



INT-1496

Women Workers in the Caribbean  
A Selection of ECLAC Research



UNITED NATIONS



UN ECLAC / CDCC



## PREFACE

This publication consisting of two parts, highlights the major components of the project "Establishment of a Database on Selected Areas of Women's Participation in Social and Economic Development", which was concluded by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) Subregional Headquarters for the Caribbean in 1990.

Part I is entitled *Participation of Women in Caribbean Development - Inter-Island Trading and Export Processing Zones*. It gives an overview of various aspects of the involvement of women in the inter-island trade and of their participation in export processing industries in the Caribbean. It reflects the findings of the project and various studies carried out within its framework.

Part II is entitled *The Use of Computer Software in the Research on Women in Trade*. It discusses the application of the databases on characteristics of the inter-island trade.

The Secretariat wishes to express its thanks to Mrs. Joaquin St. Cyr and Mr. Wayne Maughan, consultants who carried out this exercise.

The publication is distributed to the governments of the Caribbean Development Co-operation Committee (CDCC) through their national focal points concerned with the Integration of Women in Development and to relevant agencies, non-governmental organizations, institutions and individuals.

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Director



GENERAL  
CONS/90/8  
28 September 1990

ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN  
Subregional Headquarters for the Caribbean

CARIBBEAN DEVELOPMENT AND CO-OPERATION COMMITTEE

PARTICIPATION OF WOMEN IN CARIBBEAN DEVELOPMENT

Inter-Island Trading and Export Processing Zones

by

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**PART I**

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The views expressed in this document are those of the author and do not necessarily reflect the views of the ECLAC Subregional Headquarters for the Caribbean.



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## I. INTRODUCTION

This publication reviews and highlights the main findings of the ECLAC/CDCC's regional activity on women traders in the Caribbean in both tropical agricultural products and in foreign manufactured consumer goods. As part of this exercise several research projects were undertaken between 1984 and 1990. Also reviewed here is the *Survey on Export Processing Zones and Women in the Caribbean* undertaken in 1989. Both sub programmes form part of ECLAC's larger involvement in the development of a Data Base on Selected Areas of Women in Social and Economic Development (HOL/86/S38).

ECLAC's concern derives from the emphasis made in the Regional Plan of Action for the Integration of Women into Latin American Economic and Social Development (United Nations, November, 1977) on the importance of research into economic activities of women, in order to gain a better knowledge of the situation, importance and true participation of women in productive activities.

### Objectives of the Studies on Trade

The objectives of the trade studies are to:

- (a) increase the visibility of women's contribution to trade through their self-created income generating activities;
- (b) provide some insights into the subregional trading activities of women who earn a living in the informal sector of the economy;
- (c) identify needs for organization and association, management training and marketable skills for women;
- (d) serve as a basis for the assessment of the social and economic impact of trading activities in the informal sector, including its effects on regional integration, the creation of local employment, and its repercussions on income distribution and levels of living.

### Objectives of the Study on Export Processing Zones (EPZs)

The objectives of the study on Export Processing Zones are:

- (a) to present some concrete information on the operation of such zones in the Caribbean region;
- (b) to shed some light on the vociferous debate taking place in the region on the wisdom of a development strategy which encourages the establishment of such zones;
- (c) to review their potential for exploiting labour, particularly unorganized female labour.

## II. METHODOLOGY

The information on the inter-island trade in agriculture and manufactured products and on Export Processing Zones, of which this report gives a summary, is contained in several studies conducted between 1984 and 1990.

Among the respective reports which have contributed to the literature on the inter-island agricultural trade is that on women traders in Trinidad and Tobago by Phillips (1985), women traders in Dominica by Clarendon (1987), women traders in Saint Vincent and the Grenadines, Grenada, Dominica and Saint Lucia by Lagro, (1988, 1990) and by Lagro and Plotkin (1990).

Reports on the trade in manufactured goods include a study by Taylor (1988) on the Jamaican traders, Holder (1988) on the Guyanese traders, Pineda (1988) on the traders of the Dominican Republic and Plotkin (1989) on the Haitian traders.

The report on Export Processing Zones and Women in the Caribbean was undertaken jointly by Bishop, Long and St. Cyr (1989). Information on the Industrial Free Zones in the Dominican Republic was based on a report prepared in 1988.

Among the many other studies on Women in Export Processing Zones in the Caribbean region are those by Long (1986), Cowell (1988) and Anderson (1988) on such workers in Jamaica, Green (1988) on the Eastern Caribbean, Kelly on Saint Lucia, and Mills (1988) on workers in Saint Kitts/Nevis (1988).

### Inter-island traders

Sources of data and methods of collection used in the trade surveys included:

- ◆ Structured and unstructured interviews with traffickers and farmers and a wide range of persons in both the private and public sectors;
- ◆ Sample surveys;
- ◆ Discussions at meetings held to exchange ideas and information;
- ◆ Secondary sources, including shipping bills and phytosanitary certificates of agricultural produce exported from different islands over a period of time; Hucksters' license application forms and in and out manifests;
- ◆ Entry Certificates for agricultural produce imported into receiving countries;
- ◆ Observation techniques and participant observation

The available and accessible information relevant to the inter-island trade differs from island to island. Data on trade by sea are far more extensive than that on the trade by air. Information on the agricultural traders of Dominica was the most accessible.

Information on the trade in manufactured goods is less accessible than that on the inter-island trade in agricultural products for several reasons. Persons engaged in the suitcase trade often travel as tourists and are often indistinguishable from other passengers. The so-called "one day" shoppers purchase items for trade as well as for their personal use. Airway bills are not filed by name.

### Export Processing Zones

The Survey on the EPZs was based on a questionnaire administered over a two month period in mid 1989, and on face to face interviews with administrators and government officials in Antigua and Barbuda, Barbados, Dominica, Grenada, Saint Kitts/Nevis, Jamaica, Saint Lucia and Saint Vincent and the Grenadines.

## **III. GENERAL OVERVIEW**

### **BACKGROUND TO STUDIES**

The inter-island trade in agricultural and manufactured products is an important vehicle through which large numbers of women in the Caribbean earn a living. These trades are of special significance for women with little formal education, no business training and with limited access to bank or formal credit. Traders rely on their own resources for support services and protection.

They are prepared to risk scarce savings in their endeavors. This is testimony to their dynamism and ambition, but is also a reflection of the unavailability of more secure or profitable avenues of investment in many countries of the region.

The characteristics of the inter-island traders have changed over time, including shifts in the numbers involved, in the gender composition of traders, in their age composition and in commodities traded.

Export Processing Zones (EPZs) are being introduced as an alternative source of employment for unskilled women in the region. However, unlike the inter-island traders who operate in the so-called informal sector of the economy, these workers operate within the formal sector of the economy and their terms and conditions of employment are circumscribed by rules and regulations laid down by their employers, in agreement with host governments.

In a way there is a connection between the EPZs and the trades in that the curtailment of operations and/or the closing down of factories in the formal sector of the economy including the EPZs, often results in displaced workers resorting to trading.

## The Inter-island trade in agricultural produce and manufactured goods

Inter-island trading in agricultural products and manufactured goods provides an important source of livelihood for thousands, particularly women, in the Caribbean. These countries span the Caribbean sea, stretching from the Gulf of Mexico in the North West to the tip of Venezuela in the South East. Included among them are Spanish-, French-, Dutch- and English-speaking territories which reflect centuries of colonization by metropolitan powers.

### Agriculture

The trade in agricultural commodities dates back to the pre-colonial period. Its characteristics, have, however changed over the years, reflecting various periods of the nations' histories. Included in this trade are fruits and vegetables from Grenada and Dominica and ground provisions, vegetables and fruit from Saint Vincent and the Grenadines. The primary importing countries are Antigua and Barbuda, Barbados, Saint Kitts/Nevis, Saint Maarten (Netherlands Antilles), Saint Martin (French West Indies) and Trinidad and Tobago.

Known variously as hucksters in Dominica, traffickers or speculators in Grenada and Saint Vincent and the Grenadines, higglers in Jamaica, marchantas in the Dominican Republic and Madame Sara in Haiti, women today have developed a number of skills over the years which they have used for trading in a wide variety of commodities.

In the 1960s there was a new upsurge in trade in agricultural products among the English-speaking Caribbean. This was due partly to government policies which promoted the establishment of regional integration schemes, for example, the Agricultural Marketing Protocol and Guaranteed Market Scheme of the Caribbean Free Trade Area (CARIFTA) and Customs Union which subsequently evolved into the Caribbean Community (CARICOM). However by the end of the 1970s, the inter-island trade had experienced a drastic decline.

