ANNEX II

Technology and Management Needs of Small and Medium Agro-Industrial Enterprises in Jamaica: Implications for an International Agro-Industrial Service Center

Devres
TECHNOLOGY AND MANAGEMENT NEEDS OF SMALL AND MEDIUM AGRO-INDUSTRIAL ENTERPRISES IN JAMAICA:

IMPLICATIONS FOR AN INTERNATIONAL AGRO-INDUSTRIAL SERVICE CENTER

AID Contract No. AID/SOC/PDC-C-0223
Work Order No. 8

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Washington, D.C. 20523

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June 1, 1981
ACKNOWLEDGEMENTS

The Devres project team received valuable assistance from the individuals and organizations noted in Annex 2-2. Each member of the team expresses their gratitude for the courtesy and kindness shown by each person contacted and for their special assistance in each case. Special thanks are due to Bill Rodgers and Bryant Smith (AID/Washington), and Glenn Patterson, Don Yeaman and Cyril Buchanan (USAID/Jamaica) for the support they provided to the Devres effort both before and during the trip to Jamaica. Also, a special thanks to Henry Robinson of the Ministry of Labor and Employment in Jamaica who provided much of the current statistical data on agro-industrial enterprises in Jamaica.

Several members of the Devres staff also contributed much time and energy to assureing the quality and timeliness of this report. Gail Owens, in particular, helped pull together many background materials and statistical data essential to providing a complete report. Jeannette North, Christine Gunter, and Beverly Kean also helped with this work. Brenda Gaskins managed the entire production process with the assistance of Katie Mulligan, Jean Biesecker, and Dee Dee Green. They all deserve special thanks too for the long hours they put into bringing the report to its completion.
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACC</td>
<td>Associated Chambers of Commerce</td>
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<tr>
<td>ADC</td>
<td>Agricultural Development Corporation</td>
</tr>
<tr>
<td>AMC</td>
<td>Agricultural Marketing Corporation</td>
</tr>
<tr>
<td>B of J</td>
<td>Bank of Jamaica (Central Bank)</td>
</tr>
<tr>
<td>B of S</td>
<td>Bureau of Standards</td>
</tr>
<tr>
<td>BNS</td>
<td>Bank of Nova Scotia</td>
</tr>
<tr>
<td>CADEC</td>
<td>Christian Action for Development and Education in the Caribbean</td>
</tr>
<tr>
<td>CARDI</td>
<td>Caribbean Agricultural Research and Development Institute</td>
</tr>
<tr>
<td>CEO</td>
<td>Community-Economic Organization</td>
</tr>
<tr>
<td>CFNI</td>
<td>Caribbean Food and Nutrition Institute</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agricultural Organization</td>
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<tr>
<td>FIDCO</td>
<td>Forest Industries Development Company</td>
</tr>
<tr>
<td>GOJ</td>
<td>Government of Jamaica</td>
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<tr>
<td>IBRD</td>
<td>International Bank for Reconstruction and Development (World Bank)</td>
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<tr>
<td>IDB</td>
<td>Inter-American Development Bank</td>
</tr>
<tr>
<td>IICA</td>
<td>Inter-American Institute for Agricultural Sciences</td>
</tr>
<tr>
<td>ISER</td>
<td>Institute for Social and Economic Research</td>
</tr>
<tr>
<td>JAMCO</td>
<td>Jamaica Marketing Company</td>
</tr>
<tr>
<td>JAS</td>
<td>Jamaica Agricultural Society</td>
</tr>
<tr>
<td>JDB</td>
<td>Jamaica Development Bank</td>
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<tr>
<td>JEA</td>
<td>Jamaica Exporters Association</td>
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<tr>
<td>JETCO</td>
<td>Jamaica Export Trading Corporation</td>
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<tr>
<td>JDIC</td>
<td>Jamaica Industrial Development Corporation</td>
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<tr>
<td>JLA</td>
<td>Jamaica Livestock Association</td>
</tr>
<tr>
<td>JLP</td>
<td>Jamaica Labour Party</td>
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<tr>
<td>JMA</td>
<td>Jamaica Manufacturers Association</td>
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<tr>
<td>JNEC</td>
<td>Jamaica National Export Corporation</td>
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</table>
JNIC - Jamaica National Investment Corporation
MIC - Ministry of Industry and Commerce
MOA - Ministry of Agriculture
NCB - National Commercial Bank
NPA - National Planning Agency
PAMCO - Projects Analysis and Monitoring Company
PIC - Premier Investment Corporation
PSOJ - Private Sector Organization of Jamaica
REJ - Royal Bank Jamaica
SBA - Small Businesses Association
SBMA - Small Business Marketing Agency
SIFCO - Small Industries Finance Corporation
SRC - Scientific Research Council
UNDP - United Nations Development Programme
UNIDO - United Nations Industrial Development Organization
USAID - U.S. Agency for International Development
USDA - U.S. Department of Agriculture
UWI - University of the West Indies

EXCHANGE RATES* BY DATE

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<td>10/77</td>
<td>0.90</td>
<td>1/79</td>
<td>1.70</td>
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*The value of Jamaica's currency has fluctuated considerably over the last 10 years. In May of 1977, the GOJ established a two-tier exchange rate system to provide incentive for increased production. The basic rate (above the line) was used for essential imports only; the depreciated rate was for all other transactions. The system was abolished in May 1978.
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I. INTRODUCTION

A. Purpose

The purpose of this project was to conduct a study of the potential demand in Jamaica for the services of a proposed USAID-funded International Agro-Industrial Service Center (IASC). The objectives of the mission included:

- identify potential users of IASC services;
- estimate local demand for different types of proposed IASC assistance;
- analyze the implications for the IASC of local conditions; and
- undertake a social soundness analysis of the proposed project to ascertain the impact of project activities on target groups, identify constraints and the extent of project spread effects.

This report presents the findings, analysis of conclusion and recommendations of the project team regarding the potential demand in Jamaica for IASC services.

B. Procedures

A three-person team, consisting of Dennis H. Wood, Jayne Millar-Wood, and Keith L. Oberg of Devres, Inc., researched and prepared this case study over a six-week period between April 19 and May 29, 1981. They spent a total of seven person-weeks in Jamaica, visiting sixteen large and small agro-industrial enterprises in Kingston and around the island and numerous local and international financial and technical

*Annex 2-1 provides a complete Scope of Work for this study.

Devres
assistance agencies, public and private. During the course of the
visit the team interviewed over 100 persons, observed factory operations,
and gathered statistical and other written documents related to the
agro-industrial sector in Jamaica. The team members also carried out
interviews and reviewed statistical and other data available in Washing­
ton, D.C. both before and after the field visits. A complete list
of the individuals contacted, and their institutional affiliation, is
provided in Annex 2-2*, p. 110.

C. Background

Jamaica is the third-largest island in the Caribbean. It is a very
mountainous island with a tropical, humid climate most of the year.
Until its independence in 1962, Jamaica was a British colony with an
economy based on sugar and slavery. While slavery was abolished in
1838, plantation agriculture based primarily on sugar and bananas domi­
nated the economy for another 100 years. Although agriculture remains
basic to Jamaican life, the discovery of bauxite in the 1950's and the
subsequent establishment of the bauxite/alumina industrial complex
became the dominant factor in the island's economic growth. During the
1960's, a time of economic expansion, increased emphasis was also given
to the expansion of tourism and the establishment of local manufacturing
industries. During the 1970's, however, the economy leveled off and
then after 1975 experienced a severe slump. Productivity and export
earnings dropped as did foreign exchange reserves while the trade deficit
grew. Today, the Jamaica economy is based primarily on the following sectors in order of their contribution to GDP—manufacture, distributive trades, real estate, agriculture and mining. Bauxite exports are the largest foreign exchange earner followed by exports of fresh and processed food products.

The economy's performance overall has been poor in recent years, with 1979 a particularly bad year. Several factors contributed to this including a steep increase in the international inflation rate (caused in part by rising oil prices), severe flood rains and other factors that adversely affected agricultural production, declines in both the tourism and bauxite industries and an inadequate level of external financing and local private investment, a consequence in part of the lack of confidence in the Manley government. Largely as a result of these factors, real GDP continued to drop, the balance of payments position deteriorated and the deficit on government accounts remained difficult to reduce.

Since election of a new government in fall 1980, there has been a sense of renewed vigor in the economy, particularly among foreign investors and international donor agencies. More time is needed, however, before an accurate assessment of the direction of the economy can be made.
Figure 1: Map of Jamaica

Parish boundary
Name of parish  TRELAWNY
Name of city  Falmouth
II. JAMAICA'S AGRICULTURE, FORESTRY AND FISHERIES

A. Agriculture

Agriculture is an important pillar of the Jamaican economy. It is the fifth largest contributor to the Gross Domestic Product (about 9 percent in 1979), provides the largest source of employment (23 percent of the labor force), and contributed about 15 percent of the country's foreign exchange earnings. Jamaican agriculture has been hampered however by difficult terrain (mountains cover about 80 percent of its surface), diverse land-ownership patterns, poor marketing conditions, wasteful cultivation practices, shortages and high costs of agricultural inputs and equipment, and the effects of periodic floods and droughts and is thus inefficient in many places. Recently, low market prices of many primary commodities have discouraged production of certain crops particularly for export. At present, roughly 55 percent of Jamaica's land, including commercial forestry, is under cultivation.

Traditionally, Jamaica's agriculture has been export-oriented with resources concentrated on growing a small number of crops--sugar, tropical fruits, coffee, etc.--for export. In recent years, production of these crops has fallen due to lower prices and local factors such as bad weather. Between 1976 and 1979, sugar cane dropped 18 percent, citrus 30 percent, pimento 70 percent, bananas 10 percent, and ginger 32 percent. Simultaneously, production of non-traditional domestic foods has grown in response to government programs and incentives.
designed to reduce dependence on imported food. Production increased, for example, for peas and beans (180 percent), tomatoes (111 percent), sweet potatoes (126 percent), yams (25 percent), and pumpkins (54 percent), between 1970-1975 period and 1978. These efforts however still face major production bottlenecks and inefficiencies (e.g. high cost structure, poor marketing, etc.) contributing to large fluctuations in supply. Table 1 provides selected data on agricultural production for 1975-1979.

Most of the plantation crops are grown in the fertile, well-drained coastal plains and interior valleys of the island. Sugar cane, the country's leading export crop, is grown in 10 of the 13 parishes. In 1975, 144,000 acres of sugar were reaped, though this had declined by 1979 to 122,000 acres. Bananas are found primarily along the coastlands of St. Thomas, Portland, and St. Mary, and on the shale inliers in Manchester. Citrus groves are grown in the middle of the Río Minho valley (mostly in the parish of Manchester and some in Clarendon) and coconut groves can be found on coastal estates on the east end of the island in St. Thomas, Portland, and St. Ann. Many of these groves are used also as cattle pastures.

The rest of the country's crops are grown on the hillside lands, often of marginal quality. Coffee, for example, grows in a variety of soils at elevations between 500 to 7,000 feet. It is produced primarily in the uplands of Clarendon, Manchester, and St. Ann, as well as in the Blue Mountain area along the upper part of the Yallahs Valley. In the
**Table 1: Volume of Jamaican Agricultural Production 1975-1979**

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<td>Sugar Cane ('000)</td>
<td>3,524</td>
<td>3,571</td>
<td>3,177</td>
<td>3,515</td>
<td>2,931</td>
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<tr>
<td>Sugar ('000 tons commercial)</td>
<td>355</td>
<td>357</td>
<td>288</td>
<td>288</td>
<td>279</td>
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<tr>
<td>Bananas* ('000 tonnes)</td>
<td>68</td>
<td>77</td>
<td>80</td>
<td>75</td>
<td>69</td>
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<tr>
<td>Citrus** ('000 boxes)</td>
<td>1,028</td>
<td>1,000</td>
<td>666</td>
<td>886</td>
<td>703</td>
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<tr>
<td>Pimento (tons)</td>
<td>2,151</td>
<td>4,181</td>
<td>1,989</td>
<td>2,502</td>
<td>1,249</td>
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<tr>
<td>Cocoa (tons)</td>
<td>1,771</td>
<td>1,573</td>
<td>1,614</td>
<td>1,300</td>
<td>1,793</td>
</tr>
<tr>
<td>Coffee** ('000 boxes)</td>
<td>381</td>
<td>230</td>
<td>312</td>
<td>179</td>
<td>451</td>
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<tr>
<td>Ginger (short tons)</td>
<td>930</td>
<td>995</td>
<td>423</td>
<td>687</td>
<td>680</td>
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<tr>
<td>Rum ('000 proof gal.)</td>
<td>6,455</td>
<td>4,475</td>
<td>5,005</td>
<td>4,278</td>
<td>5,040</td>
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<tr>
<td>Molasses (tons)</td>
<td>120</td>
<td>118</td>
<td>117</td>
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<td>102</td>
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<tr>
<td>Copra (short tons)</td>
<td>6,308</td>
<td>5,624</td>
<td>3,406</td>
<td>2,124</td>
<td>2,023</td>
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<td>Meat (Million lb)</td>
<td>103</td>
<td>102</td>
<td>111</td>
<td>111</td>
<td>114</td>
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<td>Fish (Million lb)</td>
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<td>36</td>
<td>37</td>
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<tr>
<td>Egg (Million)</td>
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<td>162</td>
<td>152</td>
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<td>Milk (Million quarts)</td>
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<td>Root Crops*** (Million lb)</td>
<td>460</td>
<td>408</td>
<td>517</td>
<td>636</td>
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<td>Vegetables*** (Million lb)</td>
<td>203</td>
<td>223</td>
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</table>

*Exports

**Deliveries to packaging and processing plants

***Selected items

Note: Production figures for citrus, cocoa, pimento, sugar cane and coffee are for the crop year.

higher and wetter parts of the island's interior, (primarily in St. Mary, Clarendon and Hanover), are the cocoa crops. Ginger is grown primarily in Manchester and pimento in the wet limestone uplands of the island. Domestic food crops are grown all over the island but the greatest concentration is in the parishes of St. Elizabeth and Clarendon.

Livestock and poultry are respectively raised on grasslands and in areas near urban centers. Cattle-raising is done primarily in St. Ann, Westmoreland, St. Elizabeth, and St. Catherine parishes. The largest head of small stock (goats and pigs), usually located in same areas as cattle production, are also found in St. Ann, St. Elizabeth, St. Catherine, but in Manchester as well. Dairying, pig keeping, and poultry raising are concentrated near Kingston and the urbanized parishes west of the capital. Their location is more a function of market forces than of physical, climatic factors.

