniques of production and types of products.

Who are these friends? They may be people working in bigger enterprises who are willing to share their experience with a small proprietor; they may be people who make frequent (business) visits to other small or large enterprises and thus serve as inter-business carriers of information about sales, trends, styles, and availability of materials. It is very common to walk into a small enterprise workshop in Jamaica and find people ("friends") who, without seriously interrupting the owner from his job, are chatting with him about different topics. In many instances, friends are exchanging views with an eye to their own vested interests as potential small proprietors.

The source "media" refers to newspapers, radio and television. As would be expected, this source is much more important in Kingston than in

Table 28

Classification of Proprietors by Type of Information Needed and Where Information Received -- for Kingston and the E.D.'s (Percentage)

Information Type	Sources of Information						
	Friends	Media	Customers	Suppliers	Other Proprietors	Own Effort	Government Organization
1. Product Market Kingston E.Ds.	39.6 40.9	27.1 5.0	12.5 10.1	20.8 12.6	8.3 23.9	12.5 15.1	--- 1.9
2. Raw Materials Kingston E.Ds.	7.7 59.0	18.5 12.8	30.8 15.4	26.2 7.7	12.3 17.9	1.5 9.0	1.5 1.3
3. Credit Kingston E.Ds.	20.0 56.2	80.0 6.2	--- 12.5	15.0 37.5	20.0 25.0	5.0 43.8	15.0 18.8
4. Machinery/Parts Kingston E.Ds.	--- 33.3	--- ---	31.2 33.3	25.0 ---	31.2 33.3	--- ---	--- ---
5. Management Kingston E.Ds.	22.2 62.5	33.3 12.5	22.2 25.0	11.1 ---	11.1 12.5	--- 12.5	--- ---
6. Production Techniques Kingston E.Ds.	40.0 10.0	60.0 ---	20.0 5.0	20.0 12.0	20.0 5.0	--- 10.0	--- ---

Source: Phase II Survey Data, 1979

the E.D.'s. Ownership of any type of media is probably limited by one's income level; however, the practice of sharing use of these services allows greater access to the source than the rate of ownership indicates. In Kingston, media sources are important in providing information about financial aids and production techniques.

Proprietors receive some information from customers, i.e., distributors and individual purchasers, because the latter in many instances bring along their own raw materials, particularly fabrics, and in sub-contract arrangements, distributors often share with the proprietor their own ideas and information concerning the types of products produced and the materials used to produce them.

"Suppliers" refers to those providing or willing to provide materials, parts and machines -- with or without brochures. The high percentage of proprietors applying for credit in the E.D.'s is probably due to the fact that public financial agencies (e.g., SEDCO) advertise themselves through brochures and radio announcements. Otherwise, proprietors in the E.D.'s get very little information from suppliers or from the media, as evidenced by the fact that the E.D.'s consistently show a higher percentage of personal experience and effort as a main source of business information.

More information sharing appears among small proprietors in the rural areas than in the urban areas, particularly information concerning availability (and prices) of machines/parts, credit and product prices. Such sharing of information is not inconsistent with what was said concerning other small business proprietors as the main source of competition, since information sharing takes place primarily among friends.

6.4. Record Keeping and Business Analysis

Keeping systematic business records and using them periodically in business analysis is a vital practice in almost all modern firms. To determine the importance of record keeping in the SSE sector, proprietors were asked what kinds of records they kept and how they used them. (No physical examination of the records was requested, but it was explained to the respondents that "systematic record keeping allows an effective 'profit and loss' analysis of the business." A more in-depth study of managerial practices, including types of records kept, proprietors understanding of costs, business analysis and profit is found in Fisseha [1981].) Table 29 shows that at the national level about one-tenth of the proprietors said they do keep records -- a percentage very close to the 9% found in the initial enumeration of 3,500 manufacturing enterprises in the Phase I study. The level of record keeping over all enterprises rises from 4% in the E.D.'s to 29% in Kingston. However, the most convincing conclusion we can draw from this Table is that in the small scale enterprise sector, the size of the enterprise may be the most important factor determining whether records are kept or not. In the Phase I report at the national level, for example, foods and "other manufacturing" categories show a high proportion (47% and 26% respectively) of record keeping. The proportions for wearing apparel and especially crafts were, of course, very low. Record keeping by enterprise group at the national level and the corresponding enterprise size categories are given also in Tables 6 and 1 respectively of that report.

The information also shows a strong positive correlation between record keeping and level of education, to the extent that in all the locations the rate of record keeping in one level is nearly twice as great as the level

Table 29
Classification of Proprietors by Record Keeping Practice
(Percentage)

Number (Size) of the Work Force	Percent Keeping Records				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
1 person	9.5	3.8	3.9	1.4	2.8
2-3 people	17.7	13.3	13.6	8.8	10.6
4-5 people	33.3	43.8	30.4	27.3	29.3
6-10 people	58.1	47.1	56.3	0.0	15.3
11-20 people	80.0	85.7	100.0	100.0	96.6
above 20 people	50.0	-----	100.0	-----	70.0
Over All Sizes	29.4	27.1	18.9	3.8	9.8

Source: Phase II Survey Data, 1979

just below it. Within each of the three education levels, i.e., primary secondary, and tertiary, the national percentages of proprietors who keep records are 6.7%, 17.1%, and 40.3% respectively. The rate of record keeping within each level of education goes consistently higher as one moves to the more urban areas. For example, at the primary level, it is 2% for the E.D.'s but 23% for Kingston; the corresponding figures for the secondary and tertiary levels are 8.9% and 45.2% and 33.3% and 77.8% respectively. Fisseha (1981) probes deeper into this issue in his managerial questionnaire.