Among factors accounting for the decline were problems in regional co-operation, the economic crisis caused by the international energy crisis and the decrease in agrarian production. Other factors cited were increased international competition, loss of confidence in the national banking system, and the fostering of the growth of traditional export crops over domestic agriculture. Nonetheless, the inter-island trade remains a vibrant activity in the region.

Though largely unrecorded, the trade makes an important contribution to Gross Domestic Product since it evidently creates a demand for the services of such businesses as truckers, packers, boat owners, farmers, crate makers, shipping agents and others. It has been suggested that in Dominica, the earnings of each huckster typically supports an average of ten persons.

### Manufactured goods

The trade in manufactured goods is of more recent origin but has its own tradition in the region. It has often been referred to as the suitcase trade. This activity emerged in the mid 1970s from a complex mixture of circumstances. These include high rates of unemployment among women on the one hand, and on the other, severe shortages and/or high prices of foreign foodstuff, clothing, footwear and appliances. This has often resulted from governments' policies of import restrictions, primarily due to limitations in foreign exchange holdings.

The trade involves the wholesale purchase of manufactured goods from the subregion or beyond where prices are perceived to be competitive, for resale in the Caribbean. This trade covers such consumer items as clothing, footwear, jewelry, crafts and cosmetics. This trade is usually referred to as the suitcase trade.

Presently the traders originate from Jamaica, the Dominican Republic, Haiti and Guyana but also from Antigua and Barbuda, Saint Kitts/Nevis and Trinidad and Tobago.

From time to time there is a shift in the preferred buying centers. The more favoured buying centers, over the years, have been Puerto Rico, Curaçao, Saint Maarten and Margarita. Saint Martin and Saint Maarten function in the Leeward Islands as purchasing centers and transit ports. Cayman, Haiti and Panama (since 1989), have declined in importance as buying centers. Merchandise is also purchased from such far-flung places as Miami and New York.

### Export processing zones

Export processing zones are being established in the Caribbean as a number of governments continue to search for solutions to endemic problems of low incomes, high unemployment and rising expectations among rapidly growing populations. Firms from developed countries predominate in global assembly production, but a growing number of firms from newly industrialized countries in Asia and Latin America are carving out a place for themselves in export-oriented manufacture in developing countries.

A vociferous debate is currently taking place in the region on the wisdom of a development strategy which encourages the establishment of Export Processing Zones.

EPZs are seen, on the one hand, as a cheap, quick and low-risk way of creating a large number of jobs in a short space of time. On the other hand, those against their establishment point to their potential for exploiting labour, particularly unorganized female labour, the low wages paid in these industries and their arduous and repetitive conditions of employment. Job insecurity caused when factories close on account of unfavourable market conditions is another of the disadvantages cited.

These Zones represent the current phase in the international production of manufactured goods for export to metropolitan markets involving assembly operations in favoured locations. This follows two earlier phases in the Caribbean: the first involving foreign direct investment from developed countries for the production of raw materials for world markets and the second, import substitution industrialization in the countries of the region.

Free zone areas are generally established in specially delineated areas with the explicit endorsement of host country governments. One of the fast-growing locations is the Dominican Republic. Jamaica and Saint Lucia have also established such delineated zones. In Saint Kitts/Nevis and in Grenada, for example, a number of enterprises are engaged in export processing activities.

Assembly operations relating to the textile and apparel industry, electronic assembly and data processing are the predominant activities.

### IMPORTANCE OF THE TRADERS IN THE REGION

In practical terms, small traders play an insignificant role in the extraregional trade. This trade is monopolized by the United Kingdom based Geest Line which dominates the trade in bananas, the major foreign currency earner for the Eastern Caribbean. The traders, however, dominate the inter-island agricultural trade where they are believed to control some 98 per cent.

The exclusion of the smaller territories of the Windward and Leeward islands from the trading route of the West Indies Shipping Corporation (WISCO) has left a gap estimated at 55 per cent in 1977 in intraregional shipping for sea-borne freight trade that schooners and other small ships are virtually duty-bound to fill. The small-vessel fleet are all privately owned.

Between 1967 and 1971 total Caribbean Free Trade Area (CARIFTA) inter-regional imports rose steeply from EC \$95 million to an estimated EC \$188 million, although it has declined substantially thereafter.

Other exporters of agricultural produce in the intraregional trade include Marketing Corporations of governments, and private organizations or individual exporters. The Saint Vincent and the Grenadines Marketing Corporation has been virtually non-operational since 1982 in the intraregional trade. It has limited its operation to the domestic market.

In 1982 the traffickers' share of the inter-island regional trade of Saint Vincent and the Grenadines is estimated to have been between 80 and 90 per cent. In 1984, between 75 and 80 per cent of all fresh fruit sold in Saint Martin/Saint Maarten came from Dominica. This trade has since increased. Food and live animals formed

24 per cent of the total trade between Antigua and Barbuda and Dominica in the same year.

Informal Commercial Importers have now grown in significance in the labour force of Jamaica to the extent that a 1988 study attributed the increase in female employment, from 56,000 in 1975 to 91,000 in 1985 in the category commerce to their growing numbers.

In Jamaica, trade data over the period 1980-1987, under the classification "Special Entries" under which category most of the goods subject to resale by small traders are brought in, showed that this trade rose in value from approximately J\$ 8 million in 1980 to J\$ 114 million in 1987, representing a fourteen-fold increase.

### IMPORTANCE OF EXPORT PROCESSING ZONES

Almost 16,000 jobs have been created in the special processing activities of the CARICOM countries surveyed. Most were created in Jamaica, Barbados and Saint Lucia. A further 90,000 jobs were created in the Dominican Republic.

While there are several documented examples of the disadvantages of EPZs to the general welfare of workers, on the credit side, they have generated over 100,000 jobs in a relatively short space of time in a situation of chronic unemployment and under-employment. Spin-off effects of these jobs have taken the form of income generated in local economies from wage spending, from rental of factories, and other ancillary payments.

The highly disciplined nature of the workplace has served also to create a core of industrially disciplined workers who are often in demand in the domestic economy. With time, such workers could be absorbed into the wider economy to productive effect. For many women wages earned from EPZs have formed the seed capital for entry into the trade in either agricultural or manufactured goods.

### GENDER ASPECTS OF TRADERS AND EXPORT PROCESSING ZONES

#### Inter-island trade

Women clearly dominate the inter-island trade in both agricultural products and manufactured goods. Historically, men had dominated the inter-island trade in agricultural products during the first half of the century. Since then the participation of women has increased. The skills of the trade are passed on informally from one generation of women to another.

A significant number of men work in the related services of the trade, for example as truckers and loaders. Male partners of female traders also play an active

role in home-based activities of the trade such as, in buying, packaging and in obtaining visas, permits and other official documents.

A new trend of male participation in the trade is again being discerned. Many male traders who withdrew from the inter-island trade in ground provisions have continued to dominate the more lucrative trade in livestock to Trinidad and Tobago and the extraregional trade in agricultural produce. Males who remained in the trade in agricultural produce have often become involved, more than females, in the profitable reverse trade in electrical appliances.

### Export Processing Zones

On average, over 90 per cent of employees in these zones are women. This ranged among CARICOM countries from 88 and 96 per cent in textile and apparel, 72 to 97 per cent in electronics and 92 per cent in data entry. The vast majority of those who apply for jobs and who are recruited are females.

While some employers deliberately seek to employ females, feminine gender is not an explicit requirement in recruitment policies. Rather the types of activities undertaken such as, in garments and data entry are those in which females possess starting skills. The proviso that data entry operators should possess previous typing skills automatically tends to preclude males from applying. Only about 50 per cent of those employed in sporting goods and manufacturing activities in Saint Vincent and the Grenadines are female.

Women are considered to be more docile and better suited by temperament, as much as by their socialization, to the monotonous, repetitive work of assembly-type operations. There is, however, a considerable degree of stratification of work tasks by gender within factories. Sewing machine operators and supervisors are usually all female, while such tasks as warehousing, shipping, cutting, packaging, mechanic maintenance, and administrative positions are normally held by males.

## **IV. FINDINGS OF STUDIES**

### **SOCIO-ECONOMIC CHARACTERISTICS OF WORKERS AGRICULTURAL TRADERS**

#### Number of traders

In 1988, the total number of traders in the four countries studied in the Windward Islands, viz., Dominica, Grenada, Saint Lucia, and Saint Vincent and the Grenadines, numbered 1,264. This represented an overall reduction in the numbers over previous years.



### Age composition

About half of the traders in the four countries surveyed were between the ages 31 and 46 years. Those from Grenada were the youngest with an average age of 38 years and those from Saint Lucia the oldest with an average age of 44 years. In all four countries the average age of males was between four and eight years less than females.