As noted above, landholdings are unevenly distributed. Farms under five acres account for 78 percent of the number of farms, but only 15 percent of agricultural lands. Farms with over 500 acres account for less than 1 percent of the number of farms but for 43 percent of farm lands. Both farm types suffer from problems—small farms tend to be over-worked, subject to poor farming practices, and constrained by lack of access to inputs; large farms are often under-utilized, managed by other than owners, farmed extensively and are sometimes undercapitalized
given their natural resource base. The smaller farms produce mainly for subsistence and the local and national markets, although an estimated 25 percent of agricultural exports come from these farms as well. Domestic foods produced (in order of total food crop value) include yams, vegetables, other tubers, and in smaller degree, fruits, legumes, plaintain, potatoes, sweet potatoes, condiments, cereals, and small livestock (pigs and goats). The larger farms produce sugar cane, coffee and bananas for the national market, often for export. Sugar cane estates are primarily government-owned and operated by the National Sugar Company. Some of the sugar lands are now made available to workers on a co-operative basis. Though coffee is grown primarily by small farmers, it is the large farm owners, especially the bauxite companies, that have contributed to the growth in coffee output. Small coffee farmers have not been able to expand production due to lack of land. Most of the country's cattle are raised on the large farms as well. Many of the big herds are maintained by penkeepers, sugar planters and bauxite companies.

Of agriculture's 15 percent contribution to the country's export earnings, unrefined sugar is the leading export earner (although its relative share has recently decreased) followed by bananas and rum. Coffee and cocoa are also major agricultural exports. Other major fruit and fruit products exported include coconuts, pimento (and pimento oil), oranges, grapefruit, and marmalade. Cigars, cheroots and live cattle are also exported.
Food and agriculture imports constituted about 20 percent of all imports from 1970-1978. Among food imports, cereal and cereal preparations (including counter and baking flour, wheat and meslin, maize, rice, and oats) are the largest group of imported foods (45 percent) followed by meat, fish and dairy products. The importation of vegetables has declined over the years as Jamaica has improved its domestic production. Beverages and tobacco are also imported. Imports of agricultural machinery and implements, (including tractors, ploughs and harrows and their parts, soil preparation equipment, harvesting equipment, dairy-making machines, and horticultural, poultry-keeping, bee-keeping equipment) have been routinely imported by Jamaica though such imports have decreased considerably in recent years, largely due to the country's balance of payments crisis.

B. Forestry

Although trees cover about one-quarter of the country, most cannot be economically exploited at present because of difficult terrain and lack of access roads. The more accessible stands of timber have been exploited gradually over the last four centuries, without significant reforestation, to the point where Jamaica must import approximately half (e.g. 10 million board feet in 1978) of its domestic hardwood consumption and all (e.g. 45 million board feet in 1978) of its softwood consumption. Small private landholdings, which do not undertake
re-planting, are the principal source of supply for the island's small saw milling industry.

Large-scale reforestation programs are presently underway through a new government company, the Forest Industries Development Company (FIDCO). This World Bank-assisted project aims at making the country self-sufficient in lumber in 25 years. Caribbean Pine, Mahoe, and Honduran Mahogany are the principal varieties being planted.

C. Fisheries

For an island nation, Jamaica has a surprisingly small fishing industry with the industry contributing less than one percent to the country's GDP. Fishing equipment is generally traditional and obsolete and productivity is low. The fishing industry in Jamaica is divided into two main operational areas—marine (coastal, deep-sea, and cays) and inland.

The marine fishing industry supports some 12,000 small fishermen on the country's 140 fishing beaches. Larger vessels engage in off-shore fishing, operating from the nearby cays. The catch in 1978 was some 37 million pounds, but demand (all for fresh fish) still exceeds supply. A government development program, including the operation of a new fishing terminal in Kingston and subsidies for fuel and equipment, is now being implemented.

A new inland fisheries program is being undertaken jointly by the GOJ and USAID, under which fingerlings are produced for distribution to farmers in specific areas under the supervision of fish extension specialists.
Very little processing of fish takes place on the island; most domestic fish is consumed fresh. In fact, most fish to be processed is imported. The major fish processor, Jamaican Frozen Foods, imports its fish (mackerel and hake) from Holland and Argentina. The only Jamaican factory which utilizes some domestic production is a large animal feed firm, Master Blend, which supplements imported fish meal with production from its own fish farm and from local fishermen.
III. AGRO-INDUSTRY

A. Background

Manufacturing is the largest contributor to the GDP of Jamaica, accounting for slightly more than 16 percent of the GDP in 1979. It is the country's second largest employer of labor. Within this sector, agro-industry is the largest subsector generating 48 percent (or J$311.7 million in 1979 current dollars) of manufacturing's contribution to GDP or 7 percent of total GDP in that year. Roughly 25 percent of all industrial establishments are agro-industrial. Collectively they employed 58 percent (nearly 22,000) workers in the manufacturing sector or slightly more than 3 percent of the total employed labor force in 1979.

Jamaica's agro-industries produce a wide range of products including processed foods, beverages, leather goods, paper and paperboard products, tobacco products, and wood products. As in the manufacturing sector as a whole, however, there has been a decline in production in some agro-industries as a result of several factors, both domestic and international. Domestically, for example, agro-industries have been faced with a plethora of problems--insufficient and unstable supplies, inadequate packaging facilities, obsolete machinery, insufficiently trained managers and technicians, limited domestic market etc. Also, during the 1970's a crisis of confidence among investors, both domestic and

13

Devres
foreign, about the future of Jamaica's economic and political directors led to a decline in investment in the industries. In addition, Jamaica, like most other developing countries, found itself trapped by changing world economic conditions, in particular the rise in oil prices and a subsequent deterioration in its terms of trade.

During the seventies, production performance in various agro-industries varied by industry. Food processing, for example, rose until 1977 before declining sharply by 1979. On the other hand, the tobacco industry improved over the same period.

B. Description of Agro-Industries

Table 2 summarizes agro-industrial firms by industry and location. Almost half of Jamaican agro-industry is located in the Greater Kingston area, made up of the parishes of Kingston and St. Andrew. St. Andrew alone contains 34 percent of agro-industrial factories, and Kingston 12 percent. St. Andrew has by far the best-developed and most well-rounded agro-industrial sector. Every type of Jamaican agro-industrial activity is to be found there except sugar processing and paper and paperboard production. It has more establishments in nearly every type of processing activity than the other parishes. Kingston and St. Catherine also have fairly well-balanced agro-industrial sectors. Other parishes with significant manufacturing activities include St. James, Westmoreland, and Clarendon.
<table>
<thead>
<tr>
<th>Type of Agro-Industry</th>
<th>Clarendon</th>
<th>Hanover</th>
<th>Kingston</th>
<th>Manchester</th>
<th>Portland</th>
<th>St. Andrew</th>
<th>St. Ann</th>
<th>St. Catherine</th>
<th>St. Elizabeth</th>
<th>St. James</th>
<th>St. Mary</th>
<th>St. Thomas</th>
<th>Trelawny</th>
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<tr>
<td>Leather and</td>
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<td>-</td>
<td>7</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>9</td>
<td>12</td>
<td>14</td>
<td>6</td>
<td>124</td>
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<td>15</td>
<td>6</td>
<td>12</td>
<td>21</td>
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</table>

Source: Factory Inspectorate, Ministry of Labor, Kingston, Jamaica, December 1980
As can be seen in Table 3, while the value of Jamaica's food, beverage and tobacco exports have increased in current prices, their relative share of domestic exports declined from 24.5% in 1972 to 18.5% in 1978. During this same period, food imports constituted roughly the same percentage (18 percent) of total imports to Jamaica.

2. Tobacco and tobacco products

The tobacco industry is dominated by six relatively large companies which together employ over 2,000 workers. Gross income in 1979 was US$54.6 million, just over 5 percent of total manufacturing income. The industry's products include cigarettes, handmade cigars, and unprocessed tobacco. Cigarettes are primarily marketed domestically and, to a small degree, in other CARICOM countries. Cigars are produced almost entirely (95 percent) for export, primarily to the U.S. and Britain. Because of this successful export marketing, capacity utilization is reportedly near 100 percent.

3. Sawmilling and woodworking

The processing of forest products is an important industry in Jamaica for many small entrepreneurs. Unfortunately, as discussed earlier, supply is a major constraint to expansion of both sawmilling and woodworking, and the major part of supplies to the woodworking/furniture industry must be imported. The majority of sawmills obtain
Table 3: Domestic Exports by Sections 1972-1978 Showing Selected Items

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<tr>
<th></th>
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<tr>
<td>TOTAL DOMESTIC EXPORTS</td>
<td>232,277</td>
<td>347,744</td>
<td>653,135</td>
<td>699,411</td>
<td>561,622</td>
<td>691,411</td>
<td>1,057,130</td>
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<td>Food</td>
<td></td>
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<tr>
<td>Bananas</td>
<td>11,822</td>
<td>16,363</td>
<td>11,411</td>
<td>14,654</td>
<td>11,921</td>
<td>16,747</td>
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<td>Citrus fruits</td>
<td>635</td>
<td>611</td>
<td>486</td>
<td>462</td>
<td>404</td>
<td>953</td>
<td>1,558</td>
</tr>
<tr>
<td>Sweet Oranges</td>
<td></td>
<td></td>
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<tr>
<td>Grapes</td>
<td>166</td>
<td>175</td>
<td>91</td>
<td>143</td>
<td>8</td>
<td>46</td>
<td>455</td>
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<tr>
<td>Sugar unrefined</td>
<td>33,765</td>
<td>35,369</td>
<td>74,422</td>
<td>139,688</td>
<td>55,859</td>
<td>67,993</td>
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<td>Molasses</td>
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<td>1,663</td>
<td>2,177</td>
<td>14</td>
<td>2,339</td>
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<td>Grapefruit, canned</td>
<td>1,624</td>
<td>1,187</td>
<td>1,797</td>
<td>1,558</td>
<td>1,144</td>
<td>425</td>
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<td>Grapefruit juice</td>
<td>700</td>
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<td>660</td>
<td>791</td>
<td>659</td>
<td>190</td>
<td>866</td>
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<tr>
<td>Orange juice</td>
<td>508</td>
<td>726</td>
<td>480</td>
<td>722</td>
<td>1,096</td>
<td>481</td>
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<td>Coffee, not roasted</td>
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<td>2,685</td>
<td>2,155</td>
<td>3,785</td>
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<td>Cocoa beans</td>
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<td>4,634</td>
<td>4,978</td>
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<td>Ginger</td>
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<td>664</td>
<td>596</td>
<td>303</td>
<td>660</td>
<td>526</td>
<td>843</td>
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<td>Beverages and tobacco</td>
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<td></td>
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<td>Rum</td>
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<td>18,782</td>
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<td>Tobacco (unmanufactured)</td>
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<td>5,801</td>
<td>5,981</td>
<td>4,351</td>
<td>7,687</td>
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<td>Cigars and Cigarets</td>
<td>183</td>
<td>511</td>
<td>677</td>
<td>548</td>
<td>910</td>
<td>755</td>
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<td>Crude materials (Inedible except fuels)</td>
<td>190,321</td>
<td>229,678</td>
<td>483,736</td>
<td>656,564</td>
<td>393,002</td>
<td>493,915</td>
<td>764,772</td>
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<td>Bauxite</td>
<td>68,375</td>
<td>79,669</td>
<td>130,700</td>
<td>106,860</td>
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<td>Alumina</td>
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<td>727</td>
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<td>Kerosene</td>
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<td>4,162</td>
<td>4,209</td>
<td>4,644</td>
<td>4,535</td>
<td>5,424</td>
</tr>
<tr>
<td>Footwear</td>
<td>292</td>
<td>391</td>
<td>427</td>
<td>553</td>
<td>732</td>
<td>855</td>
<td>874</td>
</tr>
<tr>
<td>Miscellaneous transactions</td>
<td>13</td>
<td>58</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>8,257</td>
</tr>
</tbody>
</table>

Source: Statistical Yearbook of Jamaica, 1979, p. 593.
their supply of logs from private land and from the bauxite companies which clear-fall land in preparation for "open-cast" mining operations. Supplies of logs are also obtained, in minor scale, from the Forestry Department.

As many as 70 to 80 small sawmills currently exist in Jamaica. This figure is a rough estimate, as Jamaican sawmilling operations are generally unregistered small enterprises employing under five persons, located in rural areas, and operated on a sporadic basis. Because raw lumber is often unavailable, these small mills often shut down for months at a time (as they generally don't constitute the owners' sole means of support); however, they rarely close permanently.

Sawmilling is one of the few areas that is not organized in Jamaica. No association exists; no institutions attend expressly to enterprise needs, and no technical assistance is currently provided. The Forestry Department is presently seeking authority and funding from the MOA to organize the sawmills.

C. Conclusion

Jamaica has a diversified agro-industrial sector which is an important contributor to the national economy in general, and to employment and export in particular. The outlook for agro-industry seems good. It is expected that the manufacturing sector overall will improve and that certain agro-industries, especially food processing and tobacco products
should do well. According to U.S. Embassy sources in Jamaica an
annual growth rate of 25% in 1981 and 1982 is possible in the food pro-
cessing industry. There are three reasons for this: first, strong
domestic and foreign markets exist which give preferential treatment
to many of Jamaica's food products; second, new investment is being
considered in this area; and third, the high local input content and
an available supply of labor make the sub-sector more amenable to ex-
pansion.

Despite this optimism, there are still many Government policies
and private priorities to be sorted out before substantial progress is
made in improving and expanding agro-industry in Jamaica. At present,
GOJ economic policy is in a state of flux. Overall outlines show clearly
a change in emphasis from import substitution to export promotion, a
particularly important change for many agro-industries. Policies at
the sector and sub-sectoral level, however, and GOJ institutional roles,
are far from clear.

Responsibility for agro-industry has always been fragmented among
government agencies. At the time of the Devres team's visit, the
relatively new national administration had not designated a lead agency
for agro-industrial development. The agro-industrial jurisdiction of
various GOJ agencies, particularly the MOA's Agricultural Development
Corporation (ADC) and the MIC's Jamaica Industrial Development Corporation, was still undefined.
Nevertheless, some broad outlines of GOJ economic policy which affect agro-industry are already apparent. The emphasis on export promotion implies a renewed focus on productivity and an increase in market competition both domestically and abroad. Deregulation implies that many inefficient state-owned firms, among which are many agro-industrial enterprises, will be sold or returned to private owners or allowed to die.¹ Foreign exchange and import licenses are to be made more freely available to remove raw material and equipment bottlenecks. Although concrete actions to date are few, lip service is being paid to spatial redistribution of economic activity away from Kingston, and to the promotion of small-scale enterprises.