This high relationship tends to overshadow other important factors besides level of education that determine whether a person keeps records or not.¹⁷ The information shows that younger proprietors are slightly more disposed to keeping records than the older ones, perhaps because younger proprietors are more likely to have higher education. A much higher proportion of the proprietors who borrowed money from the commercial banks to start the business said they keep records. These rates were 69%, 80%, and 85% respectively for the Rural Towns, the Major Towns, and Kingston. The form of business ownership also has an influence on record keeping, with partnerships and limited liability ownership showing higher percentages. Not size alone but the need for equitable sharing of costs and benefits among partners and the legal incorporation requirement (and thus tax liability) are also compelling reasons to keep records in these types of ownership.

In an attempt to gauge the minimum percentage of proprietors who keep some acceptable system of record keeping, we tried to find out if their books

¹⁷ Obviously, there is almost a one-to-one relationship between the existence of record keeping in a SSE and the proprietor's personal ability to keep such records if the size of the enterprise does not warrant the employment of a professional bookkeeper or accountant. Family members such as children with some education could help but facts indicate that such is not the case.

were formally audited by an outside person. Just over one-third of those who keep records answered yes; this percentage is close to 50% in each of the locations save the E.D.'s, where it is only 30%. This implies that only 3.5% of the small scale enterprises in Jamaica keep records which are audited. In any case, the auditor here is sometimes the income tax assessor, and proprietors would be highly selective about the type and extent of the information recorded.

One important use of records would be to identify areas of business weaknesses and strengths and accordingly take the necessary steps to increase management efficiency. While it is not clear whether the proprietors use their records for this purpose, close to three-fourths of those who keep records said they try to find out periodically whether they are making money or not. The remaining one-fourth said they make no periodic evaluations at all. The frequency varies from once a week to once a year, or only when unusual circumstances require it.

Since a higher degree of business analysis is also associated with higher levels of education, record keeping (among other variables) has to be held constant to see whether education affects frequency of analysis. Hence, the rate of business analysis was examined among only those who keep records. At the national level, the percentages of proprietors who analyzed their business at least once a month for the three levels of education, i.e., primary, secondary and tertiary, were 18.9%, 19.7%, and 14.5% respectively. The corresponding figures among all proprietors were 59%, 68%, and 73%. Thus, it seems that for the rate of business performance analysis, the level of education is not as important as whether a proprietor keeps records or not. In fact, depending on the enterprise size and level of analysis carried out, it is not absolutely necessary for all proprietors

in the small scale enterprises to be educated or even keep records to periodically find out about their business. And it is very important that the value of record keeping or education to the small enterprise proprietor is placed in proper perspective by examining all the economics involved. Fisseha (1981) found that a large majority of the proprietors said that they knew how to keep records of their transactions but did not do so because "it is not worth it."

As a whole, close to 40% of all the enterprises make no periodic evaluation at all. Of those that do, about one-quarter, make an evaluation once a month. The next two important frequencies are once a year and once every two weeks.

At the enterprise type level, close to one-half of those in straw work and upholstery as well as more than 40% of those in dressmaking and shoemaking do not make any periodic analysis. The corresponding figures for tailoring and woodworking is about one-third for each, while for auto repair and woodcarving it is about one-fourth. The lowest figure is for metal works with only 6%.

6.5. Personnel Management

Attempts were made in the survey to find out from those who hire workers what practices they use to encourage worker productivity. The information is given in Table 30. Although one-person establishments dominate the overall picture, there is great variation between the locations. In Kingston and the Major Towns, between one-fourth and one-fifth of the enterprises are one-person establishments, whereas the corresponding figures for the Rural Towns and the E.D.'s, where many of the small enterprises are located, are about 47% and 82% respectively (see Table 6). In fact, the average number

Table 30
Classification of Proprietors by Productivity Enhancement Practices Used
(Percentage)

Practices*	Location				
	Kingston	Major Towns	Rural Towns	E.D.'s	Jamaica
1. Close Supervision	39.6	28.6	33.0	37.0	34.2
2. Job (task) Work	34.7	31.2	30.9	24.1	31.8
3. Financial Remuneration	28.5	26.0	25.5	42.6	28.1
4. Work Study	4.2	6.5	8.5	13.0	6.7
5. Overtime Work	1.4	----	----	----	0.5
6. Other Means	5.6	6.5	10.6	9.0	7.4
7. None	9.7	31.2	18.1	16.7	19.4

Source: Phase II Survey Data, 1979

*Due to multiple practices within the same enterprise, percentages don't add up to 100. The percentages are among those with work force ≥ 2 and weights have been accordingly adjusted.

of workers per enterprise is 4 in Kingston and 3 in the Major Towns. Thus worker management is an important concern of many proprietors in the SSE sector. It must be noted, however, that while the topic is presented here in terms of enhancing worker productivity, worker management is much broader than that.

At the national level, the two most important practices employed to enhance productivity are close supervision of the worker and paying him on a piecework or job work basis. Each practice was mentioned by one-third of the proprietors, while financial remuneration such as bonuses was mentioned by 28%. A single enterprise could, of course, use any combination of these practices and, as a result, the percentages do not total to 100.

Thus, workers are not only paid by the amount of items (work) they produce but they are also closely supervised for quality work. For this reason and the need to use the master tradesman's tools, almost all workers carry out their jobs on the premises. Given the higher level of competition which currently exists in the SSE product market, close supervision is critically important. For the same reason, workers are most commonly paid on a piecework basis rather than as salaried employees.

Financial remuneration includes regular salary increments and/or conditional take home pay increments ("profit" sharing), which is dependent on the amount of sales transacted for the day or the week. This particular practice is most prevalent in the E.D.'s.

Work study is the fourth most important management practice, at 67%. Under work study the worker is paid to attend formal school for a certain number of hours per week, or a determined effort is made to teach him the trade on the job.