Data obtained from Hucksters' licenses in Dominica suggest that male and female traders were now younger than their predecessors and also that most males were younger than females.

### Skill levels

No formal qualifications are needed to enter the inter-island trade in agricultural produce. However, certain personal qualities are necessary to be a successful trader. These include intelligence, physical strength, personal interaction skills, courtesy, patience, courage, persistence, and ability to manage money.

The viewpoint is common among traders that these qualities are more prevalent among women than men. There does however appear to be a sexual division of labour whereby males are more involved in organizing the necessary ordering, purchasing and other activities at home, leaving the selling overseas to their female trading partners.

Likewise a unique characteristic of the traders is their flexibility and capacity to adapt to new situations as features of trade change. The early Jamaican agricultural trade for instance, has now been superseded by the suitcase trade or the Informal Commercial Importers as they are now called.

### Education levels

Most traders received at least a primary education, and 14 per cent some secondary. However only 10 per cent of females had a secondary education compared to 30 per cent among the males. Traders from Grenada tended to have the highest level of education, 25 per cent having had a secondary level of education compared to only 12 per cent in Saint Vincent and the Grenadines and smaller proportions in Dominica and in Saint Lucia. Except for traders from Dominica, younger traders tended to have had a higher level of formal education than those in the older age groups. The trade is believed to attract those who are better educated only when other avenues of employment become restricted.

### Union status

More than half of the traders were in partnership arrangements, including married, common-law and visiting relationships. There were more single persons among females than among males. The union status of traders varied significantly

by country, ranging from 67 per cent of traders in partnership relationships in Saint Vincent and the Grenadines to 40 per cent in Saint Lucia. Regardless of union status, almost all traders (95 per cent) children, those in the older age group having an average of seven children.

### Dependents

Female traders, whether or not living with partners are normally responsible for bringing up their children and for making arrangements for their care when leaving home. Much reliance is placed on the extended family in child-care arrangements, older siblings playing a major part in this role. Male spouses of traders are responsible for the care of children only in a minority of instances. Children of the majority (84 per cent) of traders of all the groups taken together, slept at home while they were overseas. Only 1.6 per cent of traders said that their children stayed at home alone during their absence and these were all children over 12 years old. Only 12 per cent cited dissatisfaction with the child-care arrangements which they made.

### Kinship support

Traders often relied on others, including their children, extended families and other relatives for some form of help in their trading operations. While help from families is not automatically free of charge, help from non-family members normally incurs a charge. Female traders are more likely than males to obtain help from their children.

### Occupational History

Most of the traders had been trading for less than 10 years. Most males on average, however, had been trading for no more than seven years. Less than half of the traders claimed to have had no previous employment prior to entering the trade. Except for Dominica where there were few gender differences, male traders were more likely to have had previous employment.

Traders from Saint Lucia were most likely to have been previously employed and those from Saint Vincent and the Grenadines the least likely. All the Dominican traders who entered the trade between 1980 and 1985 were previously employed.

Prior to their involvement as traders, persons had been engaged in a variety of activities such as domestic work, carpentry, masonry, farming, seamstressing, market-vending, and work in the hospitality industry.

## TRADERS IN MANUFACTURED GOODS

By and large, traders in manufactured goods share many of the same socio-economic characteristics of the inter-island traders in agricultural produce. Both trades are dominated by females and they attract persons who are without marketable skills. Traders in manufactured goods tend, however, to come from a more urban environment; their educational backgrounds are more diverse; their activity cycle is longer and their skills and techniques of trade are not passed on as a family tradition in the same way as among the agricultural traders.

### Number of traders

In Jamaica in 1987 there were some 3,084 registered independent informal commercial importers. In Haiti, 99 per cent of passengers to Panama and the majority of passengers to Curaçao are traders. Such passengers in 1987 flew 50,000 times to Curaçao and Panama respectively. The size of the trade in manufactured goods is therefore substantial even taking into account that each trader travels several times a year and often to both countries on the same trip. Another 5,000 or so Haitian traders trade overland with the neighbouring Dominican Republic several times per year.

Traders from Jamaica, Haiti, Dominican Republic, Trinidad and Tobago and Venezuela made over 40,000 trips to the Free Zone in Curaçao in 1985. By 1988, the number of trips had risen substantially to over 80,000.

### Age composition

About half of the traders in manufactured goods who patronize the Free Trade Zone in Curaçao were between 26 and 35 years. The rest were either in the age group 36 to 50 years or in the 21 to 25 year age group. A higher percentage of male traders is found in the younger age group than among the older traders.

### Education levels

A higher proportion of these traders had a secondary level of education (47 per cent) than among the agricultural traders. Only 4 per cent claimed to have had no schooling. Fifty per cent of the women had attended secondary school compared to 40 per cent of the men. However, more males than females were to be found among the 13 per cent of traders who had formal education beyond the secondary level. Of the three main groups of traders covered in the Curaçao trade, those from the Dominican Republic had the highest level of formal education and those from Haiti, the least, while Jamaicans had the highest rate (17 per cent) of post secondary education.

### Union status

Most traders (67 per cent) were involved in some form of union. About a quarter of the traders were single and the remaining 6 per cent were either divorced, separated or widowed. The highest rate of union was among the Haitians and the lowest among the Jamaicans of whom 40 per cent were single.

### Dependents

Seventy six per cent of traders in manufactured goods had children. Of the traders with children, a higher proportion had children under nine years than among the agricultural traders. They also had fewer children on average than the traders in agriculture.

### Kinship support

Unlike the agricultural traders who placed great reliance on the extended family, including older children, for the care of their children during their absence from home, a higher proportion of these female traders with children (43 per cent) relied on their partner, followed by their mothers and also on paid domestic help to supply this service. Only 13 per cent relied on their older children, other relatives or friends for child-care in their absence. By contrast, when away from home, 77 per cent of the male traders who were fathers relied on their female partner for child-care.

More of these traders, than among the agricultural traders, were very dissatisfied with the child-care arrangements during their absence from home. However, sentiments differed between groups.

### Occupational history

Some 80 per cent of the female and male traders alike had no other employment than the trade. Of those traders who did have other paid work, 42 per cent were self employed and 58 per cent had paid jobs. Paid jobs included domestic work, driver, teacher, auto-mechanics, electrician, secretary and pilot.

Approximately half of the traders had no employment prior to their trade. Of those who had previous employment, two thirds had salaried jobs and one third were self employed. While equal proportions of men and women had salaried jobs, 25 per cent of men had been self-employed, compared with 14 per cent of the women.

## WORKERS IN EXPORT PROCESSING ZONES

### Number and types of workers

The number employed in EPZs in the Dominican Republic rose from 22,000 in 1983 to 90,000 in 1989, of whom the majority (70 per cent) are women. An estimated 60 per cent of those employed are in textiles and apparel manufacture, followed by 10 per cent in leather goods and 4 per cent in electronics and tobacco. While in electronics and textiles, women constitute between 74 and 85 per cent, in footwear and tobacco, they comprise 50 and 30 per cent, respectively.

Over 16,000 jobs have been created in the special processing zones of the CARICOM countries surveyed. Most of these jobs (6,719) are to be found in Jamaica, followed by Barbados (3,185), Saint Lucia (2,829), Saint Kitts/Nevis (1,407), Saint Vincent and the Grenadines (1,058), Grenada (379), and Dominica (375).

The predominance of female workers and the repetitive nature of the work are common to most enterprises. Textile and apparel industries employ about two thirds of all workers. However, the size and mix of activities undertaken differ substantially from country to country. The historical trend in employment patterns in the EPZs in these countries indicates a declining importance of the garment sector over the years. Electronics workers outnumber those in garments in Saint Kitts/Nevis and in Barbados where the majority of such workers are now engaged in data entry.

### Age composition

The majority of companies have a minimum recruitment age of eighteen (18) years, though a minimum age of sixteen (16) is known. A few enterprises prefer a higher minimum age of twenty (20) or twenty one (21). Most firms have a maximum recruitment age of between 25 and 30.

Most workers tend to be in the age group 20 to 30 years. Those firms which had been established over many years tended to have a higher proportion of older workers, one such firm having 16 per cent of its workers over 36 years. It is clear that workers over 35 years, with no previous experience, are unlikely to be recruited. Even where they had experience, it was felt that older workers would most probably experience difficulty in adapting to the requirements of a new facility. Interestingly in labour-short Saint Kitts/Nevis, greater emphasis is placed on manual dexterity and literacy than on age.

### Residence requirements

Place of residence is not an important factor in recruitment. Companies, however, generally tend to hire employees who live relatively close to the plants, an important consideration for shift work.