Several major internal studies were underway at the time of the Devres team's visit (April-May 1981) which were to provide the basis for policy decisions. For example, one local consultant at the time was undertaking research in the agro-industrial areas of 1) tobacco, 2) furniture, and 3) coffee, essential oils, and alcohol. These studies, however, were not due until the end of June, July and August, respectively, and the Devres team was unable to gain access to them. Also, the new administration has requested manufacturers groups to elaborate sectoral and sub-sectoral plans to increase production

¹ Nonetheless, parastatal agro-industrial firms, whether owned by the JIDC, the JNIC, the MOA, or the Ministry of Education, will continue as a significant part of the agro-industrial sub-sector.
and exports. If the GOJ accepts these plans, it has stated it will provide extensive aid (e.g., foreign exchange, training, etc.) to those industries to assist them in meeting their objectives.
IV. DEMAND FOR ASSISTANCE BY SMALL AND MEDIUM AGRO-INDUSTRIAL ENTERPRISES

A. Major Problem Areas

Small and medium agro-industrial enterprises (SMAEs) in Jamaica confront many obstacles in seeking to be profitable and grow. Productivity and capacity utilization is generally low. Discussions with local intermediary organizations and agro-industrial firms\(^1\) indicate that the major problems faced by these companies are as follows:

1. Raw materials

To date, many agro-industries in Jamaica face raw material supply problems. In some cases, such as cassava and raw lumber, raw material supplies are generally inadequate. Shortages of other commodities and inputs occur at irregular intervals such as in the sugar industry and the packaging industry. In other cases, such as most fruits and vegetables, raw materials are seasonably in short supply. Because of lack of an appropriate marketing system, there are substantial variations in year-to-year production as well. Also, much of the agricultural sector does not produce specifically for agro-industry. As a result, farmers when given the opportunity, will sell on the fresh produce market at higher prices. When fresh market prices are relatively high,

\(^1\)Annexes 2-3 and 2-5 respectively list the agro-industrial firms and intermediary organizations visited in Jamaica in April-May, 1981.
agro-industry generally cannot compete for the supplies of raw materials available. If agro-industry does not develop a continuous and adequate supply of raw materials to meet its own needs, it will continue to face certain periods of supply scarcity which will constrain its development.

Still other agro-industries must import raw materials, such as fish, wood, wheat, and other grains, at high costs. However, obtaining the foreign exchange necessary to obtain adequate imported raw material supplies can be difficult, particularly for small firms. The recent economic crisis led to a chronic lack of foreign exchange and increase in the effort required to obtain import licenses.

2. Management

Numerous management problems afflict Jamaican SMAEs. Because these firms are small, individual owner-managers are often responsible for all business functions. As a result, one or more of the purchasing, production, financial, personnel, and marketing functions in such firms usually need major improvement. In particular, the shortage of managerial and technical skills contributes to disorganized production layout and production runs. Often owner-managers are not aware of many problems or of the opportunities for improvement. In fact, the attitudes of the owner-manager in dealing with management problems sometimes are a serious constraint to improvement.

3. Antiquated plant and equipment

Due to the economic and political uncertainties of the past
decade, little recent investment has taken place in the agro-industrial sector. These constraints were reinforced by difficulties in obtaining foreign exchange and licenses to import new equipment. Lack of information has also contributed to the low rate of investment by SMAEs. The result has often been obsolete and inefficient production processes, wasteful and costly energy consumption, and waste of raw materials and by-products.

4. **Maintenance**

Inadequate maintenance of equipment is a common problem among Jamaican SMAEs, and is compounded by a chronic lack of spare parts due to undercapitalization and lack of ready access to foreign exchange and import licenses. (As in most Third World countries, most machinery and spare parts are imported.) Maintenance suffers because individual owner-operators are overextended, commonly lack the technical background to diagnose machinery problems, and are often not oriented to preventive maintenance as a regular task.

5. **Packaging**

Packaging is a problem area for SMAEs due to high costs, undependability of supply, and poor quality. Two firms, Metal Box and West Indies Glass Company, respectively produce 100 percent of the metal and glass/plastic containers on the island. The high costs of imported raw materials (tin, petroleum-derived plastics, energy, etc.) are passed directly on to industrial consumers. In some canning operations,
packaging costs account for up to 60 percent of the product cost. Supply is also limited and undependable; both firms cannot meet demand and have lost production in recent years owing to work stoppages and break-downs. One Portland food processor is preparing to set up its own can plant to avoid depending on the current manufacturer and to better control costs. Poor quality is also a problem. Limited production runs due to the relatively small output on the island make it uneconomic for the packaging producers to install exotic equipment for specialized needs. Instances have occurred (as in the case of exported callaloo, a local spinach) where improper packaging resulted in a product's being removed from the market at the last minute.

6. Quality control

Lack of quality control is a common SME problem cited by many sources, particularly in the food processing sector whose produce is destined for human consumption. It is often a function of antiquated plant and equipment, lack of information about quality standards and poor management. Poor quality control, in turn, makes it difficult to market, especially overseas. It is common for products to meet domestic standards, but fail to meet the requirements of major markets abroad. If Jamaica is to increase its exports of processed food products by SMEs, much attention to this problem area is needed.

7. Marketing difficulties

SMAEs face often-overwhelming marketing constraints, particularly
in exporting their products. In general, due to a lack of information and organization occasioned by an owner-operator's preoccupation with production, marketing is underemphasized. In the export market, this situation is compounded by additional factors, including an SMAE's:

- high cost structure stemming from imported energy, packaging materials, and capital equipment;
- undependable and low-quality packaging;
- unreliable supply of raw materials;
- relatively small quantity of supply of product;
- deficiencies in quality control;
- lack of familiarity with foreign tastes and preferences; and
- large and efficient competition encountered abroad which tends to close out the market.

8. Credit and capital

Sufficient credit appears to be available in Jamaica, but its effectiveness and availability to SMAEs is less than adequate. In particular, SMAEs require credit with a minimum of application requirements and often on "soft" terms. However, collateral requirements make it difficult for SMAEs to obtain credit, particularly for working capital. Because of the small size of the island economy and its dependence on imports of raw materials, capital equipment, and spare parts, easy access is needed to foreign exchange and import licenses. Historically, however, this has not been the case. As a result, credit in local currency on occasion goes unused, e.g. as in the case of a recent IAD-JDB credit program for industry.
Shortages of credit also exacerbate the natural scarcity of equity, or risk, capital. Because of the poor state of the economy in recent years and the flight of capital from the island, few investors could be found who were willing to risk their money in an unsecured business venture. Even assuming an upturn in the economy, small businesses are still considered unacceptable credit risks by most institutional and individual investors. Venture capital will continue to be a need, especially in light of the obsolete plant and equipment and working capital shortages faced by SMAEs.

B. Needed Assistance

Many kinds of assistance are needed by small- and medium-sized agro-industrial enterprises in Jamaica. The principal types of assistance include, but are not limited to, the following (in rough order of priority):

1. Technical assistance -- to help assess and improve raw material supply, plant and equipment renovation, production processes, energy consumption, quality control, and packaging. The systems aspects of plant operations (how production is performed elsewhere and what could the Jamaicans learn from this) and the potential of alternative production technologies are of special importance.

2. Feasibility studies -- to facilitate access to credit from lending institutions and equity capital (and technology) through joint ventures and other investors. Assistance in undertaking
feasibility studies is needed to permit expansion of plant/equipment, products, and marketing by SMAEs.

3. **Management assistance** — to help assess and improve financial control and evaluation systems, planning/expansion analysis, marketing, raw material supply organization, and other discrete functions such as bookkeeping/accounting, etc.

4. **Marketing assistance** — to help broaden the domestic and export marketing capability of firms. Improved market information, general marketing skills, packaging design, and knowledge of export requirements are necessary. Assistance here would be compatible with the new GOJ emphasis on export promotion.

5. **Credit/Capital** — to meet working capital credit and equity capital requirements to permit maintenance and expansion of operations. Owing to the Jamaican economy's small size, the foreign exchange component of credit/capital needs is relatively high. High collateral requirements should be eased and replaced by feasibility analyses, particularly to facilitate easing of working capital shortages of SMAEs.
V. SUPPLY OF ASSISTANCE
BY INTERMEDIARY ORGANIZATIONS

A. \textbf{Sources, Types, Quantities, Basis and Effectiveness of Assistance}

A plethora of institutions, public and private, actually assist SMAEs in Jamaica. Others have a mandate to do so, but provide very little actual assistance to SMAEs. Unfortunately, all of these institutions can be generally characterized as having overly broad mandates with respect to beneficiaries, inadequate resources, or limited scope of action with respect to the assistance provided. No institution exists with a specific mandate to assist SMAEs. In particular, responsibility for agro-industry among public institutions at present is fragmented; the situation was compounded at the time of the Devres team visit by the continuing budget and mandate uncertainty accompanying the transition from \textit{The} Manley government to the Seaga administration.

1. \textbf{Financial assistance}

SMAEs receive financial assistance principally through the public sector or public sector-supported programs. These programs focus either on small businesses in general, on their own "system" of dependent enterprises, or on the larger agro-industrial firms. The amount of capital going to SMAEs from all sources is limited. Only one lending institution, the recently-created Small Industries Finance Corporation (SIFCO), has established a significant track record in making loans to SMAEs. Of SIFCO's 38 loan commitments to date
(totalling J$2.3 million), one-third has been to SMAEs. However, SIFCO too has limited financial resources. Its present capital of J$2.75 million is expected to grow at most to between J$8 and J$10 million. Other financial institutions that actually assist SMAEs or could potentially do so in the future include:

- Jamaica Development Bank (JDB)
- Bank of Jamaica (BOJ) Premier Investment Corporation (PIC)
- Private sector banks
- Community Economic Organization (CEO)
- Jamaica National Investment Corporation (JNIC)

a. Jamaica Development Bank (JDB)

The JDB's mandate is, inter alia, to "financ(e) small-, medium-, and large-scale enterprises (and) to provid(e) technical advice and guidance to protect these investments." Between 1970 and 1980, the JDB provided a total of J$33.2 million to Jamaican agro-industrial firms, or about 18.2 percent of its loan portfolio. However, these loans were primarily to large- and medium-sized firms. Of a sample of 13 agro-industrial firms receiving a total of 21 loans, the average loan size was J$666,000 and the average number of employees per company was 340 persons. At the time of project appraisal, projected average annual borrower sales were J$3.7 million.

b. Bank of Jamaica (BOJ) Premier Investment Corporation (PIC)

The BOJ/PIC assists small businesses in general through the
Modern Small-scale Enterprise Development Project, a U.S. $5.5 million World Bank-supported project which channels loan money (foreign exchange) through the nationalized banking system to small businesses. Eight banks, principally the Royal Bank Jamaica (28 percent), National Commercial Bank (23 percent), and Bank of Nova Scotia (17 percent), have loaned US$4.13 million to 138 clients. Approximately 8 percent (11 clients) of these are reportedly in agro-industry (excluding bakeries). An additional seven firms, or five percent of the clients, are woodworking companies.

c. Private sector banks

Individual banks in Jamaica vary considerably in their degree of financial support for agriculture and agro-industry. The National Commercial Bank (NCB) provides perhaps the greatest support to the agro-industrial sector, with about $J10 million, or 2.5 percent of its loan portfolio, in that area. However, loans are primarily to larger firms and not in SMAEs.

d. Community Economic Organization (CEO)

The CEO, founded in 1979 as a corporation owned by the Ministry of Youth, Sports and Community Development, finances and assists some 80 community-owned businesses which it has created. Four of the enterprises created to date are SMAEs. The CEO's annual budget from 1980-81 to 1981-82 jumped four-fold, from about J$1 million to J$4.5 million. Small loans are provided for equipment and working capital at interest.
rates between three and five percent per annum.

e. Jamaica National Investment Corporation (JNIC)

JNIC is a government-owned corporation charged with the investing of resources from the Capital Development Fund, the depository of Jamaica's bauxite levy (see Annex II-5 for greater detail on the JNIC). It is not, technically speaking, a credit institution because it does not lend money to other enterprises. Rather, the JNIC develops and invests its funds in large projects in agriculture, forestry, industry, and mining. One agro-industrial project in which the JNIC has an interest is Midland Enterprises, a large meat-packing operation jointly owned by the MOA and JNIC, which was taken over in 1980 from Reynolds Aluminum. The JNIC holds the potential for channeling investment to SMAEs. To date, however, its focus has been more general in terms of sector and oriented only to large-scale activities.

In sum, different types of financial assistance are available to SMAEs. Long-term loans are provided by most institutions, but the private banks prefer to make shorter-term loans. It falls to the private sector institutions to make the bulk of the longer-term loans. Hence, it is these institutions which provide most funding for capital equipment, land, and building acquisition. Interest rates are generally at commercial rates (presently around 17 percent). The one exception is the GOJ-funded CEO, whose loans fall in the three to five percent range.
2. Technical assistance

Several institutions, both public and private, provide technical assistance to SMAEs*. These include:

- the Jamaica Industrial Development Corporation (JIDC), an agency of the Ministry of Industry and Commerce (MIC) responsible for promoting the growth of manufacturing, and its Food Technology Unit;
- the Bureau of Standards, also part of the MIC, particularly its new Packaging Centre;
- the Small Business Development Centre;
- the Small Business Association;
- financial institutions.

The level of technical assistance provided to SMAEs is low and inadequate relative to the number and needs of SMAEs in Jamaica.

a. Jamaica Industrial Development Corporation (JIDC)

The JIDC and its Food Technology Unit, in previous years quite active in the technical assistance field particularly in relation to agro-industry, has been reduced considerably in terms of quantity and effectiveness of support. Its agro-industry division was abolished in 1978 and most of its experienced staff have either been transferred to JIDC-owned firms or to the MIC, or lost to the private sector as a result of low salaries and staff demoralization.

b. Bureau of Standards

The Bureau of Standards, responsible for establishing and enforcing standards relating to industrial production, has an incipient

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*See Annex 2-5 for a fuller description of each of these intermediary service organizations.
Industrial Assistance Program (IAP) through which its departments are to assist soliciting businesses. The sections with the most promise are the Packaging Centre and the Foods Department. However, the Bureau too has suffered from low budget and staff loss, its staff members are relatively inexperienced and its orientation is still more toward regulation than technical assistance. No provision is made for staff members to dedicate full time to assisting businesses in the field. Instead, staff respond as limited time permits to inquiries by firms with problems.

c. Small Business Development Centre and Small Business Association

Two private institutions exist with a mandate to provide or facilitate technical assistance to small businesses in general. Both entities are small, with limited budgets. The Small Business Development Centre (SBDC), a non-profit training institution, provides general advice on beginning a business and makes referrals to government and non-government services. The SBDC receives approximately ten requests/day for information, advice, and consulting services. Most are referred to the appropriate assistance agencies -- SIFCO for financing, JNEC for exports, MIC for import licenses, etc. Approximately 250 requests yearly lead to the provision of consulting services (average one–two weeks apiece) for a nominal fee by qualified consultants from an SBDC advisory panel of 80 individuals. Three consultants are currently available in agro-industry.
The Small Businesses Association (SBA), a trade association, does not provide any direct assistance. However, it does operate a technical assistance referral service for members which has the potential to serve as a channel for technical/managerial assistance. To date, no technical assistance to SMAEs has occurred through this mechanism.

d. Financial institutions

Private financial institutions, in providing credit to local businesses, are potentially capable of providing technical and managerial assistance to SMAEs. Few do, however, for several reasons. For one, few banks have lending experience in the agricultural and agro-industrial sector, so most make few loans there. For another, those few that do lend in agriculture and agro-industry tend to concentrate on lending to medium and large firms, since these loans are generally larger, more secure, and hence more lucrative. Thirdly, those few loans that are made to SMAEs are secured by collateral and little technical/managerial assistance is provided. A case study of the private bank judged most involved in financing agro-industry and providing technical assistance, the National Commercial Bank (NCB), is provided in Annex 2-5.