Overtime work payments are very insignificant, which is not surprising given the importance of job work types of arrangement. Finally, there are other means of encouragement such as letting the worker repair his own items or creating a close (almost family-like) relationship between the proprietor and the worker. Close to 17% of the proprietors at the national level also said that they do nothing to encourage productivity among the workers. This response does not seem to follow any given pattern when those answering are placed in various population size categories (locations). Yet the percentage is almost twice as high in the E.D.'s as in Kingston, the two locations of greatest contrast. Such an attitude may not be a sign of weakness or carelessness on the part of the proprietor but may be a measure of the trust he has for the worker.

VII. SUMMARY AND RECOMMENDATIONS

The results of our research indicate that the small scale manufacturing sector in Jamaica employs more than 30,000 people, thus accounting for 40% of the total employment in manufacturing during the 1977-78 period. Furthermore, the share of employment for the small scale sector may have increased since then as a result of the economic difficulties the country has faced and the resultant squeeze on employment opportunities in other sectors more dependent on imported materials and hence less capable of withstanding the foreign exchange shortage.

Although differences can always be attributed to variation in location and enterprise type, the small scale manufacturing sector in Jamaica can be described in the following general terms. The proprietors are evenly divided between females and males and have the following characteristics: the average age is a little over 40 years; those who are "legally" married and those living singly each account for about 40% and the average number of children is 4 and their average number of dependents is 5. As one moves from the Rural E.D.'s to the more urban areas, proprietors are younger, have fewer children, and are more likely to be single and male.

The average enterprise is about 13 years old, was started by the current sole proprietor and has a work force of just over 2. The work force is split, with one-third female and two-thirds male; their respective average ages are about 26 and 29 years. Again as one moves to the more urban areas, the average enterprise is younger, larger, and more capital-intensive. The

average financial investment per enterprise was about J\$1,400, 90 % of which came from personal savings and the rest from various loan sources.

Reflecting its interdependence with the remaining sectors in the economy, the small scale manufacturing sector in Jamaica has currently encountered rough times. The most serious problems, in order of importance and as of the beginning of 1979, are inadequate financial resources (cash), depressed product demand, raw material shortages, lack of adequate transportation, shortage of machinery and parts, inadequate and expensive supplies of fuel and utilities and, finally, possible management weaknesses.

These problems vary by location and enterprise type. Shortages of working capital are common to all proprietors except craft makers in rural areas who use raw materials, e.g., straw, sisal and coir, from their immediate surroundings. Proprietors such as dressmakers, tailors, craft workers, shoemakers and in some cases metal workers were all hard hit by shrinking demand. Raw material shortages had not become a serious problem in 1979 except in woodworking, dressmaking and shoe and upholstery production. But in many cases what is termed a financial problem could be a proxy for raw material shortages. By intensive use of second hand parts and old machinery, proprietors have tried to cope with many fixed capital repair and replacement problems. Transportation is a problem for enterprises such as straw work that are located in remote places, and for those involved in woodwork, which requires transportation of bulky materials such as lumber.

7.1. General Policy Approaches to Problem Areas

Before any meaningful attempt is made to tackle some of these problems, it is necessary to put them in their proper context. There are several ways to approach them:

1. They can be examined from a macro (national) or micro (individual enterprise) point of view;
2. They can be considered in terms of short- or long-term solutions;
3. They can be assessed in terms of the proprietor's capabilities and limits in handling them;
4. And finally, they can be viewed in terms of resources and outside expertise available to help in finding solutions.

In reviewing the problems, we see that some are of a macro-type and require long-term solutions, thus placing them pretty well outside the realm of resources and influences of individual agencies. Others are of a short-term nature and require solutions which may be outside the capability of the proprietor but which can be solved with the help of development, financial or administrative agencies. These are the problems where program-oriented approaches may both produce tangible solutions and be cost effective.

In order to identify specific feasible programs of intervention in the major problem areas, we will first look at the possible solutions for each problem and where appropriate we will make some recommendations. We will begin with those problems which are least amenable, and then move on to discuss those which are progressively more suitable for intervention by a department or agency, taking it for granted that, except in an instance of managerial ingenuity and experience, the individual proprietor is incapable of dealing with these problems.

7.2. Short-Term Recommendations

The first problem deals with the lack of an import license, dependable and affordable utility services, and satisfactory supplies of fuel and transportation facilities. These are national problems that are difficult

to treat only in terms of the small scale enterprise sector. Occasionally acute problems of this nature that are encountered in the SSEs could be indirectly handled by means of credit extension. Policy bias against the small scale manufacturing sector in these problem areas should be eliminated, for instance, by lowering the rates at which industry is charged for electricity.

Another problem area where an agency or department may find its contribution minimal is general shortage of product demand. Demand problems arise from a number of causes. A product may be priced out of the reach of the general clientele; the clientele may have a stagnant or declining purchasing power; or the product may be obsolete (or inferior). In all of these cases there is not much an institution can do, except in an isolated case where the high price is caused by a shortage of imports used as key inputs. However, the demand problem differs somewhat from those discussed above in that lack of demand is usually location specific and this situation could be improved by providing entrepreneurs with information on domestic and external markets.

Problems related to shortages of raw materials and machinery or equipment could be offset somewhat by implementing simultaneous programs of research and education that would lead, hopefully to the discovery of substitutes. For example, we have met people who can ingeniously construct all the components, except the motor, of specialized machines. On a more general level, an attempt was made by the National Planning Agency to interest some of the major manufacturing firms in making spare parts for departments in the public sector. These firms, particularly those which had gained experience in the sugar and bauxite/aluminum industries, demonstrated the ability to produce a variety of commonly used parts. But the problem as explained by these firms was that the necessary information flow between them

and potential clients did not exist. If such is the case with major manufacturing organizations, it can be deduced that the ignorance is even greater when we consider small manufacturers in the Rural Areas or E.D.'s.