### Union status

Union status is not an issue in recruitment policies since single status does not necessarily imply that there are no dependents. Data on union and maternal status do not appear to be routinely collected. However child-bearing practices are said to hold serious implications for employers who have to roster workers to take account of maternity leave which is guaranteed by law and generally entails two months of paid leave and one month of unpaid leave. Over 90 per cent of operators in Jamaica and in Saint Kitts/Nevis are said to support dependent children.

### Levels of education and training

Basic literacy, numeracy and manual dexterity, including the ability to sew, are important considerations in the garment industries. Some secondary education, including typing skills, is considered important in data processing. Many of the recruits in Jamaica are drawn from the HEART pre-training programme designed to provide non-formal training for the large pool of unskilled, unemployed school-leavers in Jamaica.

In the Dominican Republic the average educational level was lower than in the domestic industry. Workers here were said to perform tasks that can be learnt between two and three months. A fair number of these workers had high a school education.

## THE MAIN CHARACTERISTICS OF THE TRADERS IN AGRICULTURAL COMMODITIES

The main goods marketed by the Dominican traders are grapefruit, orange, lime, plantain, dasheen, yam, christophene, pumpkin, tannia, avocado, mango, coconut and fresh cut flowers. Since 1982, anthurium lilies have been shipped mainly to the French Caribbean Islands. (Traders with health problems see this latter trade as being more manageable).

Traders of Saint Vincent and the Grenadines deal mainly in ground provision, for example, eddoe, sweet potato, dasheen, tannia and yam. A variety of fruit and vegetable is also traded. Traders from Grenada deal mostly in fruit, including avocado, sapodilla, sugar apple, plum, golden apple, lime, and banana. Root crops are also sometimes traded. Saint Lucian traders deal in such products as plantain, grapefruit, orange, mandarin, banana, plum, coconut and sporadically, ginger.

The type of products traded at any particular time depends on their availability, on market demand and on whether or not trade restrictions govern their entry in a particular market.

### Purchase of goods

The majority of traders purchase goods either directly from farmers or from the local market. Very few patronize growers' associations or marketing boards. Most traders consistently make use of the same suppliers with whom they communicate by telephone or by sending messages through friends.

The majority travel to rural areas to purchase their produce by the sack directly from farmers. Farmers, however, sometimes have to approach traders or resort to taking produce to markets when supplies are plentiful. The number of suppliers per trader ranges from about 3 to 12. An estimated 30 per cent of traders grow their own produce, but need to supplement their needs through purchases. Males from Dominica and Grenada were the most likely to do so, while the females from Saint Vincent and the Grenadines and Saint Lucia were the least likely.

Traders have no written agreements with suppliers. Farmers extend credit to traders entirely at their own risk. The informal nature of these transactions is a potential source of friction between farmers and traders.

The purchase price of goods fluctuates a great deal and is determined by various factors, such as, the degree of competition and the quantity of supplies. Traders are said to be prepared to pay higher prices for produce than formal export companies.

### Market Destinations

Markets covered by the Dominican traders include Anguilla, Antigua and Barbuda, Barbados, Guadeloupe, Saint Kitts/Nevis and Saint Martin. While male traders have stopped trading in many of the countries, they have remained in the trade with Guadeloupe and Barbados.

Most of the traders from Saint Vincent and the Grenadines market their produce in Trinidad and Tobago. Barbados is the second most-visited island. Smaller numbers go to Martinique, Carriacou and Saint Martin. Traders from Grenada market produce mainly in Trinidad and Tobago, while those from Saint Lucia go to Barbados and Martinique.

In practically all cases, produce is sold wholesale in the countries of destination. Dominican traders are reported to undertake a substantial amount of retail trading into the countries to which they travel. Antigua and Barbuda and Saint Martin have placed restrictions on their retailing however. Dominican traders who travel to Saint Martin sell wholesale to Haitians resident there.

Only an estimated 17 per cent of traders sell produce to such formal sector businesses as restaurants, supermarkets and shops. Male traders were more likely to sell in the formal sector than females. Of all groups, the Dominicans were the most likely to sell in the formal sector.

### Mode of travel

Most agricultural traders traditionally travel by boat. Because of restrictions in Trinidad and Tobago on the number of passengers on cargo vessels, traders who travel between Saint Vincent and the Grenadines and Trinidad and Tobago, ship their produce while they themselves travel to and from their destination by air. Air travel has been assuming increased significance for all traders in recent times.

The Dominican agricultural traders carry out little reverse trade. Others, notably those from Saint Vincent and the Grenadines, take back to their countries for trading purposes, such items as electrical, canned and other goods. The Madam Sara of Haiti also engage in reverse trade involving both the sale of fruit, vegetables and artifacts from Haiti and the purchase of dry goods and consumer durables for resale in their home country. They also travel back and forth between the towns and the countryside, assembling food crops bought from peasant farmers and shipping them to urban markets, and buying manufactured goods in the towns to distribute in the provinces.

### Volume of trade

An estimate of the weight per shipment per trader ranges between 500 and 7,000 kg., with Dominicans having the lowest averages and those from Saint Vincent and the Grenadines, the highest. One estimate of the volume of trade between Saint Vincent and the Grenadines and Trinidad and Tobago has been placed on average as anywhere between 5,168 kg. and 2,298 kg. per trader.

Traders do purchase items abroad for personal use. However reverse trading activities are not undertaken on a large scale primarily because of the heavy activity cycle, the poor financial returns, and because the vicissitudes of the voyage do not encourage it. When it does occur, commodities are determined by shortages prevailing in the importing country, such as onions, potatoes and red beans in Dominica.

The purchase of goods by traders who sell in Guadeloupe allows them to reduce losses which would otherwise be incurred by the conversion of the foreign-earned French francs.

While some of the evidence in this area is reported to be conflicting, traders from Saint Lucia and Grenada appeared to be more involved in the reverse clothing and other trade than those from Saint Vincent and the Grenadines. Except in the latter country, male traders tended to be more involved in the reverse trade than their female counterparts. Customers tended to be friends and relatives.

Both sea and/or air transport are used in the reverse trade, with the former mode of transport being more prevalent among the inter-island agricultural traders.



### Incomes from trade

Weekly earnings may range from under US \$50 to over US \$400. Indications are that traders from Dominica tend to earn the lowest weekly incomes, followed by those from Saint Vincent and the Grenadines, Grenada and Saint Lucia, respectively.

One of the factors influencing income levels is the size of the investment at the inception of the trading cycle, a large investment minimizing overhead costs.

Traders most likely to be represented in the higher income groups were male; those in the age group 21 to 30 years; those trading between five and nine years; those from Saint Lucia; and those involved in the two-way trade. The fact that Dominicans are least involved in this latter trade may explain their low weekly earnings. Paradoxically single traders were more likely than married traders to earn both at the lowest and highest earning levels, which raises questions about the homogeneity of the single traders.

Adverse situations which cause profits to fluctuate over the years include the devaluation of the Trinidad and Tobago currency; high customs duties and airport taxes, and the confiscation of goods and money by customs officials. Time-consuming customs and like procedures are cited as contributing to spoilage of produce.

### Activity cycle of trade

A 10 hour working day is the norm for a trader. Following is a typical work schedule:

- ◆ investigating what produce is available, the cost and the time of its availability, and the placing of orders;
- ◆ paying creditors and taking orders for re-importation of goods in the home country (where applicable);
- ◆ collecting and securing the produce;
- ◆ making domestic arrangements for dependents during absence;
- ◆ sorting, cleaning, packing the produce;
- ◆ transporting produce to port of embarkation and preparing travel documents such as shipping bills and phytosanitary certificates.
- ◆ making arrangements for boat transport and payment of freight;
- ◆ loading the produce on the boats;
- ◆ trader embarking on boat or plane;
- ◆ disembarking of trader and off-loading of produce at next port;
- ◆ going through customs, immigration and phytosanitary control;
- ◆ selling of produce;
- ◆ purchasing of goods for re-importation in home country and preparing the necessary documents;
- ◆ embarking on boat or plane for return voyage.

The boat trip between Dominica and the market in Guadeloupe takes eight hours. After making the long sea voyage, these traders often have to sleep in the market in Saint Martin to be assured of a space to sell their produce the following day. Since working relations are informal, traders are often powerless to enforce contractual obligations. Personal and tried contacts therefore need to be carefully nurtured.

Dominicans trading with Guadeloupe have an activity cycle which lasts a week, while those who go to Barbados spend two weeks, and those who go to Antigua and Barbuda and Saint Kitts/Nevis spend one day. Traders from Grenada and Saint Vincent and the Grenadines trading with Trinidad and Tobago usually have an activity cycle of 1 week. As a whole, some 46 per cent of traders travel twice per month, while 30 per cent travel four times per month. Only a few travel five or more times per month.