3. Management assistance

Management assistance is provided to SMAEs by or through several private institutions, principally the National Commercial Bank (NCB)
and its Business Advisory Manager and the Small Business Development Centre (SBDC) through its seminars and training courses and consultants referral service. The NCB program, with one staff member, assists approximately 70 client-borrowers per year, only a small percentage of which can be considered SMAEs. The SBDC provides general management training through 20 seminars (J$30-75 apiece) and 10-12 courses/year (J$75-150 apiece); it also refers some unspecified number of its 250 yearly requests for consulting services to qualified members of an advisory panel, who provide services at a nominal fee (J$20-30/hour).

4. Training assistance

Training in various subject areas is available to SMAEs on a limited basis. The two major sources are the Small Business Development Centre (SBDC) and the Jamaica National Export Corporation (JNEC). Several government programs under the Ministry of Youth, Sports and Community Development also provide vocational training in agro-industrial skills to individuals.

a. Small Business Development Center (SBDC)

The SBDC provides training in general managerial areas — starting a business, accounting, cash flow analysis, marketing, etc. — through approximately 10 courses/year attended by approximately 100 businesspersons. More general seminars reaching several thousand people are also offered. These courses and seminars are not focused on any particular industrial sub-sector, nor can they be characterized
as "advanced", dealing with more complex areas such as product expansion or new investment decisionmaking. In addition, only recently has the SBDC begun a limited offering of courses on a regular basis outside of Kingston. To date, then, it has not been an effective agency for reaching SMAEs.

b. Jamaica National Export Corporation (JNEC)

The JNEC, a subsidiary of the Ministry of Foreign Affairs, has as its mandate the expansion of Jamaican exports. Its courses are export-oriented, dealing with specific overseas marketing requirements and Jamaican export regulations, often on an industry-by-industry basis. During 1981, the JNEC is offering seven courses, at fees ranging from J$50 to J$400, including one on food processing exports. However, the courses are generally offered in Kingston and attendance is limited. Although anyone may apply, participants tend to be the medium- and large-size firms more likely to be potentially or actually exporting. For them, the JNEC courses are quite helpful.

c. Ministry of Youth, Sports and Community Development

Vocational training focused on agro-industry, particularly food processing, is undertaken by the public sector. Within the Ministry of Youth, Sports and Community Development, three programs—4-H Clubs, the Youth Community Training Centers, and the industrial Training Centers—educate youth in food processing, woodworking, and other industrial areas. The 4-H Program has particularly good linkages with
the private sector and farmers in particular. It offers vocational training in small-scale food processing to rural youth who afterwards work either for agro-industrial employers or on their own farms.

5. Marketing/export assistance
   a. Domestic marketing

   SMAEs receive very little assistance in marketing their production, whether domestically or overseas. In marketing domestically, no institutions exist (that we know of) which provide assistance specifically to SMAEs for this purpose. The Agricultural Marketing Corporation, for example, markets agricultural production but not processed food. GOJ Ministries do little more than regulate.

   b. Foreign marketing

   For exporting, the situation is little better than SMAEs. Both public and private institutions tend to focus on the larger firms, for which the export potential is generally greater and more immediate, and for which "development" costs are more moderate. JNEC and its subsidiary, JETCO, have the greatest potential for assisting SMAEs. Together, the two entities perform market identification and development, training, and marketing services (the latter to 80 clients in 1980) for Jamaican companies, including many agro-industrial firms. Their basic criterion for selecting firms to assist is whether or not the company has the potential to quickly become an exporter (and generate foreign exchange). Particular in the case of JETCO, a profit-making trading
firm, commercial considerations are paramount. JNEC and JETCO appear effective (JETCO won two JEA export awards in 1980). However, by concentrating their limited resources on firms with the most immediate export potential, they are failing to assist the majority of SMAEs.

A recently-created for-profit business venture, the Small Business Marketing Agency, shows potential for assisting SMAEs. On a commercial basis, it is attempting to assist small businesses by importing inputs in bulk and by aggregating small firm production for export. However, it is undercapitalized and to date has only worked with craft enterprises. Its 1980 gross revenues were under J$200,000.

Three business associations, the SBA, the Associated Chambers of Commerce, and the Jamaica Exporters Association (JEA) also provide some marketing assistance to members, some of whom are SMAEs. However, the assistance is of a passive and responsive nature and not focussed on agro-industrial firms. The SBA sponsors a "Trade Center" which exhibits member's production, principally furniture and crafts. The ACC has one staff member who (among other duties) liaises with export agencies, trade missions, etc. The JEA performs similar functions, and in addition provides a mechanism for members at their own cost to participate in trade missions, trade fairs, and other activities to facilitate exports.

6. Feasibility study assistance

Feasibility study assistance is provided only by financial
institutions in conjunction with credit, or at commercial rates from consulting firms. SMAEs generally do not benefit from these services. The SBDC and SBA referral services, which could facilitate the provision of such services at less-than-commercial rates, record no instances in this area.

Financial institution staff members, relying on collateral rather than feasibility analysis to give assurance of repayment, have little incentive (along with little time) to assist potential borrowers in undertaking a feasibility study. Only one bank, NCB, has a staff member whose sole responsibility is to advise clients. (He provides general assistance and yearly attends to an average 70 clients of varying size and activity.) This service, provided free to clients and prospective clients, includes advising on feasibility studies. However, actual preparation of the study, when required, is the responsibility of the loan applicant.

7. Joint venture brokering

The current optimistic atmosphere in the country has stimulated interest by a large number of U.S. firms in investing in Jamaica. The Jamaica National Investment Corporation (JNIC) has been designated the general clearinghouse for investment inquiries. JNIC is to refer potential agricultural investors to the Agricultural Development Corporation, an agency of the Ministry of Agriculture, and potential manufacturing investors to the Jamaica Industrial Development Corporation (JIDC), a
dependency of the MIC. As of May 1981, no agency had sole responsibility for the agro-industrial sub-sector, nor did any of these agencies have staff actively concerned with the area. Public institutions, with the new government and new investment climate, are only beginning to gear up after a period of little foreign investment and joint ventures, particularly among SMEs. Private institutions, likewise, have not been performing this role either.

B. Gaps In The Supply Of Needed Assistance For Firms

Major gaps and weaknesses appear in the provision of assistance by intermediary organizations to SMEs in Jamaica. This section summarizes these deficiencies by category of assistance.

1. Financial assistance

No credit shortage per se exists in Jamaica, but numerous constraints exist which serve to limit credit availability or effectiveness especially for SMEs. The net result is that larger firms, not SMEs, benefit most from the existing credit system.

A basic constraint to the effectiveness of financial assistance is the lack of complementary feasibility analysis, loan packaging, technical, and managerial assistance by lenders. Both public and private sector institution staff members are stretched thin. For example, the NCB has one business advisory manager (in addition to branch loan officers) who assists approximately 70 clients (in all areas) per year. SIFCO,
with eight professionals, has individual experts in marketing and engineering to supplement its three loan officers; however, its staff, too, is overextended. This restricts the access of SMAEs to financial assistance and diminishes the effectiveness of those loans that are made.

Shortages of foreign exchange have also reduced the usefulness of local currency loans, since, as a result, inputs and capital equipment complementary to local currency items have not been readily available.

High collateral requirements for small businesses make it difficult for some SMAEs to borrow. One result is a chronic shortage of working capital.

Due to inflation and the high cost of money, market interest rates are currently around 14-17 percent per annum. No money is currently available to small businesses on soft terms. This, along with other factors, discourages many SMAEs from borrowing in the first place.

2. **Technical assistance**

Relative to the needs and numbers of SMAEs in Jamaica there is a serious lack of technical assistance, especially in technical production areas. Programs for many agro-industries are often non-existent. For example, no organized provision of technical assistance exists for the sawmilling industry, where approximately 75 small firms exist. Existing technical assistance programs are general in focus (i.e., no focus *per se* on agro-industry). More importantly, such programs are
too "passive", i.e., there is no outreach program through field staff to SMAEs or small firms in general. Entrepreneurs must identify and define their problems and solicit assistance in Kingston.

3. Managerial assistance

General managerial assistance is provided in effective, but limited, quantities to small businesses and some SMAEs by the SMDC. The SBDC supplements its three full-time officers with consulting services by 80 Advisory Panel members, three of whom have technical skills in the agro-industrial area. Only one of these three, however, is available full-time; the others are employed full-time at a large fish-processing plant. These limited resources translate into inadequate coverage, in terms of numbers, geography, and subject area. Assistance by financial institutions (to protect their loans) is on an ad hoc and crisis basis, and does not systematically address the needs of SMAEs, particularly in terms of more complex business operations and planning expansion.

4. Training assistance

Training assistance available to SMAEs is generally fragmented and unconcerned with technical aspects. For most advanced areas, no practical training is offered. With the demise of the JIDC's Small Industries Development Department, the Small Business Development Center (SBDC) remains as the principle training institutions targeting small enterprises. However, its focus is primarily managerial and not
technical, too general in its targeting of all small businesses and, until recently, not oriented toward areas beyond Kingston.

The JNEC training focus is on larger firms with immediate potential for export. Thus SMAEs, which require greater involvement of time and resources, are not actively sought out nor adequately attended.

5. Marketing assistance

The gap in marketing assistance is large. Although marketing is a major problem faced by SMAEs, intermediary organizations have rarely addressed it, particularly at the domestic level. Even at the export level, no focus is made on SMAEs and, effectively, only the larger firms (over J$1 million gross annual sales) are helped. The one for-profit intermediary addressing small business needs, the SBMA, has not yet dealt with SMAEs and lacks working capital to effectively implement its program.

6. Feasibility study assistance

Feasibility study assistance is rarely available at affordable terms to SMAEs. The services of consultants are generally priced too high and hence not used by smaller firms. Where provided through financial institutions in conjunction with credit, such services are generally inadequate in quality and quantity since bank officers, although competent, are generally overextended. Financial institutions generally lack the resources and interest, particularly with small loans to small
firms, to analyze the feasibility of loan proposals. As a consequence, most banks eschew feasibility studies and depend on collateral to guarantee loans. This restricts the access of SMAEs and other small businesses to credit and advice.

7. Joint venture brokering

At present no assistance is being provided to SMAEs in arranging joint ventures with foreign firms. Several public institutions do exist which hold responsibility for channeling investments into the economy. The (JNIC) possesses overall responsibility for investment promotion and recently began to serve as a clearinghouse to direct investment inquiries to the appropriate sectoral agencies. The Agricultural Development Corporation (ADC) and the Jamaica Industrial Development Corporation (JDIC) hold responsibility for facilitating investment in agriculture and industry, respectively. These agencies presently have overlapping responsibility for agro-industry, though the government is expected to clarify their institutional roles over the next few months. The ADC and JDIC will likely be the agencies designated to assist investors. However, their mandates, functions and future capacities are not yet defined. Both institutions currently lack staffing adequate to play a significant role in assisting SMAEs in this area.
C. Assistance Needed by Intermediary Organizations

There are a number of existing intermediary organizations in Jamaica, but their assistance efforts for SMAE's are weak in both in-depth expertise and coverage of the many firms with specific assistance needs. Thus, existing intermediary organizations need assistance of two types: additional funding and additional human expertise. Since the IASC is designed to provide the latter, such needs are emphasized here.

1. Assistance needed by financial intermediaries

Financial institutions either require additional staff resources or need to be able to send small borrowers to experts to provide help in packaging loan proposals, assessing project feasibility, and successfully undertaking projects. An organization such as the IASC could contribute to meeting these needs.

To make their assistance more effective, particularly in reaching SMAEs, financial institutions must augment their lending staff with personnel familiar with the technical as well as management and financial problems of these enterprises. SIFCO, for example, requires greater human resources, some of which could come from an IASC, if it is to adequately address some of the priority areas where it feels its clients have problems, including:
o record-keeping;
o costing;
o quality control/hygiene;
o production engineering;
o plant layout; and
o energy.

If the financial institutions will not add such staff because of pecuniary considerations, they could be encouraged to use IASC staff or to send potential SMAE borrowers to another agency for help in loan packaging, etc. The IASC could relate to the latter agency as one of its selected intermediary organizations. This activity by IASC could help reduce the high administrative costs of dealing with SMAEs, thereby serving as an incentive to financial institutions to do so.

The incidence and effectiveness of supervised credit also needs to be increased. To go beyond a crisis-oriented approach to the assistance needs of borrowers, a financial institution might link up to the IASC directly or to technical/managerial assistance agencies (such as the SBDC, which would itself be augmented by IASC good short-term assistance) to channel assistance directly to borrowers. This holds the promise of making credit more effective, encouraging lenders to deal with small enterprises, and strengthening SMAEs in greater numbers.

2. Assistance needed by technical assistance intermediaries

Intermediaries providing technical assistance require additional human resources and access to expertise to adequately address
the technical needs of SMAEs. They need such people as well to reach out to smaller firms physically removed from Kingston and those which are less capable of defining their technical deficiencies. Substantial areas where such expertise is needed by existing intermediary organizations include: plant layout, production engineering, energy technology, quality control and packaging.

This is not just a supplemental resource problem, however. Increased or new emphasis is required by these intermediate organizations in areas presently not covered by technical assistance efforts, such as sawmilling and leather-working. The IASC could on request, quickly provide them with expertise in these and other areas.

More effective transmission of technical information is also needed through strengthening the capacity of existing institutions, such as the Bureau of Standards' Packaging Centre, to keep abreast of new technology and to disseminate this information to SMAEs. IASC efforts to strengthen the technical assistance capabilities of such organizations might better assure that such information is made available to firms in need of it.

3. **Assistance needed by managerial assistance intermediaries**

Intermediary organizations providing managerial assistance to SMAEs need help in providing hands-on, one-on-one managerial assistance, either linked to credit (through financial institutions) or to general technical assistance programs. Group training, such as through an augmented SBDC program, would also be appropriate.
4. **Assistance to training intermediaries**

Training institutions need additional people who can address specific technical needs of SMAEs in training sessions, particularly in the financial, production and marketing areas, and who can help entrepreneurs outside of the Kingston area. Assistance by the IASC could take several forms:

- improvement and/or broadening of curricula;
- training of intermediary organization trainers;
- short-term teaching assignments by U.S. individuals; and
- visits by intermediary personnel to U.S. and U.S. SMAEs.

In all cases, such assistance could help an intermediary to broaden its outreach and provide more effective training to SMAEs.