7.2.1. Issues Related to Management

The next two problem areas that must be examined carefully are those dealing with weaknesses and inefficiency in management and those related to financial constraints. We feel that these two major problem areas are amenable to program-oriented approaches, both as a cost effective measure and perhaps as a way to partially tackle the other problem areas as well.

Proprietors of small scale enterprises (SSE) do not usually perceive their management weaknesses and deficiencies, in which case such inadequacies must carefully be detected and interpreted from the managerial practices, personal attributes or convictions of the managers, and the ultimate financial gains or losses of the business. (The Phase II report contains insufficient information to reveal areas of weakness and strength in management practices. Such information will be forthcoming from the financial and administrative data of the Phase III survey.)

For reasons such as those given above, the task of helping proprietors to improve their management capabilities (practices) is obviously a very difficult and complex one. One has to identify specific weaknesses, find possible solutions for them and then communicate them to the proprietors individually. For example, some easily detectable inefficiencies could be discovered in workshop layout, input purchasing habits, resource usage, marketing policy, etc. Others may be much more complex and require prolonged review of each problem area with each individual proprietor. The improvement of management practices could be undertaken by development (or financial)

agencies willing to do the job. Financial institutions, for example, could be encouraged to provide a more structured program of management advice as a component of credit programs. Potential borrowers would, upon application, undergo a thorough review of management capabilities and practices, and advice would be rendered accordingly. Thus, the credit would not only be objectively rationalized, but certain pitfalls in management could be discovered early. We distinguish between this approach and that of supervised credit, which could end up removing the decision-making role of the proprietor.

Seminars and group meetings can also be useful. But unless specific issues are discussed with the individual proprietors, meetings may be of limited value in that they increase the proprietor's general awareness but may not go very far in terms of solving a concrete problem or adapting a specific technique. For any advice on a specific issue to be effective, it is necessary to have close and continuous interaction between the change agency and the proprietor.

7.2.2. Financial Constraints

The report shows that problems related to shortages of finance, particularly working capital, are the most critical ones. A little over one-third of the proprietors rank it among the top three problems. A number of underlying problems could cause such shortages of financial resources. The most important ones are (1) declining demand, (2) rising costs and shortages of raw materials, and (3) inefficiency in management as it relates to production methods, input procurement habits, marketing policy and investment decisions. We believe the first two problems are the most crucial ones in our case.

Financial agencies could effectively contribute towards alleviating such financial constraints. Their past involvement is worthy of note: twenty percent of all the SSE proprietors applied to these institutions

for credit and 40% of the applications were successful. Such a record is certainly higher than that of many other developing countries. However, given the present situation in which many proprietors find themselves, the financial institutions must become more involved than before. The institutional structure of the credit sector is already in place and what is required is to make it more effective, more accessible to the small enterprises, and more appreciative of the specific problems proprietors face. The best way to do this would be to tackle the problems encountered in credit application and acquisition that were articulated by the proprietors themselves in this report.

In our study, we found that the most critical problem related to finance or credit was the collateral or security requirements of lending agencies. This was followed by the small size of a business, which made it highly unattractive for credit. The third important problem was the expensive process, in time and money, through which a potential borrower has to go, both to make a contact with a credit official and to process the application.

We consider the last problem first. The problem of expense, in time and money, could be partially resolved through an administrative clearing desk, where visits by prospective borrowers, particularly to public agencies, are promptly channeled to relevant personnel and thereafter monitored for any subsequent office or field contacts between a credit representative and a proprietor. Some proprietors have complained of delayed meetings and broken field appointments, a problem whose effects get worse the longer the distance a proprietor has to travel to apply. For this reason, contacts should not entirely be left up to individual credit officials. Another related move which may not so easily lend itself to short-term adjustments is for lending institutions, again the public ones, to open branch offices in a few central places outside Kingston.

The problem of limited business size is a difficult issue to handle. If it refers to genuine lack of business viability rather than physical smallness, then there is not much that one can do except look closely at the managerial aspects for areas of potential improvement that could justify credit worthiness. However, if it refers to a viable but small enterprise size, then one can justifiably argue that such small enterprises deserve some equitable share of the financial services.

Obviously, there are economies of scale to be reaped when a credit agency deals with a relatively large enterprise. For this reason, it is essential to have public credit agencies that would meet the needs of the very small enterprises, in general, and the supply of long-term credit funds, in particular, needs that would probably be by-passed by commercial institutions. While the need for efficient use of credit resources would be mandatory no matter what the credit source, public institutions would be able to handle the small time frame and goals which are different from those of the commercial institutions. From society's point of view, bigger enterprises do not necessarily imply a more efficient use of scarce resources.

Moreover, it is important that public agencies like SIFCO (see page 51) take on more of an extension-type role in order to provide information concerning markets, production techniques and aspects of management practices. Such agencies should also periodically collect information concerning problems, new opportunities and trends, and should then inform the government so that the necessary policy decisions can be taken in response to a changing environment.

As for the financial problems, we have only hinted at the peripheral issues. Giving prompt and careful attention to proprietors' problems and

giving the very small producers equal access to credit do not make the credit any more realizable than before. The basic question is: What can be done to relieve the cash problem proprietors are facing now? In general there are at least five major aspects of the whole problem of credit: (1) the availability of credit, (2) the conditions under which credit is made available, (3) the effectiveness of credit, (4) the servicing of credit and (5) the rationalization of credit.

The availability of credit depends on the loanable funds available, the number of people borrowing, the total amount loaned out and the rate at which old debts are being repaid. We are not aware if there is a shortage in the supply of loanable funds.

The conditionality of credit refers to safeguards taken by the lender to protect the loan; these include the amount and kind of collateral required, the requirement for matching funds, the application of restrictions on loan use and the participation in the use of credit (supervised credit). The most pervasive and critical problem mentioned by proprietors was the collateral requirement. Close to one-seventh of all proprietors and more than 40% of those who applied for credit found it a serious problem. The seriousness of the problem was felt regardless of whether the application was made to a commercial institution, a public one, or even to a private lender. The smaller the enterprise, the worse this problem becomes, which indicates that, at worst, the credit agencies find it unattractive to lend funds to the small proprietors and that at best, even when these agencies are willing to make the loan, the collateral requirements are so restrictive in the applicants' view that they, in turn, find it either impossible to meet the requirement or find it economically unattractive to accept the loan.