#### Level of business formalization

An attempt to judge the level of formalization of individual traders using such criteria as size of investment in capital assets such as a van or shop, extent of business contact with the formal sector and dependence on regular suppliers, revealed that not more than 26 per cent of all traders had some level of formal organization. The businesses of female traders were on the whole less well-organized than their male counterparts. The Dominican traders (32 per cent) were the most likely to have organized businesses. None of the Saint Lucians had. On the whole, capital investment in the trade was low, 21 per cent not having any at all and only 11 per cent owning vans, for instance. Only 3 per cent of the traders had written agreements with their buyers abroad.

The level of record-keeping was very low even among traders with a high level of education. Only an estimated 14 per cent of females, generally the younger ones, kept records compared to 32 per cent of males. This, however, was not to be interpreted as poor business expertise, many having developed their own personalized business systems.

Despite several attempts, over the years, to form themselves into associations, only in two countries, Saint Vincent and the Grenadines and in Dominica, have they succeeded. Formed in 1983, the main concern of the Traffickers' Small Business Association in Saint Vincent and the Grenadines was to secure a living income for traders. Among the problems addressed by this association was the need to restrict the number of traders and the quantum of goods shipped to Trinidad to reduce supply and increase prices, and therefore income per trader.

Reasons cited for the relative lack of success in forming associations include:

- ◆ traders' mobility and widespread geographic distribution;
- ◆ limited free time due to heavy workload;

- ◆ their individualistic mode of operation which makes collective enterprises unattractive;
- ◆ fear that such a level of formalization would provide unwelcome opportunity for government interference;
- ◆ negative perception of themselves not considered conducive to their coming together as a group.

Formed in 1982, the aim of the Dominican Hucksters' Association (DHA) is to promote the interest of the hucksters by providing them with technical and financial assistance. Among the DHA's more valued services to traders is a Credit Scheme administered by the AID Bank. A 60-day short loan of up to US \$300 at 8 per cent interest is available (4 per cent of the interest goes to a revolving fund managed by the Association). By 1989, 60 per cent of inter-island traders in Dominica were members of the DHA, and of these 65 per cent were females.

## IN MANUFACTURED GOODS

Goods purchased in the Free Zone of Curaçao are, by and large, typical of the type of manufactured goods traded. Clothing, footwear, textiles and cosmetics were the goods most frequently purchased. Nearly all (97 per cent) traders deal in clothing.

There are no striking differences in the types of merchandise most frequently purchased by female and male traders, respectively, except that male traders purchased electronics goods more frequently and females were the dominant buyers of toys. It appears, however, that the trade of both male and female traders is geared towards a largely female-oriented market.

### Mode of travel

The traders in manufactured goods invariably travel by air taking as much cargo as possible with them in their suitcases and boxes - hence the name suitcase traders.

### Size of investment

The average amount spent in the Free Zone in Curaçao per trip was in the region of US \$1,000. Expenditure per trader per trip ranged between \$100 and \$20,000. On average, male traders spent more per trip than females.

Average cross country comparisons, by gender, show that Haitian women spent the most per capita per trip. The Surinamese and Guyanese are also known for buying in large quantities valued at up to US \$20,000.

The quantum of business done by traders from the different countries in Curaçao appears to be governed by changing economic conditions in the home countries, for example, the devaluation of the Jamaican currency.

### Volume of trade

Weight of goods shipped to the home country per trader ranged from a low 10 kg. to a high 2,000 kg. per trip, the average being 79 kg. On average male traders made heavier shipments to their home countries than female traders did. The Haitian female traders had the heaviest shipments on average.

### Disposal of goods in home country

Traders often employed multiple strategies to dispose of goods in their own country. Most sell primarily to friends and neighbours. Many also sell to intermediaries or consumers in the streets and markets.

About one fifth reported that they sold the goods from their own shops and 16 per cent sold goods to other shops. Very few sell goods from door to door. Female traders were more likely than male traders to sell their goods in the streets/markets and at home to their friends. Male traders were more likely than females to sell goods to shops or from their own shops. Male traders were more likely than females to receive advance orders from customers, particularly from shop owners.

Of the main groups of traders, those from the Dominican Republic are the most likely to sell goods to friends from their homes and from their own shops, those from Haiti in the streets and markets, and Jamaicans from their homes.

### Levels of income from trade

Fifty six per cent of traders reported average profit of less than US \$500. About one quarter of Jamaican traders reported profits of over US \$1,000. Mean profits per trip for the three groups of traders were: US \$727 for Jamaicans, US \$474 for Dominicans and US \$377 for Haitians. Male traders overall earned higher profits per trip than females.

There appears to be no clear relationship between the age of the trader and profit per trip, since both the groups over 51 years and those between 21 and 25 had the highest average profits, and those between 26 and 35 years, the lowest.

Neither is there a clear correlation between experience in trading and educational background. While traders with no schooling earned the lowest average profit, traders with only a primary school education earned higher profits than those with low secondary or post-secondary education.

Marital status appeared to have some correlation with a traders' average profits, those with partners earning higher average profits than those without. The partners of traders were an important source of financial support. Thirty eight per cent of females and 12 per cent of males claimed that they received financial help from their partners.

Like the inter-island trade in agriculture, the conclusion is that traders' profits per trip were clearly linked to the size of their investment in merchandise per trip.

### Traders' activity cycle

Activities in preparation for, during and following each buying trip vary depending on the country of origin of the trader. The trade in manufactured goods, illustrated from the Free Zone of Curaçao, comprises the following work schedule:

#### In home country:

- ◆ investigating market conditions to determine demand;
- ◆ taking pre-paid orders from customers;
- ◆ collecting payment from customers supplied on credit or on consignment;
- ◆ purchase of merchandise to sell in Curaçao (common among Haitians);
- ◆ purchase of airline ticket;
- ◆ obtaining of exit visas from home countries and entry visas to Curaçao;
- ◆ obtaining of foreign exchange from banks or on the black market;
- ◆ arranging for care of children during absence;
- ◆ placing of advance orders in shops in the Free Zone of Curaçao;
- ◆ travelling by air to Curaçao.

#### In Curaçao:

- ◆ sale of merchandise brought from home country (where applicable)
- ◆ placing of orders in Free Zone while waiting to collect payment for goods sold;
- ◆ purchase of goods;
- ◆ arranging for transportation of goods to the airport;
- ◆ repacking of goods in preparation for flight home;
- ◆ return flight to home country.

#### In home country:

- ◆ retrieval of goods from customs house;
- ◆ transporting of goods home or to market or depot;
- ◆ selling goods to shops, in the markets and/or from home or work.

Traders receive all their purchases from the Free Zone at the airport and have to repack the goods themselves or hire others to do so before they can be loaded on to the plane.

Most of the traders spend from three to five days away from home during each of their buying trips. They generally obtain accommodation in the inexpensive hotels

in Curaçao. One month is the average time taken to dispose of goods in the home country. Male traders on average dispose of goods faster than females. Traders from the Dominican Republic sell their goods the fastest and the Jamaicans the slowest.

### Levels of business formalization

Only 1 in 10 of the traders in manufactured goods belongs to a traders' organization or association. The Jamaicans had a membership rate of 21 per cent and those from the Dominican Republic 5 per cent. None of the Haitian traders belonged to an association.

Eighty four per cent of the traders claimed to have no access to formal credit. Only a small percentage had access to either credit from shop keepers in the Curaçao Free Zone, bank credit or credit from other sources. The trade is, therefore, heavily based on cash transactions. Not more than 20 per cent of the goods bought in the Free Zone is insured.

The majority of traders had no paid employees to assist them with their trading activities. Less than 1 in a 100 had six or more employees. Male traders were more likely to have paid employees than females. Those with paid employees were among the better organized enterprises and were among traders with the highest profit per trip. Only one in five enterprises was well-organized. The enterprises of male traders were better organized than those of female traders.

The oldest traders had the highest proportion of well-organized businesses. However there appeared to be no clear relationship between levels of organization and age of trader, but instead with the level of the trader's education. The combined percentage of well-organized and organization categories increased with each level of schooling. Traders with post secondary education did not however have the highest proportion of well-organized businesses.

Most traders keep some kind of records of their trading activities. The Haitians were the least likely and the Jamaicans the most likely to keep records.

The level of capital investment in the trade is low, but is generally higher than among the agricultural traders. A quarter of the traders own shops, one third own vans and about one third own market stalls. Traders from the Dominican Republic are more likely to own shops and vans and those from Jamaica to have a market stall. Among the Jamaicans and Haitians, male traders were more likely than females to have shops but not among those from the Dominican Republic.