5. **Assistance needed by marketing/export assistance intermediaries**

Marketing and export assistance agencies need the expertise an IASC could provide to extend their technical assistance, training, and market research and development services to smaller firms, particularly to SMAEs. At the domestic level, marketing specialists are required. For export, experts with contacts in the U.S. and other developed country markets are needed to assist market research and development efforts.

6. **Assistance needed by feasibility study agencies**

Since little assistance is given in this area by intermediary
organizations, it is a fruitful area for IASC input and experimentation. In fact, what is needed is a detailed and longer-term effort to develop a capacity to carry out "bankable" feasibility studies in one or more intermediary organizations with a clear track record or desire to serve SMAE's. This may be possible via short-term IASC assignments, but it may require a substantial IASC investment in an intermediary organization, including the posting of one or more long-term persons to help build such a capacity within the organization. The SBDC seems to be the most logical candidate for such assistance, but SIFCO and others are possibilities also.

In fact, such studies are used to help organize and begin a business expansion (or a business) on the right foot. This implies that both financial institutions and technical assistance providers can use IASC help in this area.

Financial institutions, in order to finance more SMAEs and in a more adequate fashion, must rely more on feasibility analysis and less on collateral than at present in the appraisal and guarantee of a loan. This can be facilitated by IASC training and by provision of direct assistance in performing feasibility studies, either through a bank or a technical assistance agency to SMAEs.

7. **Joint venture brokering**

At present, no intermediary performs this service for SMAEs. It is not clear, either, at this time which existing intermediary would be most appropriate to assume responsibility for promoting SMAE joint
ventures. The JNIC is the most capable institution, having a small but solid investment analysis staff. However, its focus is on larger firms and ventures. Both the ADC and the JIDC would require creation of new offices for promotion of investment, long-term management assistance, and other joint venture arrangements and in the case of SMAEs would require extensive orientation to U.S. SMAE concerns. An IASC could find an interested intermediary organization and provide it with appropriate assistance to enable it to be effective as a joint venture broker in the SMAE area.

8. Conclusions

There are numerous needs of intermediary organizations that an IASC could meet effectively. To be of maximum value, however, the IASC must avoid working with all intermediary organizations and select one in each area of primary concern to work with on a consistent basis. This will limit the "needs of intermediary organizations" to a more manageable size. It also will begin the concentrated effort of building strong IASC relationships with a small number of intermediary organizations that the IASC can relate to and assist effectively.

Selecting the intermediary organizations most appropriate for furthering IASC purposes should be done by IASC after its initiation. However, a preliminary assessment along these lines suggests that IASC effectiveness would be most enhanced if IASC provided assistance to and developed strong relationships with the following intermediary organizations:
- technical assistance - SBDC, JIDC, and/or Bureau of Standards
- managerial assistance - SBDC
- marketing assistance - JNEC
- feasibility study and bank loan packaging assistance - SIFCO, JDB
- joint venture brokering assistance - ?

Of course, many other intermediary organizations could be chosen by IASC, and choosing two in some areas would be appropriate. The important point is to choose so as to concentrate IASC resources effectively while not limiting IASC access to too few channels, thereby choking off its receipt of legitimate SMAE requests for assistance.
VI. SOCIAL SOUNDNESS ANALYSIS

A. Purpose And Procedure

The purpose of this analysis is to determine the social soundness of IASC-supported projects in Jamaica by examining the following:

- the general socio-economic context in which IASC-supported projects will be undertaken;
- the particular situation of labor and of women especially as they are related to agro-industry;
- the potential impacts of IASC projects especially the project beneficiaries and spread effects;
- the social feasibility and constraints of any project;
- the criteria to be considered in supporting projects and the social analysis needs of such projects;

The analysis was undertaken primarily during a two-week field visit to Jamaica during which time extensive interviews were conducted with private citizens and government officials knowledgeable about a variety of socio-economic issues. Additional research was also conducted before and after the trip to Jamaica drawing especially upon statistical data.

B. Introduction

The socio-economic context in Jamaica in which development, especially in agro-industry, will take place is complex and fraught with myriad problems including a large class of poor people, a labor force with a high percentage of unskilled workers who contribute to a high unemployment rate, a debt-laden economy with crises in many sectors,
more capital than labor-intensive industry, high emigration rates siphoning off skilled technical and managerial personnel, a large and growing population with 41 percent under the age of 15, a legacy of colonialism and of a plantation economy which still affects socio-cultural attitudes and habits. In light of all these problems however there is the potential, for example, through the expansion of agro-industry, to utilize many of Jamaica's resources (e.g. labor and agricultural productivity) to improve the overall economy and enhance the quality of life of for at least some of Jamaica's people.

Jamaica's total population is slightly more than 2.2 million. It is predominantly rural with more than 60 percent of the people living in rural parishes and 36 percent or more residing in the Kingston-St. Andrew metropolitan area, the major urban center of the country. Other urban areas, though much smaller in size include Montego Bay, Spanish Town, May Pen and Savanna la Mar, Port Antonio and Mandeville. Rural to urban (primarily to Kingston) migration in the last 20 years has been substantial.

The population growth rate, while high relative to many industrialized countries, has declined in recent years in part because of high rates of external migration, especially to the U.S. A significant portion of the outflow in recent years are Jamaicans in the 20-49 age group, with more women than men, who are largely professionals, management personnel, and skilled workers whose migration has severely depleted the country's
pool of skilled labor. Despite the unusually low growth rates and the declining fertility, Jamaica has a serious population problem. The rapid growth of the population over the last few decades has left the country with approximately 40 percent of its people under the age of 15 and about to enter their childbearing years. Therefore, despite a drop in birth rates, Jamaica's population will continue to rise rapidly. This rapid growth, particularly of the 15 to 25 age group will create increasing problems in labor force absorption and rural-urban migration.

The quality of life as measured by both economic and social indicators for Jamaica's population is high relative to that of most people in developing countries. The per capita income of $1,110 (1978) places this island nation in the upper middle-income bracket among the world's nations. The Physical Quality of Life Index (PQLI) rating for Jamaica is also high—87 in 1979 on a scale of 100. This Index reflects Jamaica's high literacy rate (86 percent), low infant mortality (20 per 1,000 live births), and long life expectancy (68 years).

These relatively high ratings, however, are deceptive, in that they fail to portray the real conditions of poverty which most of Jamaica's population faces daily in both rural and urban areas. Average income figures do not, for example, highlight the extreme maldistribution of income between rich and poor though this is quite evident when one examines the high crime rates found in Jamaica.
Health conditions for much of the population are poor, also. Health care facilities are inadequate and insufficient, and there is a high ratio of people per physician. Widespread malnutrition, especially among young children, is evident and extremely hazardous environmental health conditions exist with much substandard housing, substantial slum and shanty towns and poor or non-existent water supply or waste disposal. For example, as of 1976, only 6 percent of the rural houses and 40 percent of the urban houses had piped-in water.

All of these situations are compounded by the inevitable crunch of an inflationary economy with steady increases in the consumer price index over the last decade which has made it difficult for all people, but especially for the poor, to really improve their standard of living. Thus while the "statistical" picture is better than that of most developing countries, the realities of daily life for the poor are stable and their future limited.

In addition to the demographic and economic facts of Jamaican life, the structure of society also has an important impact on development programs and progress. There are two principal socio-cultural systems operating in Jamaica. The most predominant is African, belonging to the majority (nearly 80 percent) of people who are descendents of slaves and are of African heritage. The other is Western European in origin. Jamaicans of nearly total African heritage constitute the agricultural working class and the growing commercial and industrial labor force.
Many of Jamaica's farmers own small plots of land that they frequently work in addition to other part-time jobs. The rural farmers and urban workers fall primarily into the "lower class", though there are opportunities for upward mobility as many people move to cities and the economy improves. The growing middle class of merchants, professionals and corporation employees is made up of Jamaicans of Chinese and Lebanese, Syrian and East Indian descent as well as some Black and increasing numbers of people of mixed heritage. The small upper class is dominated by wealthy land owners and planters, high government officials, wealthy industrialists and professionals. As a social class it is largely influenced by European custom and tradition.

Strong traditions of democracy, religion, unstable family relationships, organized labor among others contribute to both the cohesion and cleavages in Jamaican society. Moreover, the heritage of a plantation economy and long-term colonial rule has left its mark on the social, political and economic relationships of Jamaica's population. Some believe that this heritage has had a demonstrable impact on the nation's ability to make progress in some areas, particularly in improving the economic well-being of the people and the nation. Thus, these factors and their impact on present-day Jamaican society need to be taken into consideration in planning new projects in agro-industry or other areas.
C. Labor And Employment

1. Background

The labor force in Jamaica, like that of many developing countries, is expanding rapidly, placing strains on public and private institutions alike and challenging them to focus on job creation strategies. By 1979, the labor force numbered 954,000, or 44 percent of the population. A large majority of new entrants into the labor force are unskilled women and youth. Also, among men, it appears that those with no work experience are increasingly replacing skilled and experienced workers, a function in part of both out-migration and of the withdrawal of older workers from the labor force.

In 1979, the average number of employed persons was 689,000, or 72 percent of the total labor force. Of those employed, one-third were employed in agriculture, forestry and fishery. Another third were employed in public administration or service sector jobs. Eleven percent were involved in manufacturing. Only 1 percent were involved in one of the island's most lucrative industries—the mining and refining of bauxite.

In terms of occupation, self-employed and independent workers as well as those in unskilled manual jobs, craftsmen and production process workers constituted 63 percent of the work force in 1979. Those in professional, technical, administrative or managerial positions were less than 9 percent of the work force. Regional variations in employment
exist, as well, with the parishes of St. Elizabeth, Manchester and St. Thomas having consistently high (though only relative to the rest of Jamaica) employment rates.

As the labor force has continued to grow, however, so have the numbers of unemployed which swelled to nearly 300,000 at one point in 1979.¹ The average unemployment rate was nearly 28 percent, a substantial increase over previous years. Unemployment among agricultural workers, in particular, increased substantially and induced migration to urban areas by people seeking work. This average figure, however, does not clearly reflect the high rates of unemployment concentrated among youth (67 percent) and among women (44 percent and up for some age groups). The parishes of highest unemployment overall (30 percent and over) were Hanover, Clarendon, St. Mary and Portland. Those in which unemployment ranged from 20-30 percent were Westmoreland, St. James, Trelawny, St. Ann, St. Catherine and Kingston/St. Andrew.

Wages and employee benefits in Jamaica vary considerably by industry and occupation. Minimum wage is set by law at J$30.00 (approximately US$17) weekly plus two weeks paid vacation. There is a Social Security system encompassing a National Insurance Scheme which covers the majority of the gainfully employed population. Also since 1979, the

Table 4: Average Weekly Earnings and Percentage Changes in Earnings for Wage Earners by Type of Industry, with subsectors for Agro-Industries—1978-1979

<table>
<thead>
<tr>
<th>Type of Industry</th>
<th>Average Weekly Earnings</th>
<th>% Change 1978-79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>$203.51</td>
<td>$229.69</td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food, Drink and Tobacco</td>
<td>63.40</td>
<td>79.39</td>
</tr>
<tr>
<td>Sugar, Rum, and Molasses</td>
<td>63.37</td>
<td>78.17</td>
</tr>
<tr>
<td>Bakeries</td>
<td>59.23</td>
<td>55.73</td>
</tr>
<tr>
<td>Other Food Manufacture</td>
<td>58.38</td>
<td>65.09</td>
</tr>
<tr>
<td>Beverages</td>
<td>74.45</td>
<td>85.60</td>
</tr>
<tr>
<td>Tobacco</td>
<td>115.61</td>
<td>144.64</td>
</tr>
<tr>
<td>Wood and Wood Products,</td>
<td>61.33</td>
<td>63.17</td>
</tr>
<tr>
<td>Paper and Paper Products</td>
<td>89.94</td>
<td>106.56</td>
</tr>
<tr>
<td>Electricity</td>
<td>167.69</td>
<td>201.50</td>
</tr>
<tr>
<td>Private Construction</td>
<td>75.01</td>
<td>82.11</td>
</tr>
<tr>
<td>Distribution</td>
<td>56.59</td>
<td>65.04</td>
</tr>
<tr>
<td>Transport and Communication</td>
<td>107.90</td>
<td>126.16</td>
</tr>
<tr>
<td>Financial and Business Services</td>
<td>58.99</td>
<td>76.49</td>
</tr>
<tr>
<td>Other Services</td>
<td>71.88</td>
<td>85.14</td>
</tr>
</tbody>
</table>

Maternity Leave Act guarantees 8 weeks maternity leave with pay to all female workers. In 1979, the average weekly earnings for all employees was J$123.21, though for wage earners it was only J$90.50. (See Table 4.) Wage earners in the mining sector earned more than twice that amount (J$229.69) while wage earners involved in manufacturing, for example, earned less (J$79.39). In sharp contrast, salaries at the top level of the Civil Service System ran as high as J$385 weekly though many of the workers in the trades, labour and general services category in the civil service received about the same as their counterparts in the private sector. In nearly all sectors of the economy wages have been steadily rising in recent years though annual percentage increases vary substantially by sector.

2. Labor and Agro-Industry

In 1979 the agro-industry sub-sector (including food, beverages and tobacco; wood, paper and leather products) accounted for roughly 58 percent (over 21,000 workers) of employment in large establishments in the manufacturing sector. Employment was concentrated in 4 agro-industries—preservation of fruits and vegetables, bakery products, sugar and the beverage industries. The sugar, rum and molasses industries were the largest employers in the sub-sector with 6,500 employees.

1Statistical data on employment in agro-industries in Jamaica varies by source and data collected. Unless otherwise noted, the figures used in this section are taken from Department of Statistics, Employment, Earnings and Hours in Large Establishments 1979 (large establishments are those employing 10 or more persons) and the Department of Statistics, Statistical Abstract, 1979.
Table 5 provides an overall picture of employment by agro-industry and by sex in Jamaica's 14 parishes for 1980.1 Table 6 shows trends in employment in agro-industry for 1976, 1978 and 1980. As Table 5 indicates, the parishes of St. Andrew, St. Catherine and Clarendon employ the largest number of people in agro-industrial enterprises at present. However, there are substantial variations by parish. The average number of persons employed in an agro-industry factory in 1979 was 52. As can be seen from Table 7, most agro-industrial factories employ less than 50 people. In terms of employment by sex, Table 5 indicates that overall men outnumber women nearly three to one in agro-industries. Female employment is highest in the preservation of fruits and vegetables, tobacco and leather industries. All other agro-industries are male dominated.