It would be unrealistic to ask financial agencies not to require some security for their loan investment. Certainly restricting loan uses and supervising them should be greatly discouraged; we found no instances of these two problems, by the way. We see no problem with requiring matching funds so long as it does not defeat the purpose by requiring unrealistically high proportions. Matching funds may make the applicant more discreet in his request and more careful in administering the funds.

One way of reducing the negative impact of unacceptable collateral structures would be to bring into the picture a third party, such as the central bank, a development bank or other agency that would partially underwrite the loan. Such a third party would lend its weight and resources to make the collateral requirement effectively valid for the creditor and more acceptable to the borrower. The creditor would be required to screen every application or loan as he would do any other financial transaction, carefully examining the economic viability of the credit and, hopefully, the long-term implications for the borrower. In the event of court-declared inability of the borrower to meet his debt obligation, the underwriting agency would pay the creditor a certain percentage of the outstanding balance, a portion that should be agreed upon in advance. Thus the credit agency, too, would have a stake in seeing that a loan is extended and administered in good faith, after a thorough screening of each application. The underwriting agency could reserve the right to ultimately collect the arrears when the borrower is in a position to be able to pay them. Such collection of arrears could be facilitated by using a public agency such as SIFCO, which already has its staff on the field. For this and other reasons, we do not believe any agency should play the dual role of both extending and guaranteeing credit. These two functions should be kept separate.

The long-term benefit of such a guaranteed loan arrangement is that it gives an opportunity for many of the capable SSE proprietors to gradually build and prove their individual credit worthiness, which will in turn result in more confidence being placed in the sector by new entrepreneurs and the financial institutions. On the other hand one would hope, of course, that these institutions would place more emphasis on the economic viability and cash flow potentials of the enterprises (see Chuta and Liedholm, 1979).

Even if a credit agency is guaranteed partial reimbursement of its funds, because it stands to lose the remaining percentage with a higher probability (because of the "riskiness" of the credit) and because of the high investigation cost involved, the agency still may not lend to the small proprietors. Thus it may be necessary to vary the incentives. For instance, the government could lend commercial banks some funds, at less than the going interest rate and stipulated for use by small manufacturing enterprises. (The use of commercial banks is suggested since they already have in place a network of institutions.) The difference between what the bank charges the borrower and what it pays to the government would then help to defray the cost of investigation. The interest rate that the government can charge will depend on the demand for such revolving funds. The purpose of these alternatives is not necessarily to bias credit extension in favor of small manufacturing enterprises and thus distort optimum factor relationships; rather the aim is to correct the bias existing against small enterprises which do not have the same degree of credit accessibility as the larger ones. On the other hand, a loan policy intended to buy capital items may have its potential capital favoring bias mitigated by working capital loans granted to pay or train workers in the same or other enterprises.

The third major aspect related to credit extension was its effectiveness. By this we mean that the loan must be big enough and available on time to accomplish the purpose for which it was intended. For this reason, it is important for a loan agency to investigate the timing and the real loan requirement level. An important fact which must constantly be borne in mind is that there are usually other related expenses which the proprietor must meet in order to make effective use of the loan and so the lending agency should ensure that there is sufficient funding to cover these. A person may need money to buy a machine but if he does not have enough cash to purchase the raw materials for the machine, then obtaining the loan may not have been a positive step; indeed, with loan repayment added to his other costs he may be worse off.

A fourth, and related issue is the servicing of credit, which includes the legal fees charged, the grace period granted and the repayment schedules and amounts agreed upon. In several instances, a potential borrower incurs so much in costs before he has received the loan that his cash position is adversely affected even after he gets the loan. This problem must be considered together with that of credit effectiveness and dealt with similarly. By extending the grace period and spacing repayment schedules carefully, a lending agency could help the proprietor escape a ruinous liquidity problem. It is pointless to burden the borrower with a loan which competes with other equally important obligations. Flexibility should be built into the system such that in times of severe business declines, debt servicing will be delayed or minimized. The initial emphasis should be not on getting the loan repaid, but on getting the enterprise in a position to generate enough income out of which loan repayments will be made. All of this will require a careful individual study of each enterprise to identify its capabilities and constraints.

In order to avoid a high default and arrears rate, credit agencies need to improve their ability to screen each application and examine the projected cash flows. This exercise becomes even more crucial in times when product demand is weak. The survey showed the tendency by the credit agencies to favor the larger enterprises over the smaller ones; with the proper policy measures, these institutions can be encouraged to lend smaller amounts so that they can also accommodate the smaller enterprises. By striking a realistic balance between the proprietor's need and debt servicing capability, banks can make it possible even for small loans to greatly relieve the cash constraint of many enterprises. In order to do so, not only the monthly loan repayment but the grace period, the total number of repayment periods and other terms of the loan must be looked at carefully. For example, a tailor who earns net J\$65.00 a week and wants to borrow J\$2,000 at 15% interest rate to be paid over 4 years, including a one year grace period, would be paying about \$80 per month to settle the debt (including a total of J\$871 for interest charge), or almost one-third of his monthly income. Unless there is a reason to believe that income will be greatly enhanced in that period, it won't help him in this case to increase the grace period to 2 years; doing so will increase both his monthly payment and his cumulative interest by 15% and 49% respectively. However, if the loan term is increased to 5 years and the payment period to 4 years, then the monthly payment drops by 20% to J\$64 and the total charge increases by only 23%. He may feel a little more comfortable paying one-quarter instead of one-third of his income to service the debt. Note that if the grace period had been increased to 2 years as well, his monthly repayment rate would have dropped by only 8% while the interest charge would have shot up by 76%. Increasing the grace period will be effective if a clear sign exists that there will be a working capital shortage in the first few years or that a higher income will be earned later in the period.