More than half of the traders in manufactured goods considered themselves successful most of the time. Only a small proportion (9 per cent) considered themselves unsuccessful, and about one third considered themselves successful some of the time. A higher proportion of male traders considered themselves more successful than the female traders. Traders in the high profit categories of goods

were more likely to consider themselves more successful than those in the lower profit categories.

## THE CHARACTERISTICS OF EXPORT PROCESSING ZONES

### National Policy

In the Commonwealth Caribbean, the Agreement on the Harmonization of Fiscal Incentives to Industry, which was signed by CARICOM governments in 1973, forms the common agreed legal basis for such manufacturing and processing operations producing goods exclusively for export to extraregional markets. The Jamaica Export Free Zones Act of 1982 provided the legislative framework for the designation of areas by the government as Export Free Zones.

### Government incentives

All countries offer fiscal and other incentives to employers which typically include the following:

- ◆ exemption from taxes on income and profits;
- ◆ freedom from export and import licensing and quantitative restrictions;
- ◆ duty free concessions;
- ◆ repatriation of profits and dividends;
- ◆ competitive wages, though not lower than the minimum legal wages paid in the particular country;
- ◆ waiver on night shift labour for women;
- ◆ skills training programmes;
- ◆ factory accommodation at a subsidized rate or at a reasonable rental.

### Assembly production exclusively for export markets

Export oriented production involves the co-operation of the governments of both the home country and the host country.

There is a preference for industrial locations close to the intended markets or in ports on important transshipment routes. Caribbean locations are favoured by companies from the United States.

### Income levels

Low, competitive wages is the norm among workers in Export Processing Zones. These are normally substantially below those paid to similar workers in metropolitan locations. The minimum wage laws as apply to all industrial workers are adhered to by enterprises operating in EPZ-type operations in such countries as Jamaica and the Dominican Republic.

In practice, a wide range of methods is employed in the determination of wages. Some employees earn a basic wage for a specified period of time. A minimum level of production is required by management. Yet others are employed in enterprises which operate on a straight piece-rate for the entire output of all operations. A minimum level of output is also required.

Piece rate incentives and group incentives also apply. The norm is that workers are required to perform at stated minimum levels of efficiency.

### Health and maternity

Good health and vision are considered to be important assets among workers. In Jamaica for instance, first aid and primary health care services are provided free of charge at the Zone and include pre- and post-natal services such as, family planning counselling and the provision of contraceptive supplies.

At the Kingston EPZ, two pregnancies with paid maternity leave are allowed each employee during the term of her employment. One view expressed is that women with dependent children make better workers since they need the wages in order to discharge their responsibilities to their families.

### Probationary period

A probationary period of between three and six months is the norm in EPZ-type enterprises. This is a period with the highest wastage rates ranging from an estimated 65 per cent in Jamaica to 90 per cent in Saint Kitts/Nevis. After training the typical duration of employment ranges from one to three years.

### Termination of employment

Most enterprises have provisions for the notification by the employers of termination of employment. The period of notice may vary depending on the statutory regulations of the particular country and the duration of the term of employment.

In Jamaica, employers and employees are required to give two weeks notice of termination of employment. In both Saint Kitts/Nevis and Antigua and Barbuda, workers who are retrenched are entitled to severance benefits paid out of a levy imposed on employers.



When the market for textiles in the United States became soft, many workers in this sector were retrenched. Many other reasons are cited as affecting job turnover including such factors as, level of job satisfaction, the attitude of management, conditions of work, opportunities for alternative work, ability to cope with domestic responsibilities while working and the scope for migration.

Many who leave of their own volition move on to become small independent entrepreneurs after having accumulated some savings. Workers with experience are also raided by both employers within the zone and outside the zone. This practice is reportedly common in Jamaica and Saint Kitts/Nevis where it is widespread in data entry operations.

## PROBLEMS OF TRADERS

### TRADERS IN AGRICULTURAL PRODUCE

#### Small and insecure incomes

Problems of the inter-island traders in agricultural produce relate to:

- ◆ intense competition among traders who often market similar products thereby causing the prices of goods to be depressed;
- ◆ high levels of spoilage due to high temperatures and humidity, infections from fungus or bacteria, and physical damage due to bad packaging and handling particularly at time of shipping and off-loading;
- ◆ frequency of thefts of produce in markets overseas, older females more readily becoming such victims than males or younger females. While being less common, theft of money was more widespread from females than from males;
- ◆ high costs of transportation by land, air or sea; costs of accommodation overseas; market and other fees and costs of documentation;
- ◆ dumping of produce when seas become rough.

#### Poor conditions of work

The harsh conditions under which traders vend is considered to be sub-standard and injurious to their health. They typically work long hours in uncovered areas exposed to the sun, dust or rain. There is an absence of adequate security for their produce at most destinations.

#### Burdensome rules and regulations

Nearly half of all traders regarded official rules and regulations as obstacles to their success in the trade. These include high customs duties and airport taxes; restrictions on imports into Grenada and confiscation of goods and money by customs officials. Time-consuming customs procedures also contribute to spoilage of produce. Dominican traders were the least affected by these rules.

### Health problems

Common problems experienced by women were headaches, swollen feet, back pains and dizziness. The difference between males and females is described as striking: more than two thirds of the women seemed to suffer ill health compared to one quarter of the males. Vulnerable groups are those over 46 years and those who are single.

## TRADERS IN MANUFACTURED GOODS

### Dissatisfaction with the airlines, customs and other personnel

All traders expressed dissatisfaction with the services provided by the airlines in Curaçao. Problems include:

- ◆ over-lengthy check-in procedures, unsuitable arrival and departure times of flights, and the inadequate number of flights between Curaçao and the home countries;
- ◆ the negative attitude of the airline personnel, the lack of security of the baggage transport and the poor storage and packing facilities for baggage at the airport;
- ◆ high air fares, low maximum luggage weight allowance, high overweight luggage charges;
- ◆ high cost of food at the airport, lack of rest rooms and toilet facilities and unhelpful baggage porters

There were also complaints of:

- ◆ unfair treatment by customs officers in their home countries where they were often charged high import duties, and their goods confiscated for non-payment of duty;
- ◆ unfair treatment by a variety of other personnel including flight attendants, transport drivers and hotel and guest house workers.

### Dissatisfaction with the Free Zone

Traders are dissatisfied with what they consider to be high prices for low quality merchandise at the Free Zone. Lack of adequate toilet, restaurant or internal transport facilities in the Free Zone and the lengthy procedures for entering the zone are also lamented.

### Problems in traders' home countries

Difficulties are experienced in obtaining foreign exchange in their home countries. The small amount of foreign exchange which may be taken out of

Trinidad and Tobago and Jamaica is a source of dissatisfaction. Haitian traders cannot obtain foreign exchange at home and must rely on the black market or go to Nassau or to the Dominican Republic to change their money.

Several traders also have difficulty importing goods due to trade restrictions in their own countries. The traders from Guadeloupe are not allowed to import goods made in China. Since a great deal of the goods sold in the Free Zone is from Taiwan, these traders are severely restricted in their trading.

## PROBLEMS OF WORKERS IN EXPORT PROCESSING ZONES

### Low wages

Low, competitive wages are an attraction to foreign investors in all countries. Wage rates are usually much lower than in the host countries of the employer. Where minimum wage laws for industrial workers are in force in a particular country, they are adhered to by employers. In such instances, wages within the enclave sector are similar to those outside of the sector.

(When EPZs were first established in the Dominican Republic, enterprises would pay only 80 per cent of the then minimum legal wage. This practice was suppressed in 1979. They are now compelled to pay the minimum wage.)

### Repetitive nature of the work

Common to all assembly type operations is the monotonous nature of the work, involving a repetition of the same tasks from day to day. The types of jobs available are of low quality requiring mainly skills of manual dexterity. In addition, the pressure to satisfy minimum quotas in order to qualify for a basic wage creates a disciplined, but stressful environment in the workplace.

### Job insecurity

When market conditions in the metropolitan countries change, employers in assembly-type operations quickly respond by closing down operations or reducing the number of their employees. They are also not averse to switching their factory operations to more attractive locations in other countries thereby displacing workers.

### Occupational immobility

As presently constituted, there is little opportunity for locals to be involved in the more sophisticated technological aspects of the operations or at the management levels. There are, therefore, limited opportunities for promotion within the enterprise and little transfer of technology to the local economies.

## V. CONCLUSIONS AND RECOMMENDATIONS

### INTER-ISLAND TRADE

It is clear that many earn a useful livelihood from the inter-island trade in agriculture and manufactured goods. Similarly increasing numbers of formerly unemployed women are earning much needed income from assembly type operations being established in the region.