Wages in the agro-industry sub-sector are among the lowest paid in the economy. Although average weekly earnings for wage-earners in the food, drink and tobacco industries, for example, had one of the highest annual percentage increases (23.4 percent) from 1978 to 1979, wage earners in these industries were paid only one-third as much as wage earners in the mining industry and less than two-thirds as the

1Data in this Table was provided by the Ministry of Labor and Employment, Factory Inspectorate in April 1981. While not every factory in Jamaica is registered, the data provides a good picture of the distribution of agro-industrial employment.
<table>
<thead>
<tr>
<th>Type of Agro-Industry</th>
<th>Clarendon</th>
<th>Hanover</th>
<th>Kingston</th>
<th>Manchester</th>
<th>Portland</th>
<th>St. Andrew</th>
<th>St. Ann</th>
<th>St. Catherine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit and Dairy</td>
<td>-</td>
<td>19 (9/10)</td>
<td>288 (237/51)</td>
<td>38 (34/4)</td>
<td>-</td>
<td>463 (91/162)</td>
<td>136 (127/11)</td>
<td>639 (301/250)</td>
</tr>
<tr>
<td>Preservation of Fruits and Vegetables</td>
<td>567 (126/443)</td>
<td>-</td>
<td>20 (15/5)</td>
<td>86 (72/12)</td>
<td>-</td>
<td>645 (267/318)</td>
<td>-</td>
<td>695 (373/222)</td>
</tr>
<tr>
<td>Grain Mill Products</td>
<td>31 (28/3)</td>
<td>2 (1/1)</td>
<td>289 (266/23)</td>
<td>-</td>
<td>-</td>
<td>164 (111/53)</td>
<td>-</td>
<td>137 (101/70)</td>
</tr>
<tr>
<td>Bakery Products</td>
<td>151 (138/13)</td>
<td>38 (36/2)</td>
<td>263 (188/75)</td>
<td>22 (211/10)</td>
<td>22 (74/3)</td>
<td>1,362 (889/473)</td>
<td>149 (139/10)</td>
<td>29 (25/4)</td>
</tr>
<tr>
<td>Sugar</td>
<td>1,057 (971/86)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10 (6/4)</td>
<td>-</td>
<td>10 (6/4)</td>
</tr>
<tr>
<td>Sugar Confectionary Coco and Cocoa Products</td>
<td>30 (30/-)</td>
<td>7 (7/-)</td>
<td>147 (81/66)</td>
<td>22 (10/12)</td>
<td>12 (5/7)</td>
<td>47 (41/6)</td>
<td>-</td>
<td>7 (9/1) (97/117)</td>
</tr>
<tr>
<td>Miscellaneous Food Preservation</td>
<td>25 (24/1)</td>
<td>30 (28/4)</td>
<td>245 (156/40)</td>
<td>2 (1/1)</td>
<td>38 (8/30)</td>
<td>416 (269/147)</td>
<td>6 (6/-)</td>
<td>77 (54/73)</td>
</tr>
<tr>
<td>Beverages Industries</td>
<td>57 (53/-)</td>
<td>-</td>
<td>72 (46/26)</td>
<td>-</td>
<td>-</td>
<td>2,173 (1,894/279)</td>
<td>-</td>
<td>34 (23/7)</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,267 (311/956)</td>
<td>-</td>
<td>418 (164/370)</td>
</tr>
<tr>
<td>Wood Products</td>
<td>-</td>
<td>-</td>
<td>54 (51/3)</td>
<td>-</td>
<td>-</td>
<td>223 (207/21)</td>
<td>23 (22/7)</td>
<td>44 (64/-)</td>
</tr>
<tr>
<td>Paper and Paper Board and Pulp</td>
<td>97 (94/3)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Paper and Paper Board Products</td>
<td>-</td>
<td>-</td>
<td>24 (15/9)</td>
<td>-</td>
<td>-</td>
<td>815 (523/292)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Leather and Leather Products</td>
<td>-</td>
<td>-</td>
<td>23 (18/18)</td>
<td>-</td>
<td>-</td>
<td>212 (126/86)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Total** 2,015 (1,466/549) 96 (79/17) 1,425 (1,069/356) 367 (328/39) 127 (87/40) 7,787 (4,934/2,853) 285 (297/77) 3,754 (2,289/466)

Table 5: Distribution of Employment by Agro-Industry, Sex and Area (Corporate Area and Rural Parish) in Jamaica (Continued)

<table>
<thead>
<tr>
<th>Type of Agro-Industry</th>
<th>St. Elizabeth</th>
<th>St. James</th>
<th>St. Mary</th>
<th>St. Thomas</th>
<th>Trelawny</th>
<th>Westmoreland</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot and Dairy</td>
<td>18 (17/1)</td>
<td>21 (21/-)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>103 (71/32)</td>
<td>1,714</td>
</tr>
<tr>
<td>Preservation of Fruits and Vegetables</td>
<td>48 (36/12)</td>
<td>-</td>
<td>118 (38/80)</td>
<td>90 (31/59)</td>
<td>22 (29/2)</td>
<td>20 (9/11)</td>
<td>2,109</td>
</tr>
<tr>
<td>Grain Mill Products</td>
<td>10 (9/1)</td>
<td>10 (7/3)</td>
<td>6 (6/-)</td>
<td>8 (3/5)</td>
<td>58 (55/3)</td>
<td>10 (7/3)</td>
<td>720</td>
</tr>
<tr>
<td>Bakery Products</td>
<td>34 (33/1)</td>
<td>156 (137/19)</td>
<td>95 (91/4)</td>
<td>49 (47/2)</td>
<td>51 (47/4)</td>
<td>83 (76/7)</td>
<td>2,808</td>
</tr>
<tr>
<td>Sugar</td>
<td>454 (442/12)</td>
<td>-</td>
<td>250 (245/5)</td>
<td>104 (100/4)</td>
<td>594 (590/4)</td>
<td>900 (861/39)</td>
<td>4,251</td>
</tr>
<tr>
<td>Sugar Confectionary</td>
<td>-</td>
<td>-</td>
<td>120 (95/25)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>594</td>
</tr>
<tr>
<td>Cocoa and Cocoa Products</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Miscellaneous Food</td>
<td>22 (20/2)</td>
<td>18 (16/2)</td>
<td>-</td>
<td>12 (6/6)</td>
<td>4 (3/1)</td>
<td>11 (10/1)</td>
<td>916</td>
</tr>
<tr>
<td>Preservation</td>
<td>(608/298)</td>
<td></td>
<td></td>
<td>(2,286/362)</td>
<td></td>
<td>(659/1,226)</td>
<td></td>
</tr>
<tr>
<td>Beverage Industries</td>
<td>-</td>
<td>56 (56/-)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,648</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,685</td>
</tr>
<tr>
<td>Wood Products</td>
<td>3 (3/-)</td>
<td>30 (26/4)</td>
<td>-</td>
<td>6 (6/-)</td>
<td>5 (5/-)</td>
<td>388 (760/28)</td>
<td></td>
</tr>
<tr>
<td>Paper and Paper Board</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>97</td>
</tr>
<tr>
<td>and Pulp</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(94/3)</td>
</tr>
<tr>
<td>Paper and Paper Board</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>839</td>
</tr>
<tr>
<td>Products</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(538/301)</td>
</tr>
<tr>
<td>Leather and Leather</td>
<td>-</td>
<td>13 (6/7)</td>
<td>-</td>
<td>128 (14/114)</td>
<td>-</td>
<td>376 (151/225)</td>
<td></td>
</tr>
<tr>
<td>Products</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL**

<table>
<thead>
<tr>
<th></th>
<th>(560/29)</th>
<th>(269/35)</th>
<th>(475/114)</th>
<th>(201/190)</th>
<th>(721/14)</th>
<th>(1,039/93)</th>
<th>(13,813/5,322)</th>
</tr>
</thead>
</table>

59
Table 6: Agro-Industries in Jamaica, by Number of Registered Factories, and Persons Employed 1976, 1978, and 1980

<table>
<thead>
<tr>
<th>Type of Agro-Industry</th>
<th>No. of Registered Factories</th>
<th>No. of Persons Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and Dairy Products</td>
<td>37</td>
<td>38</td>
</tr>
<tr>
<td>Preservation of Fruits and Vegetables</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>Grain Mill Products</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td>Bakery Products</td>
<td>154</td>
<td>133</td>
</tr>
<tr>
<td>Sugar</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Sugar Confectionary, Cocoa and Cocoa Products</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Miscellaneous Food Preparations</td>
<td>40</td>
<td>34</td>
</tr>
<tr>
<td>Beverage Industries</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Wood Products</td>
<td>49</td>
<td>40</td>
</tr>
<tr>
<td>Paper and Paperboard Products</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Paper and Paperboard and Pulp</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Leather and Leather Products</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>421</td>
<td>377</td>
</tr>
</tbody>
</table>

1Statistics for 1976 and 1978 are from the Statistical Yearbook of Jamaica 1979, Department of Statistics, Kingston Jamaica (May 1980). Statistics for 1980 were obtained from the Factories Inspectorate, Ministry of Labor and Employment, Kingston Jamaica (April 1981). A "registered factory" as defined by the Factories Inspectorate is one that either employs 10 or more manual laborers or uses mechanical power (electricity, water) for the making or repairing of articles etc., processing of food etc., or both. Though all factories in Jamaica are not covered by this survey, the list of registered factories prepared by the Factories Inspectorate is considered by the Department of Statistics to be the definitive listing.
Table 7: Jamaica's agro-industry by type of industry and numbers of persons employed per registered agro-industry factory, 1980

<table>
<thead>
<tr>
<th>Industry</th>
<th>1-50</th>
<th>51-100</th>
<th>101+</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and Dairy</td>
<td>29</td>
<td>5</td>
<td>5</td>
<td>39</td>
</tr>
<tr>
<td>Preservation of Fruit &amp; Vegetables</td>
<td>15</td>
<td>6</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>Grain Mill Products</td>
<td>19</td>
<td>5</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Bakery Products</td>
<td>115</td>
<td>6</td>
<td>4</td>
<td>125</td>
</tr>
<tr>
<td>Sugar</td>
<td>1</td>
<td>-</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Sugar Confectionery, Cocoa</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Misc. Food Preservation</td>
<td>29</td>
<td>2</td>
<td>4</td>
<td>32</td>
</tr>
<tr>
<td>Beverage Industries</td>
<td>12</td>
<td>4</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td>—</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Wood Products</td>
<td>35</td>
<td>2</td>
<td>-</td>
<td>37</td>
</tr>
<tr>
<td>Paper &amp; Paper Board &amp; Pulp</td>
<td>—</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Paper &amp; Paper Board Products</td>
<td>10</td>
<td>4</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Leather &amp; Leather Products</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>283</td>
<td>38</td>
<td>39</td>
<td>360</td>
</tr>
</tbody>
</table>

Source: Factory Inspectorate, Ministry of Labor and Employment, Kingston, Jamaica (December, 1980).
wages earned by workers in the transport and communications industries. Within the sub-sector, sugar workers, while the most numerous, are the poorest paid, averaging $55.73 per week in 1979. Workers in beverage industries are the highest paid, averaging $144.64 weekly, followed by those in the paper and paper products industry at J$106.56 weekly. Table 4 provides further details on weekly earnings for wage earners for 1979.

On site visits to 17 agro-industry factories in Jamaica confirmed these wage and employment figures. Smaller establishments tended to pay the lower wages. Also, while legislation guarantees that women are not to be discriminated against in either employment opportunities or wages, interviews with a number of factory managers and Ministry of Labor employees indicated that women are often not paid wages equal to those received by men. In some instances this is because their work is not "equal"; in others it appears that cultural practice dictates that men receive higher wages.

Benefits for workers in agro-industry vary from factory to factory, related in large measure to the size and stability of the firm. As can be seen in Annex 2-3 "Summary of Agro-Industries Visited in Jamaica", the larger, more successful operations provide 3 weeks or more vacation, health and pension benefits for the employee. Also, those factories with unionized labor tend to provide better benefits.
3. **Implications for the IASC**

One of the objectives of expanding agro-industrial potential in developing countries is the generation of employment opportunities. It is important to note that in Jamaica, some of the areas with the highest unemployment rates (St. Andrew, Kingston, St. Catherine and Clarendon) are also the parishes which presently employ the greatest number of people in agro-industrial enterprises. Many of these enterprises, as well as the majority found in other parts of Jamaica, are small-scale with less than 50 employees. This suggests that the expansion of some of these enterprises could contribute to improving the employment situation in Jamaica. Also, given the particular employment needs of youth and women, IASC-sponsored activities should promote training programs that could help to better integrate these groups into the agro-industrial work force.

D. **Role And Status Of Women**

1. **Background**

   In Jamaica, the role and status position of women vis-a-vis the development process are characterized by lack of skills, under-utilization of existing skills, low income and low status. While women
contribute much to the economic, social and political life of the country, negative attitudes—that women have towards themselves and that society has towards the advancement of women—have tended to impede women's active participation at other than low levels in all spheres of activity. Particularly because of such attitudes regarding "women's work", many development plans have failed to take advantage of opportunities to make better use of female labor to improve the economic and social development of the country.

Women's participation, or lack of participation, in Jamaica's development process is related to the following facts:1

- 51 percent of Jamaica's population are women—36 percent of the female population is under the age of 14;

- more than one-third of all households are headed by women and another one-third live in non-legal unions; in both cases, women are working in- and outside the home to supplement family income;

- 47 percent of the total labor force are women indicating women's high level of participation in the labor force; however only 56 percent of the female labor force is employed compared to 80 percent of the male labor force; female employment is concentrated in a narrower range of industries than male workers e.g. commerce, public administration, and services sector.

- 44 percent of the female labor force are unemployed and the number is growing, as against an unemployment rate of 20 percent for men; data indicates, for example, that women of all ages have significantly higher rates of unemployment than men even in parishes where overall unemployment rates are

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1The statistical data for this section are drawn from several sources: "Women in Development in Jamaica", a paper presented by the Director of the Women's Bureau in May 1980; Department of Statistics, The Labour Force—1979, (Kingston, Jamaica), May 1980;
relatively lower, indicating that patterns of industrial and occupational segregation serve to exclude women from many local employment opportunities;

- while more women than men have had some post primary education, an examination of vocational school training for women indicates that a very high percentage (approximately 97 percent) of women engage in traditional "female" skills such as typing, shorthand, garment making, etc. Moreover, 83 percent of the apprenticeships training available in Jamaica is provided for men and more than twice as many men as women receive on-the-job training;

- 24 percent of the female labor force are engaged in low paying service occupations compared to 6 percent of the male labor force;

- the difference between the median weekly income for males and females continues to widen with 50 percent of the female labor force earning under $33 per week while the median income for men is $40;

- men outnumber women in the managerial, technical, executive and professional jobs in manufacturing (nearly 6 to 1) as in most other sectors of the economy with the exception of public administration where there are twice as many women as there are men in these occupation groups;

- women, especially those who are pregnant or lactating, suffer serious health problems such as anemia;

2. **Participation in Agro-Industry**

Women in Jamaica have traditionally been the mainstay of an important sub-sector of agro-industry, namely, the processing and preservation of fruits and vegetables. In their own homes, in small community-based cottage industries and in larger factories, women are the principle processors and preservers. Many of these workers receive no income for their labors; it is simply a part of preparing food for their families.
For others it is a primary source of income.