The fifth and final topic is the rationalization of credit, that is, the justification of extending credit on the basis of economic and equity criteria. Although the main thrust of our financial policy recommendations has been to mitigate against some inherent obstacles preventing SSE proprietors who are viable potential borrowers from getting loans, once these obstacles are removed, each business (large or small) should be judged for credit worthiness on its economic and social viability. Such a yardstick for measuring assistance needs should also apply in the context of regional, community or specific industry development projects.

There is always the temptation to "go easy" with public funds, both when they are loaned out and when they are to be collected or repaid. In a program like this, there may also be an element of subsidy in favor of the small scale manufacturing enterprise. But such a subsidy, while it could be justifiable as a developmental cost, should not continue indefinitely. We feel that those enterprises that have successfully obtained loans under the alternatives described earlier and have established good credit worthiness should not qualify again for preferential treatment.

Full information on the default rate or the extent of loan repayments in arrears is not available. But in its 1978 preliminary report to the Jamaican Government, a private auditing firm (Capleton Jones and Company) estimated that of J\$9,000,000 in outstanding loans, granted mainly by the Small Business Loan Board (SBLB), about 40% of them were deemed uncollectable (our own recent inquiry indicates that the picture is even worse). At this rate, a bank with ten million dollars of revolving funds which it loans out at a rate of 2 million each year would be left after only six years with 50% of its original funds and no interest collected. Such a program certainly cannot be viable.

Sometimes, there is the tendency to give more sympathetic attention to fixed capital loans than working capital needs. It must be remembered, however, that both kinds of loans are equally important for the success of the business, (although we hope the working capital shortage is a temporary problem). In fact, under difficult economic conditions, we have seen that working capital is the most critical need.

The collection of outstanding loans is just as important as screening prospective borrowers. Therefore credit agencies, and particularly public ones, should try to improve their collection rate by enforcing the repayment schedule of those who can afford it. In many cases, those who are in arrears for long periods are the ones who could afford to be up to date. To be sure, some loans will be written off and there will be some subsidies in favor of the small scale manufacturing sector; however, such subsidies are not unique to this sector alone and what is important is that they are compatible with long run national developmental goals.

These programs are not easy to administer and much will depend on the efficiency of the financial institutions and the caliber of their staff. Also, sticky issues yet to be resolved include defining a small scale manufacturing enterprise and target groups to receive such assistance delineating the extent to which small enterprises get such general support deciding what channels to use, and identifying and enhancing the role of the non-manufacturing small enterprises. In order to make an integrated study of linkages and supportive services, the role of the retailing or service sector must be understood, and we hope our Phase III study will partially supply us with the necessary information.

7.3. Long-Term Implications

In the previous sections of this chapter, we have presented recommendations for actions which can be taken in the short-term, utilizing resources and institutions already in existence to assist the small scale sector in a more efficient manner. However, the question of the role of the sector in long-term development effort must also be examined. Phases I and II of the project, although far from providing all the answers, have given enough insight to allow some informed choices.

Long-term questions to be examined must include the potential contribution of the SSE sector to increased employment and production -- two of the most critical issues in development. Related to the question of increased production is that of improved productivity which, in turn, is partially a function of the level and kind of training, production techniques and market promotion being employed. In posing these long-term questions it is first necessary to state some of the basic facts about the sector.

First, even in the absence of specific data, opposing views often arise as to the extent to which the sector is deprived of assistance and needs concrete support to play its real role in the development effort. Clearly, as we have shown, certain areas within the sector have been neglected by the various institutions which were expected to serve it. At the same time, however, when financial assistance has been made available, the record of repayment has been far from desirable. With the formation of SIFCO, the operations of three institutions previously established to serve the needs of the small scale sector were absorbed into one (see p. 52). But the poor repayment record of the borrowers from two of these institutions has allowed SIFCO to assume responsibility for only a small percentage of the loan portfolios.

In the case of SEDCO, SIFCO has assumed responsibility for only J\$310,000 out of a total loan portfolio of J\$900,000 (i.e., 25 accounts out of a total of 112). As for the SBLB, SIFCO has taken over portfolios with a total value of J\$2.2 million out of a loan portfolio of J\$7.2 million (i.e., 240 accounts out of 2,400). Such a poor record may be attributed to both the borrowers and the institutions. The borrowers' attitudes toward repayment of funds obtained from state agencies, for instance, are greatly influenced by the efficiency with which the agencies administer the same funds. A more complete picture could be obtained by examining the records of state agencies making loans to other sectors and of commercial banks lending to small proprietors in order to see whether a consistent pattern emerges.

The second fact is that while we have an adequate picture of all the operations employing twenty-five persons or less (including the proprietor), the overwhelming majority (two-thirds) are one person operations. This high percentage is accounted for by its preeminence in the rural areas or E.D.'s, where over 80% of all enterprises are of this type -- a situation contrasting with the urban location, where a significant percentage of the enterprises employ five persons or more. The figures are 30%, 31% and 17% respectively for Kingston, the Major Towns and the Rural Towns.

Several important characteristics related to this size differential have been discussed at length in this report. The implications are significant for the types of policies that should be adopted to aid the sector. It is clear, to begin, that the policies should be differentiated along rural/urban lines as well as between small and larger enterprises.

In the rural areas, the proprietor only produces for his immediate locality; his chief worry is competing with other one-man operations in

the market. He uses hand powered machines or wood as his source of power, he keeps no records and he has been in business in the same enterprise for an average of 13 years.