While there is no shortage of new recruits to these enterprises, those who participate in the trades have concerns about the life style and low status of this form of employment. The intensity of the industrial discipline in the workplace of EPZs which is unmatched by high wages results in a high turnover of workers.

#### The trade in agricultural and manufactured goods

Both the inter-island trade in agriculture and manufactured goods involve demanding lifestyles. Trading entails long hours of work and long periods away from home. Returns from business are not always certain or lucrative. The spoilage rate of traded agricultural products is high.

Trading involves setting up informal social networks with friends, neighbours and kin for child-care services. The long term effects of the frequent absences of parents on the well-being of their children is cause for concern.

The trades are easily associated with such anti-social activities as smuggling and illegal currency dealings. The suitcase trade in particular operates within what is known as the underground economy and questions are raised about its usefulness to the national economy.

Several recommendations have been made in the interest of improving the earnings and well-being of those engaged in the inter-island trade. The experience of the Dominica Hucksters Association in providing credit and other support services to traders in Dominica, the successes of the United Vendors Association of Jamaica in securing foreign exchange legally and the setting up of purpose built arcades for the marketing of traders' goods provide useful insights into future possibilities.

Market information and investment capital are obvious areas for improvement since levels of formalization and organization appear to be related to the size of the capital investment. Improved levels of education among traders are also likely to improve their levels of business sophistication.

Paradoxically, the tendency to attract new vendors when business is buoyant - thus lowering prices especially for perishable agricultural products, suggests that indiscriminate entry to the trade may itself be self-defeating.

In designing action programmes to overcome the existing constraints on the trade, it must be recognized that these very survival strategies embody within them qualities of discipline, resourcefulness, business acumen and entrepreneurship. If such qualities are effectively harnessed and managed, enterprise development may emerge in a more structured business environment such as would offer a better life for many and sustained growth and development for the country.

For this gap to be bridged it will be essential that more conscious efforts be made by national and regional governments to address problems of both a regional and national character. There will be need for instance, to standardize import and export regulations in the region.

The formal recognition of the traders and the construction of purpose-built facilities for their use will substantially enhance the quality of their lives and with it their status, and most probably their incomes.

There is, therefore, need for the provision of more suitable market facilities where vendors can be protected from the elements and other basic comforts provided. Adequate security and warehousing facilities should also be provided. Costs incurred in improving working conditions must be balanced by the need for the trade to remain competitive.

There is need for vessel owners to be more sensitive to the importance of providing more adequate cooling, handling and storage facilities. The skills of traders need to be consolidated and enhanced in such areas as in the proper selection and handling of agricultural produce. The system of collecting and transporting products needs to be restructured, by making use of advantages that may be derived from doing these tasks on a collective basis. Traders would also benefit from ongoing market intelligence.

A challenge also resides in possibilities for steering those engaged in the trade to link their activities with agro-industrial manufacture. This approach would be useful to avoid wastage during seasonal gluts, but may provide opportunities for the more enterprising to become involved in agro-processing and eventually to broach extraregional markets. Very important is the need for the intensification of research into more suitable low-cost packing materials.

The traders in manufactured goods in particular, need more sympathetic and less hostile treatment from immigration and customs officers, and a reduction of their lengthy irksome procedures. The question that has not been answered relates to the economic costs, including the opportunity costs, of the suitcase trade. While many find a livelihood in it on an individual basis, it may reduce demand for locally produced clothing and other items. It occupies an enormous amount of time and energies of those involved in it.

The question that has to be asked is whether this is the most efficient way of meeting the needs for consumer goods. One challenge is to improve the cost competitiveness of goods produced locally, which can then be exported, and

stimulate local employment for some of those now attracted to the trade in manufactured goods.

### EXPORT PROCESSING ZONES

With respect to those employed in the Export Processing Zones, there are likewise arguments for and against the phase of industrialization in the Caribbean characterized by EPZs. They have proven themselves as a catalyst in the creation of jobs, especially for the female population, in a short space of time. They are, therefore, one approach to solving endemic problems of unemployment in the Caribbean.

On the other hand, as presently constituted, with limited transfer of technology to the local economies, limited involvement of the local employees at management levels and the small size of the value added to the local economy in the sourcing of raw materials, they do not offer high standards of living to those employed in them. It is feasible that as skills of workers improve and the process of production in EPZs becomes more complex, greater value added would result. This would give rise to increased levels of remuneration.

Notwithstanding these possibilities, it is advisable, in the long term, for Caribbean governments to devise programmes for the growth and restructuring of their societies, on the basis of local enterprise and initiative, producing services or goods of high value and quality for export, and at a rate of growth capable of absorbing the incremental growth of the labour force. Only if this is achieved will populations of the region be assured of substantially improved standards of living in the long term. EPZs can, at best, set the pace for such growth and change.

In the meantime, the report on EPZ has recommended that governments should strive to obtain the best terms and conditions of work that are feasible. They should also seek to upgrade the skills of these workers so that like the traders, they could participate at a higher level of technological competence and improve their scope for vertical mobility.

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GENERAL  
CONS/90/7  
28 September 1990

ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN  
Subregional Headquarters for the Caribbean

CARIBBEAN DEVELOPMENT AND CO-OPERATION COMMITTEE

THE USE OF COMPUTER SOFTWARE IN THE RESEARCH  
ON WOMEN IN TRADE

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**PART II**

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The views expressed in this document are those of the author and do not necessarily reflect the views of the ECLAC Subregional Headquarters for the Caribbean.



## PREFACE

The United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Subregional Headquarters for the Caribbean concluded a project entitled "Establishment of a Database on Selected Areas of Women's Participation in Social and Economic Development" in 1990. The project commenced in September 1986 and was funded by the Government of the Netherlands.

Within the framework of the project, computer software has been developed for the recording and storing of data collected on traders in agricultural produce in the Eastern Caribbean. The databases have been designed in the computer software Dbase 3+. They may be used on any IBM compatible computer and do not require the use of the Dbase 3+ software.

Each of the databases focuses on the collection of data on a specific group of traders and as a result data collection and analysis cannot be shared among the different databases at this stage. However, each database offers valuable insights into the characteristics of the trade conducted by the respective populations which have been recorded.

Recognizing that the databases display potential for use other than the purpose for which they were originally designed, a decision was taken to conduct an in-depth assessment of the computer software.

The assessment exercise sought to clarify the application of the databases, providing a basis upon which interested agencies and individuals may wish to take follow-up action which will benefit women traders.

Mr. Wayne Maughan conducted the exercise. His expert advice has contributed to an understanding of possibilities for use of computerized databases. The present document contains a report of the exercise.



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## INTRODUCTION

Two computer applications were developed as a result of the research work on inter-island trade. One application is a database, the other is a data analysis system. The data base was developed to store information derived from the whole population of inter-island agricultural traders. The data analysis system was developed to analyze data captured by the researcher on inter-island trade in agricultural products and on the suitcase trade.

## DATABASE APPLICATION

### Overview of Software

One of the outputs of the research project by the Economic Commission for Latin America and the Caribbean (ECLAC), Subregional Headquarters for the Caribbean, on Women in Development (WID) in the Eastern Caribbean is three electronic databases developed in dbase III+. These databases are referred to above as "The Database Application" because they are basically similar. The applications were developed to capture and manipulate data on the trafficking of agricultural commodities in Grenada, Dominica and Saint Vincent and the Grenadines, respectively, by inter-island traders.

Each of the three databases captures the following, in the case of each trader:

- Name
- Sex
- Age
- Address by parish of trader and supplier
- Inscription year of membership and date
- Whether a licensed trader and year of renewal
- Whether active or inactive - 1987 to 1989
- Products traded in each year
- Source of products: own produce or purchased supplies.

Each of the three databases captures the following, in the case of each shipment of each trader:

- Point of departure
- Number of shipments by points of departure
- Destination of products
- Dates of departure
- Ships used
- Type of products shipped
- Quantities of products shipped
- Respective values of products shipped.

The software also provides the user with the ability to undertake the under-mentioned research queries:

- Number of traders, active and non-active, identified by sex - January to February 1987, 1988 and 1989;
- Number of traders in possession of licences - 1986 to 1989;
- Number of traders who are members of associations - 1986 to 1989;
- Number of shipments per person by sex - 1986 to 1989;
- Total quantity shipped, by produce - 1986 to 1989;
- Number of items and their value, by shipment, by sex of shipper, and point of departure;
- Residence of hucksters (area), by sex, (number of traders by parish);
- Number of shipments per destination, by sex of shipper, by point of departure;
- Number of traders with licence requested - 1984 to 1989.