Women are also involved in the distribution of food (usually fresh produce) as private marketers, or higglers. Most higglers are female, about two-thirds of whom are over 45 years of age. In addition to buying and mobilizing fresh produce from farms to sell to the consumer at local parish markets, higglers also may buy "leftovers" or scraps from agro-industry factories (such as Grace Food Processing in Savannalala Mar) and after some simple cleaning and preparation sell them on the street to local buyers. These higglers may make J$30 or more each week from selling the scraps of such a factory.

An examination of the statistical data available indicates that women do not however play a significant role in the formal agro-industry sector overall. Table 5 indicates that out of a total of over 19,000 people employed in registered agro-industry factories in Jamaica in 1980, women constituted only 28 percent of the workforce. More women than men are employed in three agro-industries—preservation of fruits and vegetables, tobacco and leather production. All other industries are male dominated, especially the sugar and paper board industries. The parishes of Kingston, Clarendon, St. Andrew and St. Catherine employ the largest numbers of women in agro-industry.

Despite legislation that prohibits discrimination against women in the paying of wages, women are often paid less for similar work or work of similar value. This is sometimes because they perform jobs
requiring the least skill or training, (e.g. on an assembly or bottling line). It is also because women may only be hired for short-term, seasonal, work that pays them less than full-time workers. Also, women in certain age groups, i.e. youth, are frequently discriminated against because employers do not want to hire women who will "leave after a few months to have a baby". This is not surprising since there is a strong pattern of early teenage pregnancy and marriage.

3. Implications for IASC

Because women traditionally participate in agro-industry in one way or another, it follows that they too should benefit from programs that the IASC will undertake in Jamaica. There are three ways in which an IASC could contribute to an improvement in the status and quality of life of women in Jamaica. First, training women in technical and managerial skills associated with agro-industry will help provide women with more and better employment opportunities in those factories in which they already work or could potentially work if they had some training.

Second, support the development of local, small-scale agro-industries in rural areas that draw upon the existing knowledge and skills of women in the preservation of fruits and vegetables. Such efforts will provide training, employment and income for women, particularly those who need to stay close to home to care for their families. Several pilot projects have already demonstrated the effectiveness of this approach in helping to improve not only the status of women but also the quality of life for their families and communities. Such efforts
should be expanded or replicated in other locations.\textsuperscript{1}

\textbf{Third}, give priority to supporting those agro-industrial activities that will promote and assure the involvement of women, along with men, as beneficiaries of the various services an IASC will provide.

\textsuperscript{1}One example of such a project is the St. Elizabeth's Bammy Project started in 1978 by the Women's Bureau in collaboration with other government and non-government community-based organizations. The Bammy is an unsweetened bread-like circular cake made from cassava and eaten as an accompaniment to a variety of dishes, somewhat like a tortilla. The specific goal of the Bammy Project is to harness the unemployed skilled resources in cassava processing and to utilize the locally grown cassava for the processing of a product—the Bammy. (The latter goal had a special importance since local farmers had been encouraged to grow cassava for bulk purchase by a proposed cassava factory. Though the factory plan did not materialize, the Bammy project provided the farmer with an immediate market for their cassava.) An important feature of the project is that the Bammy Production is carried out within the participants' homes allowing them to tend to their other family and household responsibilities. While the number of women participating is small (32) relative to the need to provide jobs and income, the project has benefited the participants. They have learned new skills related to quality control and packaging. They have also moved from the status of non-earner to that of income earner, earning from J$35.00-70.00 weekly, depending on individual productivity. A collateral program of training and social support services is being developed to include co-operative training, simple business skills and family life education. Other projects of this type include a project in St. Andrew where a group of women are processing cucumber pickles and relishes and marketing them cooperatively to hotels in Kingston and a candied peel factory in North Clarendon which, while not specifically a women's project, does employ a large number of women.
E. Potential Project Impacts

1. Beneficiaries

   a. Primary beneficiaries

   The diverse nature of agro-industry projects which are likely to be supported by the operations of an IASC in Jamaica means that the beneficiaries of the Project's activities will be similarly diverse. However, two target groups can be identified as primary beneficiaries: (1) local entrepreneurs and/or entrepreneurial groups who own and/or manage agro-industrial enterprises of various sizes; and (2) potentially large numbers of unskilled workers (male and female) who are presently employed in agro-industry or are unemployed but may be able to secure jobs as existing agro-industrial enterprises expand and/or new enterprises are started.

   With respect to the first target group, it is estimated that there are over 400 agro-industries in Jamaica (See Annex 2-4). Over 85 percent of these have less than 100 employees; 70 percent have less than 50. Many of them are family-owned and run by one individual who faces the same daily problems that all smaller scale entrepreneurs face—lack of capital, management expertise, up-to-date technology, etc. At least a portion of these individuals or groups of individuals could be expected to benefit greatly from the assistance—technical, managerial, informational and/or financial—that an IASC will provide. Such assistance could
help them to increase their efficiency, expand production, explore new marketing channels, etc.--in sum, improve the operation of their enterprise, increase their profitability and thus contribute to the economy as a whole.

With respect to the second target group, the workers, it has been noted elsewhere that unemployment and underemployment in Jamaica present a crisis of mammoth proportions. Nearly one-third of the labor force (over 300,000 persons) is unemployed and a substantially larger number of people are routinely underemployed. In October 1979, the unemployment rate for all manufacturing industries was nearly 27 percent or among the unemployed, generally, 60 percent have been previously employed in crafts, production processing or unskilled manual jobs or have had no previous occupation. These are precisely the types of individuals who would most likely be employed in many agro-industrial enterprises as they expand. It is also interesting to note that some of the areas of highest unemployment (St. Andrew, Kingston, St. Catherine, and Clarendon) are also the parishes which now have the greatest number of agro-industrial enterprises. This suggests that support of enterprises in these areas might help to reduce unemployment.

An improvement in the productivity of a number of smaller (as well as larger) agro-industrial enterprises could make a substantial difference in rural and urban employment as well as in the income of unskilled workers in particularly hard-hit parishes. Generating more employment in the rural areas could also have a favorable impact on rural to urban
migration, by providing more work opportunities in rural areas and reducing somewhat the impetus to move to urban areas.

b. Intermediary beneficiaries

There are also two groups of intermediary beneficiaries:

1. raw material and other input suppliers, and
2. intermediary organizations in Jamaica. In the first group many of Jamaica's more than 200,000 small-scale farmers already supply fruits, vegetables, wood, livestock and spices (e.g., pimento and peppers of all kinds) to small- and large-scale agro-industrial enterprises on a regular basis for processing, packaging and marketing. These supplies may be handled on both informal and formal bases. School children, for example, may regularly drop off a bunch of peppers on their way to school in exchange for J$2 to cover their lunches. In other instances, an agro-industry factory (e.g., Grace Food Processors in Savanna-la-Mar) may have helped to "organize" producers (in that case, of hogs) who, in effect, contract with the factory to supply certain raw materials on schedule and sell only to that factory. As agro-industries improve and expand their operations they will increase their demand for raw material supplies which should provide an incentive and opportunity for farmers, especially small ones, to increase their production, sell their produce and increase their family income. Additionally, other input suppliers such as packaging manufacturers, machine repair shops, fuel distributors, etc. will benefit as agro-industries expand and their services and products are in greater demand.
This project will help to improve the income of many input suppliers whose incomes are presently low and sporadic.

The second group of intermediary beneficiaries consists of two types of intermediary organizations (IOs) in Jamaica. The first type consists of approximately 15,000 organizations that do now, or could in the future, directly assist agro-industrial enterprises. These include such organizations as Community Economic Organization, Small Industries Finance Corporation, Small Business Association, Jamaica Industrial Development Corporation, and Small Business Development Center among others. These organizations will benefit as their capacity to help agro-industries improve productivity and expand markets is strengthened by IASC projects. Other local intermediary organizations such as credit unions and farmer cooperatives will also benefit where activities of IASC-assisted firms cause the structures and services of these institutions to be utilized more fully.

c. Ultimate beneficiaries

The ultimate beneficiaries of a healthier agro-industrial sector in Jamaica are the potential consumers of locally-produced agro-industrial products as well as the economy as a whole. In 1979, consumers allocated roughly 43 cents of every dollar (in current prices) to the purchase of food, beverages and tobacco. Food expenditures accounted for 33 cents of this and was the largest single consumer item
purchased. As efforts are made to reduce the amount of imported agro-industrial products and to increase the amount of these products made domestically, especially foods, the poor (which constitute more than 80 percent of Jamaica's population) will benefit from their increased availability (more consistently throughout the year and around the country) in a greater variety of forms and often at lower prices.

The Jamaican economy in general will benefit as exports of agro-industrial products increases and imports are reduced as import-substitution occurs. Also, as the economic position of Jamaica improves, all people, including the poor, will benefit to some degree from the prosperity.

d. Women

The promotion of agro-industrial operations in Jamaica will also enhance the status of women as they are entrepreneurs, potential workers, and/or suppliers of inputs to agro-industries. Such projects, if properly structured could help to equalize existing male/female differences in employment and opportunities. Across the board, as described above, women as a group are faced with high rates of unemployment, low incomes and few opportunities for training either in technical/managerial positions or in manufacturing. To the degree that projects encourage the participation and training of women, they will make a significant contribution to the economic and social well being of women. This is particularly important as the employment of women will generate
more income for them and their families, thus increasing their potential to buy more and better food, send children to school, etc. While emphasis should not be placed on programs and projects that are "for women only" a number of small-scale food processing projects already in existence (e.g., the St. Elizabeth Bammy project) demonstrate the potential for increasing women's productivity and income in these areas.

2. **Spread effects**

The benefits of IASC-supported project activities that flow directly to the primary, intermediary and ultimate beneficiaries can be expected to spread to still other beneficiaries in each of the above categories both during and after the initial project activities are terminated as a result of employing the following three mechanisms:

- a focus on supporting agro-industries that rely on locally-produced raw materials and other inputs (so as to reach more beneficiaries than would be the case if firms using primarily imported raw materials are emphasized);

- the development of the capacity of Jamaican intermediary organizations to continue assistance to agro-industries after IASC-sponsored projects are ended;

- the creation and encouragement of an on-going involvement by U.S. agribusiness firms in Jamaica.

First, as emphasis is placed on supporting those agro-industrial enterprises (during and after the life of IASC activities) that rely on locally produced raw materials rather than on the importation of raw materials, from other countries, a growing number of farmers, especially small-scale farmers, will benefit. For example, Darliston Community Devres
Foods, Ltd. in Westmoreland is a labor-intensive operation designed to both draw upon local resources (labor and raw materials) and supply local food needs. It is estimated that perhaps 300 families within a 30-mile radius get some cash income directly or indirectly from the sale of agricultural inputs used in this food processing plant. Over time, projects such as this can have a significant impact on a number of rural communities that are dependent on selling their agricultural products for income.

Second, as IASC-sponsored projects are able to strengthen the capacity of Jamaican intermediary organizations, both national and local, to assist and to serve agro-industrial enterprises, these institutions will be able to better carry on and expand their own work with such firms during and after IASC-sponsored projects. Specifically, as the institutional capacity of four or five intermediary organizations in Jamaica is improved in terms of analyzing data, doing feasibility studies, identifying markets, providing management support, technical assistance, and even financial assistance these organizations will, over time, benefit far more than the initial 100 or so firms which might be expected to benefit over a five-year period in Jamaica.

Third, there is currently great interest among a number of U.S. agribusiness firms in doing business in Jamaica. If, as a result of IASC-instigated activities U.S. agribusiness firms develop a more dynamic interest in, and synergistic relationship with, agro-industries in Jamaica,
it is expected that longer-term, two-way relationships of mutual benefit to both parties will develop and continue beyond the life of any projects. The two-way benefits that might accrue to both parties are a sharing of appropriate technical and managerial expertise, the expansion of markets, potential joint ventures, etc.

F. Social Feasibility And Constraints

Given a newly elected government in Jamaica which places a high priority on the development of private industry, the time is right for identifying ways to support and expand agro-industries in Jamaica. There appears to be a resurgence of confidence, particularly by outsiders in the economy and in the ability and willingness of the political leadership to encourage business, especially as it can generate employment and income for Jamaica's largely poor population.

As to social acceptability, there are no major cultural or social barriers to the expansion of agro-industry, particularly as many of the activities that fall within the sector, e.g., food processing, have been a traditional part of the fabric of Jamaican life for many years. Entrepreneurs in both the U.S. and Jamaica can be involved, employment and income opportunities increased, the participation of women improved and the benefits on initial IASC activities spread to groups beyond the direct project beneficiaries.

There are some potential constraints, however, that are unique to this project which may impede the delivery of benefits to the above-described beneficiaries. Some of these can be addressed and remedied by
IASC activities and others cannot. Those which cannot, may have a continuing negative impact on the successful implementation of agro-industrial projects in Jamaica supported through an IASC. Some constraints which could have such an impact on IASC activities are listed below:

<table>
<thead>
<tr>
<th>Constraints that IASC activities can remedy</th>
<th>Constraints that IASC activities cannot, in the short-term at least, address</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Difficulties associated with publicizing the existence of, and services available through, the IASC to smaller-scale industries, especially in Jamaica's rural areas;</td>
<td>o Ingrained attitudes, structures, and government policies supporting the development of large-scale, export-oriented agro-industries over the promotion of smaller-scale, domestic-market-focused agro-industries;</td>
</tr>
<tr>
<td>o problems associated with effectively integrating unskilled workers into the daily routine of industrial work-patterns and of strengthening managerial capacity;</td>
<td>o competition between different ministries (e.g., Agriculture and Commerce) for a &quot;piece&quot; of the agro-industrial pie;</td>
</tr>
<tr>
<td>o hesitancy on the part of smaller-scale U.S. agribusiness firms to become &quot;involved&quot; with similar firms in Jamaica where the socio-economic and political environment is very different than in the U.S.;</td>
<td>o cultural biases on the part of either U.S. or Jamaican entrepreneurs and technicians that impede communication and cooperation on projects;</td>
</tr>
<tr>
<td>o absence of strong linkages between intermediary organizations and local industries;</td>
<td>o traditions regarding the work and workers involved in agro-industry, e.g., biases against women or youth;</td>
</tr>
<tr>
<td>o lack of sufficient numbers of trained technical and managerial personnel to expand agro-industrial enterprises;</td>
<td>o consumer preferences (domestic or foreign) for certain agro-industrial products;</td>
</tr>
<tr>
<td>o lack of indigenous structures designed to respond specifically to the needs of smaller-scale enterprises.</td>
<td>o government policies regarding food and agriculture prices, and imports that discriminate against local raw producers, consumers, etc.</td>
</tr>
</tbody>
</table>
Identifying these constraints is an important step in lessening their impact on any IASC-sponsored project in Jamaica. As noted above, many of the constraints to implementation to be found in the Jamaican context are amenable to various solutions by the IASC itself or by others so as to enable IASC-sponsored activities to be effective.