It is clear that in this situation the ability of proprietors to expand production and employment in the rural areas or E.D.'s is dependent upon both an increase in the level of disposable income available to the population in those areas and upon an increased flow of tourism into the country. But other actions can be taken -- not necessarily by agencies established specifically to aid small scale enterprises -- to help these enterprises in the E.D.'s. Among these are the production process, promotion of adequate imported raw materials essential in the production process, promotion of product development and quality control, and provision of information, particularly that which concerns potential markets outside the immediate vicinity.

While the amount of imported raw materials used in the rural areas may be very small in relative terms, such raw materials are among the essential ingredients in the production process. It is important that shortages of these materials in the local markets be immediately eliminated.

Product development and quality standardization refer particularly to handcrafted work. As the number of people who visit the country will possibly increase from year to year, a wide variety of the market for high quality handcrafted items will also increase. Thus, new product development must be promoted by encouraging and supporting Jamaicans with artistic talent.

In contrast to the rural areas, the urban and semi-urban locations present a different picture and accordingly require different policy measures. The percentages of enterprises employing three or more persons in Kingston,

the Major Towns and the Rural Towns are 57%, 55% and 34% respectively. Given the higher levels of mechanization, more extensive record keeping, underutilization of capacity, and the market orientation found in these enterprises, they offer the greatest potential for increasing production and employment in the sector.

Because there are a number of related policy measures that can be instituted in these urban areas, specific issues become more complex and the undertakings required are more involved. It would be insufficient to provide only credit when assistance is also needed in technical, management, and marketing areas. Yet to determine whether the need exists for technical and management assistance is a difficult task, and to deliver these services is even more difficult, given the complex issues and the prevailing constraints of experts, institutions and funds.

The kind and level of technical assistance will vary by enterprise location, size, and type, as well as by the kind of product produced and the machinery used. For example, enterprises engaged in the production of chemicals, paper products, and food processing require relatively more complex assistance than those involved in garment or furniture production.

Management assistance is a tricky problem with which to deal. It is easy to find faults with what the proprietor is doing without examining why he is doing so. The possibility exists, for instance, that a proprietor does not have some kind of a record keeping system (assuming he knows how to keep one) because he finds the opportunity cost of keeping records too high (Fisseha, 1981).

The need for marketing assistance may be more obvious if not easier to settle. Many small urban enterprises are struggling to enter the export market. While some proprietors have already entered the external market

with high quality products -- some garment and furniture manufacturers, for instance -- the overhead cost is usually so great that most cannot overcome this problem individually. Lack of (funds for) market information research and warehouse facilities to respond to purchaser complaints and the inability to meet potential orders on time and with certain standard and quality specifications are the greatest constraints here. Hence a few big private businessmen realizing the potentiality of such a venture and with the needed financial and administrative resources, are organizing a pool of small producers from whom they buy or receive finished products on consignment, which they in turn sell abroad for profit or commission. Still, the potential of the export market remains to be fully realized.

Jamaica has many other institutional channels through which it can deal squarely with the issues we have discussed. Yet these organizations must streamline their operations and develop clear cut guidelines in order to reach their desired goals. The Scientific Research Council (SRC), the Bureau of Standards, and the Social Development Commission (SDC) should be enlisted to help develop new products and new quality standards, and to promote apprentice training. Even private organizations such as the Private Sector Organization of Jamaica (PSOJ) and the Small Business Administration (SBA) can be called upon to promote apprentice training among their members.

As for the dissemination of market information, organizations such as the Agency for Public Information (API), the Jamaica Movement for the Advancement of Literacy (JAMAL), The Jamaican National Export Commission (JNEC) in collaboration with the news media, and particularly the Jamaica Export Trading Company (JETCO) would be extremely useful.

Management problems seem to receive less institutional support than problems in the areas of technical and marketing assistance. But the Small

Business Development Center (SBDC) has pioneered in the systematic training of personnel for improved management of domestic and export products. The Jamaica Institute of Management (JIM) provides a similar service, usually to slightly bigger enterprises. The Jamaica Industrial Development Corporation (JIDC) also provides management training and other services; a training scheme that has more potential usefulness is its industry specific and on the spot management and technical aid by experts in various fields. Such an approach is much more useful, as we have noted earlier, than the classroom or seminar type approach, which is more suited to discussions of topics of general interest, e.g. management principles, usefulness of record keeping, better customer relations, etc. Finally, the crucial role of financial institutions in pointing out areas of management weaknesses should not be underestimated.

With such a multiplicity of organization, (and we have not mentioned all of them here) there is the obvious danger that in trying to help the SSE, efforts will be duplicated and areas of responsibility will be muddled. It may well be beyond the resources of any section in the Ministry of Industry and Commerce to promote and coordinate such activities pertaining to the SSE in all these organizations. And if the SSE sector is to have a sound base for growth and the opportunity to expand into new products and markets, the assistance programs must not only be flexible and stable, but also committed to supporting long-term programs spanning not just 5 or 7 years but rather 10, 15, or even 20 years.

We would like to conclude with our hope that present commitments to the small scale industries will continue. The Jamaica Labour Party has expressed the need for "providing adequate financial and technical assistance in fields such as business education, production organization, accounting and marketing" for the small business (Jamaica Labour Party, 1980). This

is very encouraging. In the final analysis the shortages of demand, raw materials, spare parts and machinery are problems that must be solved at the national level, for it is there that financial and other kinds of assistance become programs aimed at development rather than attempts to relieve temporary crises. Our Phase III data will further probe many of these problems and analyze them in terms of choice of technique in production, relative efficiency, factor intensity, and constraints to growth.