Advanced programming of the software should facilitate access to the following reports:

- Areas of residence of suppliers, by parish;
- Number of traders who are own suppliers alongside a comparison of the number of shipments and price of produce with others.

The application provides a listing of all the data on shipments made by each trader.

### Sources Of Data

Information was gathered from a variety of sources including inward and outward manifests, import and export licences, phytosanitary certificates, clearances of ships, warrants/entries for goods liable to duty and/or consumption taxes, passenger lists, crew lists, ships' files or registration books, hucksters' lists, government departments, such as agriculture, statistics, trade and industry and economic development.



All data were not available from the sources indicated above in each country. For example, in some instances, the sex of trader was omitted from the shipping bills at the Customs Department.

The Dominica Hucksters' Association, with a register of members by sex and date of renewal of membership, provided the most complete record on hucksters.

The database focuses on the agricultural trade and combines four different aspects of data on each trader:

- (a) The quantities of produce shipped by each trader of each shipment in pounds and valued in Eastern Caribbean dollars. This information was obtained from shipping bills at the Customs Department for the months of January and February, 1987, 1988 and 1989;
- (b) The name of the ship, the date of shipment, and the destination of the boat. This information was obtained from the shipping bills;
- (c) Information on the traders: name, sex, whether in possession of licence, membership of the Traffickers Association and years of membership. This information was obtained from the Shipping Bills as well as Licence Forms which are completed by persons shipping agricultural produce at the Department of Agriculture;
- (d) Information from the Licence Forms: address of trader, first inscription date and last renewal date of huckster's licence. In the case of Dominica, the traffickers licences provided further information on the age of the trader, the products traded, name of suppliers, residence of suppliers and destination of the produce.

The manuals which were produced to accompany the respective database applications also note that not all the data are available in each country. Saint Vincent and the Grenadines recently initiated the use of a Licence Form. In the case of Grenada, there is no evidence of an operational Traffickers' Association.

### Use of Application

When the application is started, the user is presented with a screen which permits a choice of any one of a number of options. These options allow the user to modify data by entering new information on traders into the database, changing information on traders which has already been entered or removing information on a trader altogether. The options permit the user to list the data entered on individual traders or to make calculations on groups of traders. The latter option is available under the "research" menu. Cross country tabulation is not possible. The database provides an option for file maintenance. This option re-indexes the files. The process of indexing the files ensures that the time required for the computer to search through the database for data is kept to a minimum.

In addition to the standard reports which the databases on agricultural traders in Dominica, Grenada and Saint Vincent and the Grenadines have been designed to produce, the data captured should allow one to report on a number of other economic aspects of agricultural trade activity.

### Mechanics of Application

Each application is designed so that there should be eight database (dbf) files. Database files are being referred to as dbf files because these files carry the file extension dbf. These dbf files store the data input by the user. It is not intended that these files should be either accessed or manipulated directly by the user. These files are manipulated by a number of programme (prg) files.

On entering the name of a new trader into the database, the computer generates a code based on the first and last name. This code is the hub of the system in that it is used to find and correctly store and retrieve data relating to each trader.

### Critical Examination of the Database Application

The databases which have been designed must be critically examined in terms of:

- (a) Their completeness, efficiency and reliability;
- (b) The comprehensiveness of data capture;
- (c) The facility with which it is possible to relate reports generated by the database to national statistics;
- (d) The integrity of the procedures used to generate reports;
- (e) Documentation of the database application and the facility for maintenance, modification or expansion of the database;
- (f) The ability to address reports which are not currently designed into the application.

While reports giving detailed lists of traders, including some basic data, suggest the possibility that all the databases may have been completed and that report-generation was possible, the examination of databases showed that they were incomplete. Such examination was made using electronic files accessible on the project computer at ECLAC.

It is understood that the database applications are intended to be identical, except insofar as they capture data for different countries. At least one of the databases does not have all the menu options of the other two. In addition, two of the three databases would not execute beyond the main menu offered to the user. It must, therefore, be recommended that before distribution, the programme files of the application should be carefully audited and debugged where necessary. All user options should be included to make the applications complete.

In one of the applications a most important data (dbf) file is missing, rendering the application inoperable.

It appears that there are inconsistencies in the different reports which are generated by the application. The tabulations produced by the listing option contain arithmetical errors. Because of the sophistication of the database, such errors cannot be rectified by a non-programmer and this in itself would seriously compromise the integrity/validity of the application. This is perhaps the most serious factor warranting the review of the application before its promotion and distribution is considered.

It is recommended that when the applications are eventually distributed, clearly documented user and technical manuals should be provided.

It should be noted that it is also possible to view the database application primarily as a method for storing data on individuals engaged in agricultural trade. In this circumstance, the application may be viewed as a **directory** of hucksters, best suited to the information needs of the respective hucksters' associations

### Important Considerations in Establishing Database

One of the observations concerning the database application was that a proper systems analysis appears not to have been done to determine flows, reliability and relative importance of information, so that there is the possibility that the application is not properly focused. There is no indication as to who the database was designed for. It may well be naive to expect that some agency will want to or has the resources to go through all the documents necessary to maintain the database. However, the application would seem to have the potential to be of considerable value to the Hucksters' Associations.

As a general rule, the establishment of a database must always be carefully planned. This planning is even more important when the database is to be established using computer technology and will be used by several persons. In particular, much planning must go into the specific area of focus of the database. For example, firms commonly establish databases on the personnel employed.

To be effective, a database must have a clear focus: what information is to be captured, who will use it, how the data will be captured, how information is currently stored, etc. An effective database is based on the needs of a user or group of users,

and such needs must be carefully determined in conjunction with the users before the application is designed.

## DATA ANALYSIS SYSTEM

### Overview of Software

The electronic files which have been developed as part of the overall consultancy in research on women in the inter-island trade, include software developed by an independent consultant for the purpose of analyzing data collected from sample surveys, undertaken among both the agricultural and suitcase traders. A complete manual explaining the purpose of the software and how it is to be used is not available and as a result conclusions had to be drawn on the basis of experimentation. The preliminary manual which was available states that the software has not been completed in that the user cannot access all of the menu options provided. The software developer indicated that all the menu options which were needed to undertake the data analysis required by the contractor were available. Some of the printed reports on the inter-island trade substantiate this claim.

### Use of Application

The software presents the user with a hierarchical system of menus. Essentially, the software allows the user to enter and manipulate data to produce tables of statistics on the suitcase or agricultural trade as required, and on the basis of a number of predetermined variables. These tables compare the relationship between one variable and another; the variables must be selected by the user. It appears that these variables were originally determined by the requirements of the questionnaires on the agricultural and suitcase trades, respectively. The user may elect to generate up to 20 tables from the electronic data file on the agricultural or suitcase trade and the variables selected for comparison.

The software was not developed for general distribution to the islands in which data collection took place, nor for use by any institution. Indeed, if this were so, then there would have to be a training component for the use of the software. In fact, the software was developed for use by the researcher on Women in Development at ECLAC, Subregional Headquarters for the Caribbean, and it was a "one off" exercise, in that after the analysis of the data and conclusion of the report by the researcher, there was no apparent proposal to use the software on a continued basis.

One can readily appreciate the utility of software, which will facilitate the analysis of data and generation of reports on large amounts of data fairly quickly. Indeed, there is evidence that extensive use was made of the software by the researcher. It needs to be borne in mind, however, that the software was custom designed for the specific needs of the research work on women in inter-island trade and it is not entirely intuitive.

Potential users would have to be trained in the use of the software. In any event, there would hardly be a need for the use of the software unless the specific survey for which it was used is to be replicated.

## CONCLUSIONS AND RECOMMENDATIONS

### Database Application - Reports

The potential for generating reports on the characteristics of the inter-island trade, which may be published will be determined by the completeness of the data entered in the database applications. Should that data are collected and entered, then it will be possible to generate the several tables available under the "research" menu.

Reports on the basis of these tables may then be prepared.

The databases have the potential to provide government agencies and researchers with information within the following areas:

- Socio-economic characteristics of traders;
- Extent to which supportive social services such as day care and toilet facilities are necessary;
- Extent to which ancillary services such as cold storage, chill rooms, warehousing, overnight facilities, security for goods, personal safety, first aid and medical services are required;
- Constraints to expansion of trade: post harvest losses, poor packaging, turn around time, and availability of credit;
- The relationships between the agricultural trade and the suitcase trade.

It will however be necessary to augment the software.

### Data Analysis Application

The information which is generated by the data analysis software provides a "snapshot" of the women in inter-island trade.

The software may be used for processing data captured for updating the survey.

Training in the use of the software will be required.