BIBLIOGRAPHY

- Chuta, Enyinna and Carl Liedholm. 1979. "Rural Non-Farm Employment: A Review of the State-of-the-Art," Michigan State University Rural Development Paper No. 4. East Lansing: Michigan State University, Department of Agricultural Economics.
- Davies, Omar, Yacob Fisseha and Claremont Kirton. 1979. "Small-Scale Non-Farm Enterprises in Jamaica: Initial Survey Results," Michigan State University Rural Development Series, Working Paper No. 8. East Lansing: Michigan State University, Department of Agricultural Economics.
- Fisseha, Yacob. 1981. "Managerial Characteristics, Practices and Performance in Small-Scale Manufacturing Enterprises: Jamaican Milieu," Ph.D. Thesis, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan. (Forthcoming).
- Gold, Bela. 1979. Productivity, Technology and Capital. Lexington, Massachusetts: D. C. Heath and Company.
- Haggblade, S., Jacques Defay and Bob Pitman. 1979. "Small Manufacturing and Repair Enterprises in Haiti: Survey Results," Michigan State University Rural Development Series, Working Paper No. 4. East Lansing: Michigan State University, Department of Agricultural Economics.
- Jamaica, Government of. Department of Statistics. 1977. Employment, Earnings and Hours in Large Establishments. Kingston, Jamaica: Department of Statistics.
- _____. Department of Statistics. 1977. The Labour Force. Kingston, Jamaica: Department of Statistics.
- _____. Department of Statistics. 1979. Statistical Abstract 1978. Kingston, Jamaica: Department of Statistics.
- _____. National Planning Agency. 1978. Five Year Development Plan 1978-82 (Main Document). Kingston, Jamaica: National Planning Agency.
- Jamaica Labour Party. 1980. Election Manifesto. Kingston, Jamaica: Jamaica Labour Party.
- Kilby, Peter. 1962. The Development of Small Industry in Eastern Nigeria. Lagos: United States Agency for International Development.
- _____. (ed.). 1971. Entrepreneurship and Economic Development. New York: The Free Press.

- Liedholm, Carl and Enyinna Chuta. 1976. "The Economics of Rural and Urban Small-Scale Industries in Sierra Leone," African Rural Economy Paper No. 14. East Lansing: Michigan State University, Department of Agricultural Economics.
- Winston, Gordon. 1974. "The Theory of Capital Utilization and Idleness," Journal of Economic Literature (December): 1,301-1,320.

MSU RURAL DEVELOPMENT PAPERS

- RDP No. 1 Akhter Hameed Khan, "Ten Decades of Rural Development: Lessons from India," 1978.
- RDP No. 2 Lane E. Holdcroft, "The Rise and Fall of Community Development in Developing countries, 1950-1965: A Critical Analysis and an Annotated Bibliography," 1978.
- RDP No. 3* James E. Kocher and Beverly Fleisher, "A Bibliography on Rural Development in Tanzania," 1979.
- RDP No. 4 Enyinna Chuta and Carl Liedholm, "Rural Non-Farm Employment: A Review of the State of the Art," 1979.
- RDP No. 5+ David W. Norman, "The Farming Systems Approach: Relevancy for the Small Farmer," 1980.
- RDP No. 6+ Elon H. Gilbert, David W. Norman and Fred E. Winch, "Farming Systems Research: A Critical Appraisal," 1980.

MSU RURAL DEVELOPMENT WORKING PAPERS

- RDWP No. 1* Benedict Stavis, "Turning Point in China's Agricultural Policy," 1979.
- RDWP No. 2* Kathryn M. Kolasa, "The Nutritional Situation in Sierra Leone," 1979.
- RDWP No. 3* Benedict Stavis, "Agricultural Extension for Small Farmers," 1979.
- RDWP No. 4* Steve Haggblade, Jacques Defay, and Bob Pitman, "Small Manufacturing and Repair Enterprises in Haiti: Survey Results," 1979.
- RDWP No. 5 Peter Riley and Michael T. Weber, "Food and Agricultural Marketing in Developing Countries: An Annotated Bibliography of Doctoral Research in the Social Sciences, 1969-79," 1979.
- RDWP No. 6 Harold M. Riley and Michael T. Weber, "Marketing in Developing Countries," 1979.
- RDWP No. 7* Victor E. Smith, Sarah Lynch, William Whelan, John Strauss and Doyle Baker, "Household Food Consumption in Rural Sierra Leone," 1979.
- RDWP No. 8 Omar Davies, Yacob Fisseha and Claremont Kirton, "The Small-Scale Non-Farm Sector in Jamaica: Initial Survey Results," 1980.
- RDWP No. 9 John Hatch, "A Record-Keeping System for Rural Households," 1980.
- RDWP No. 10 Sarah G. Lynch, "An Analysis of Interview Frequency and Reference Period in Rural Consumption Expenditure Surveys: A Case Study from Sierra Leone," 1980.
- RDWP No. 11 John Holtzman, John Staatz, and Michael T. Weber, "An Analysis of the Livestock Production and Marketing Subsystem in the Northwest Province of Cameroon," 1980.

- RDWP No. 12 Victor E. Smith, John Strauss, Peter Schmidt and William Whelan, "Non-price Factors Affecting Household Food Consumption in Sierra Leone," 1980.
- RDWP No. 13 Victor E. Smith, John Strauss and Peter Schmidt, "Single-Equation Estimation of Food Consumption Choices in Rural Sierra Leone," 1981.
- RDWP No. 14 John Strauss, Victor Smith and Peter Schmidt, "Determinants of Food Consumption in Rural Sierra Leone: Application of the Quadratic Expenditure System to the Consumption-Leisure Component of a Household-Firm Model," 1981.
- RDWP No. 15 Middleton Wilson, "Some Problems in Operating a Loan Program for Craft and Emerging Small-Scale Non-Farm Enterprises in Jamaica," 1981.

Single copies of the MSU Rural Development Papers and MSU Rural Developing Working Papers may be obtained free by writing to: MSU Rural Development Program, Department of Agricultural Economics, 206 International Center, Michigan State University, East Lansing, Michigan 48824; U.S.A.

*Out of Print.

†Available in French.

∞Available in Spanish.