G. Social Analysis Needs of IASC Activities in Jamaica

If the agro-industrial projects to be supported by an International Agro-Industry Service Center in Jamaica are to be supportive of AID's emphasis and standards related to certain critical social issues such as the maximum participation of low income people, especially women, the equitable distribution of benefits, employment and income generation, etc. then certain steps need to be taken at the design, implementation and evaluation stages to assure these conditions are met.

At the design and implementation stages special attention should be given to projects that:

- employ and train women;
- generate employment opportunities for unskilled workers, especially youth;
- make use of locally produced resources, e.g. raw materials, and local input suppliers;
- create an on-going linkage of mutual benefit between smaller-scale U.S. and Jamaican agro-industry firms;
- strengthen the capacity of Jamaica's intermediary institutions at both the national and local levels to assist agro-industries and continue "the work" of the IASC after IASC projects are terminated.
In addition efforts should be made to develop sufficient and relevant baseline data prior to the start-up of an IASC assistance effort so that monitoring the impact of the project on the intended beneficiaries can be conducted throughout the project. Likewise, criteria need to be set up to evaluate the success (or failure) of IASC efforts in social, as well as economic, terms.
VII. IMPLICATIONS FOR AN IASC

The above description and analysis of the situation in Jamaica has numerous implications for the prospective IASC. These implications are explored in this section.

A. Potential Users of Services

1. SMAEs

There are over 400 agro-industrial enterprises in Jamaica, most of which are small and many of which are in rural areas. These SMAEs are in both the public and private sector, and most are potential users of the IASC. This indicates the IASC must be organized to deal with the problems of numerous geographically scattered smaller enterprises. The large variety of activities and different problems faced by these firms also suggests the IASC must be able to locate and field a very wide range of expertise.

The nature of most of the SMAEs in Jamaica—small, operated and owned by one person or a family, time- and capital-constrained, etc.—implies that the IASC must provide assistance persons who can relate to such firms with real understanding and empathy. A U.S. expert accustomed to company cars, executive suites, and unlimited institutional resources will find it difficult to put her/himself in the shoes of most SMAE managers in Jamaica.

1Annex 2-4 lists 414 agro-industrial enterprises in Jamaica. Eighty-seven percent of these are "registered" by the Factory Inspectorate, Department of Labor and Employment. There are perhaps 200-300 more small-scale agro-industrial enterprises that are not registered. Devres
On the other hand, some of Jamaica's SMAEs are parastatals, owned for the GOJ by such agencies as JIDC, MOA, JNIC and the Ministry of Education. Working with these firms will require experts to understand the attitudes and constraints faced by parastatal managers.

The widely varied locations and substantive needs of SMAEs suggests that IASC activities, on the whole, will not be able to realize much in the way of economies of scale. Working with small firms in different locations and with unique problems in Jamaica (or in any other developing country) will not be inexpensive. The short-term nature of such assignments, adding higher travel, allowance and other expenses, also increases the cost of such assistance. Thus, every effort will have to be made by the IASC to leverage its assistance efforts to SMAEs. This can be done via intermediary organizations, as noted later in this section, by training trainers, by seeing several firms with similar problems on one trip, and so on.

The demand by SMAEs for the kind of assistance the IASC will provide is likely to be large and to over-subscribe IASC's capabilities and resources. Therefore, the IASC should be clear early on about the criteria to be applied in accepting or rejecting requests for assistance, as well as the procedures for handling such requests. As to procedures, for example, the likely problems of the IASC dealing directly with SMAEs in fielding their requests for assistance loom large—communications, verification of the facts and need, etc. It is probable that
the IASC could work much more effectively if SMAEs had to approach it via a local intermediary organization, including AID Missions.

Another aspect of IASCs operations will need clear policy guidance and procedures. About half the SMAEs in Jamaica are located in and near Kingston. It would be easy for the IASC to invest most of its effort in this concentrated area if a deliberate effort is not made to reach SMAEs in outlying areas.

Finally, the IASC will, for each country, have to determine the degree to which it will concentrate its activities to support a certain government policy. In Jamaica, for example, the new administration is launching an ambitious economic revitalization program, including an export promotion drive. An IASC operating in Jamaica could be directly supportive of GOJ investment, trade and growth objectives. This would imply that, sectorally, IASC should assist SMAEs in non-traditional, labor-intensive activities, particularly for export.

2. **Intermediary organizations**

Many intermediary organizations in Jamaica assist SMAEs actively or nominally. Others are prepared by charter and inclination to do so, but have not done so to date. Thus, while the magnitude and effectiveness of this assistance is such that the IASC is needed, the availability of an IASC is likely to activate each of these intermediary organizations to seek IASC assistance as a means to meeting
their own ends. Given the complex nature of IASC short-term assistance missions (and their expenses), however, it is imperative the IASC not try to deal with or through all intermediary organizations in Jamaica that could or do offer assistance to SMAEs.

The IASC, to be effective, will have to develop a strong relationship with each intermediary organization it works through. This will enable the IASC to develop agreed standard operating procedures with the intermediary organization, will enable both the intermediary organization and IASC to build confidence in each other's capacity and performance and will bring a host of other benefits to both sides. This means the IASC will have to choose a few intermediary organizations to work through in Jamaica. All IASC assistance requests from SMAEs, etc., would flow through only the selected intermediary organizations.

There are, of course, disadvantages to this approach. The intermediary organizations chosen, for example, may be too political, may prove to be ineffective, or may direct IASC resources to the advantage of some groups while excluding others. Selection of two to four intermediary organizations in Jamaica—probably along functional lines—will help ameliorate these potential problems. Wise selection of intermediary organizations and careful management of the IASC could be depended upon to do the rest, so that the multiple advantages of the use of selected intermediary organizations could be realized as part of the project.
Intermediary organizations not selected as primary recipients of IASC assistance would still benefit from its activities and could assist both their client SMAEs and the IASC. For example, the Chamber of Commerce is well organized in Jamaica and could assure that information about the IASC was made available to most SMAEs on the island.

In selecting intermediary organizations in Jamaica, the best suited ones in each functional area appear to be:

- **technical assistance**: JIDC, SBDC, and/or Bureau of Standards;
- **managerial assistance**: SBDC;
- **marketing assistance**: JNEC (for export);
- **feasibility study assistance**: SIFCO, JDB;
- **joint venture brokering**: not known.

### B. Role of U.S. Agribusiness Firms

U.S. agribusiness firms are professing substantial interest in Jamaica because of U.S. Government efforts to encourage their involvement and because they perceive the recent change of administrations in Jamaica to herald good news for the Jamaica private sector. However, there is little opportunity in Jamaica for large-scale agribusiness operations. As more and more large U.S. firms discover this, they will leave the field of potential participants to U.S. firms more like those being worked with by the IASC. Thus, to begin to achieve anywhere near the agro-industrial development results in Jamaica.
expected from the private sector, the IASC or an effort like it, will likely be critical. Put bluntly, as the honeymoon period wanes between U.S. agribusiness firms and Jamaica, most of the progress that will be made will be achieved because of the hard work of organizations and firms like those to be assisted by the IASC.

On the other hand, given the high level of interest in Jamaica by U.S. agribusiness firms, the existence of an IASC now would be especially helpful in facilitating exploration of their "interest" in the country.

C. Types of Assistance

The needs of most SMAEs and intermediary organizations often are amenable to short-term assistance efforts. SMAE deficiencies and problems not being adequately met now, as noted in the earlier analysis, exist in technical, managerial, marketing, feasibility study and joint venture areas. To meet these needs on a short-term basis, the IASC

1 Defined in more detail, these areas of need include:

- technical assistance, production scheduling, production engineering, spatial layout, maintenance, energy, packaging, and quality control, etc.;

- managerial assistance (cash flow analysis, cost control, accounting/record keeping, etc.);

- marketing assistance, especially for export of non-traditional products such as art flowers, canned fruits and vegetables, etc., for which either no domestic market exists or whose domestic market is saturated;

- feasibility studies/expansion analysis particularly for loan applications (to decrease the sentiment on the part of financial institutions for requiring collateral) from firms with little collateral seeking working capital;

- joint venture brokering to facilitate SMAE access to foreign exchange, technology, management skills, and export markets.

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must be able to consistently, quickly and accurately carry out the following functions across a wide range of agro-industrial operations:

- identify the problem or needs of a firm or firms;
- provide adequate expertise and supporting resources to analyze the problem(s) accurately and devise practicable and successful solution(s);
- assure high quality written or oral documentation of IASC efforts where this is important for financial, training or implementation purposes.

Succeeding on these three fronts will facilitate IASC's efforts to encourage continued involvement by U.S. agribusiness firms in agro-industrial development. It also will strengthen the IASC's hand in working with and improving the capacity of intermediary organizations. Thus, the situation in Jamaica highlights the complexity of the IASC task. It also indicates that, at the heart of IASC's program must be a high quality, effective short-term assistance effort using mostly active U.S. agribusiness firm personnel. Once that succeeds, the longer-term and more dynamic aspects of the IASC effort will have a much better chance to develop.

It is probable that the IASC will find situations where long-term IASC assistance could be useful. This would tie up IASC resources over the long term, may undercut intermediary organizations' activities, and would cut down the number of U.S. agribusiness representatives that can be used to assist SMAEs in developing countries. However, a trade-off between these and other factors may result in the IASC
supplying some long-term assistance as its program and experience develops.

One area of special interest to the Jamaican Government and private sector and to U.S. agribusiness firms has not been adequately dealt with in Jamaica. This is an identification of concrete agro-industrial project opportunities in Jamaica that appear to be feasible. Such a survey is needed to 1) attract U.S. companies which might be interested in concrete feasible opportunities, 2) discourage U.S. companies which are interested in ideas already determined not to be feasible, 3) save the time of GOJ officials who can say to interested U.S. firms, "Here is our estimate of what is feasible, try to concentrate your energies here."

The World Bank has carried out surveys such as this at the request of developing countries, and surely it, the Caribbean Development Bank, the Inter-American Development Bank and others, would entertain such a request from Jamaica with some possibility of acting on it.

In its own operations, the IASC may find it needs such a study, or one similar to it, as a critical tool to encourage U.S. SMAEs to continue their involvement in the agro-industrial development of each

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1 Essentially, the study is a country profile plus a series of pre-feasibility studies on all identified agro-industrial project possibilities. The Overseas Private Investment Corporation prepares a similar set of studies for its overseas investment missions.
country. If so, the IASC could cooperate with the government and various international organizations to develop such a study. If necessary, it could carry out the study itself, especially if it would lead to joint venture possibilities.

D. Quantities of Services

Services to SMAEs in Jamaica, even where offered in an effective manner, are inadequate to meet the potential demand in all areas suggested for IASC involvement.

Of more than 400 agro-industrial enterprises, 15 percent or less obtained some form of technical assistance over the last 2 years. This is in great part because no subsidized technical assistance, except minimally through lenders such as SIFCO, and on occasion through the SBDC, is offered. Government technical assistance capabilities (e.g., within JIDC, MOA Forestry Department) have deteriorated over the last five years, primarily because of the Jamaican economic and GOJ budget crises, to the point where almost no effective services reach SMAEs. A similar situation exists for feasibility study assistance and joint venturing brokering for SMAEs.

Given the number of SMAEs identified and the sizeable deficits in effective services in the areas noted, there is substantial absorptive capacity for proposed IASC services, well over US$1 million/year, and well above the likely budget for Jamaica of any IASC. Demand
for these services is immediate, given the recent development push initiated by the new Jamaican government.

This present demand for a large volume of IASC-type services strongly suggests that, once established, the IASC can begin assistance operations as quickly as possible. Therefore, once it is decided to proceed with the IASC, emphasis should be given to assuring its "learning curve" is, with respect to identifying, analyzing and solving SMAE problems, encouraging development of intermediary organization capacity and fostering U.S.-developing country agro-industrial firm interactions. Too often, the learning curve of a new program or organization is with respect to staffing, contracting, making contacts with potential consultants, logistics, etc. The latter could easily be the case here unless the IASC is initiated by an institution that has already conquered the procedural matters. In such a case, the IASC can concentrate on quickly actually coping with the problems of SMAEs, rather than on its own start-up and internal operating difficulties.

Initiating the IASC via a competitive grant or contract with an existing organization outside the U.S. Government would enable the IASC to begin with many of its organizational tasks accomplished on three grounds: First, in the process of competing, the initial planning, staffing, etc. of the IASC is taken care of by an outside organization (at its expense) with appropriate and adequate authority to act in doing so, and usually within one month's time. This pre-planning
enables the IASC to get started more quickly than if a brand new
organization is established. Second, an appropriate existing organiza-
tion will have already the procedures and experience necessary to
provide rapidly the many short-term assistance assignments anticipated
for the IASC. Third, an appropriate existing organization already
would have many of the contacts with the U.S. agribusiness community
and in-house experience with SMAE problems and assistance efforts
abroad.

E. Mechanisms and Terms of IASC Operations

The IASC will need to be able to work effectively at least with
SMAEs in the U.S. and in developing countries and with and through
intermediary organizations. In such a complicated institutional environ-
ment, the IASC mechanisms and terms used to deliver assistance must
be linked clearly to 1) an authoritative decision and performance
control center for each IASC assignment, 2) a responsible financial
center for each assignment, and 3) a final evaluation center for
each assignment.

These three factors will differ by assignment and various aspects
of each will have to be dealt with by contracts, rules, standard
operating procedures, etc. However, all three can remain vested with
the IASC in most cases, at least nominally. As IASC experience grows,
some functions such as quality control or evaluation could be shifted
to intermediary organizations wherever appropriate.
Specific IASC mechanisms, based on the situation in Jamaica, would include:

- provision of IASC-recruited personnel directly to SMAEs (the option liked the most by owners and managers of SMAEs);
- provision of IASC-recruited personnel to intermediary organizations for intermediary organization strengthening and to work directly with SMAEs;
- assistance, on a fee basis, in arranging joint ventures between U.S. and developing country firms.

Examples of the use of each of these mechanisms are presented later in this section.

F. Terms of IASC Assistance

The terms of IASC assistance will vary from situation to situation, but several guidelines seem appropriate based on conditions in Jamaica.

- ability-to-pay criteria should be developed and used effectively;
- only small- and medium-scale agro-industrial enterprises should be assisted;
- technical, managerial, marketing and feasibility assistance should be closely linked to financial assistance.

1. Ability-to-pay

The IASC is designed to assist both public and private sector enterprises and intermediary organizations. There are several reasons these organizations should be required to pay some or all the costs associated with the services they receive from the IASC. First, most of the firms and intermediary organizations in Jamaica can pay some or
all costs and are willing to do so. In particular, the costs of per
diem, travel, and other miscellaneous direct costs can be covered in
local currency or in kind by many users of IASC services. Some private
entrepreneurs, for example, will receive additional pecuniary benefits
from IASC assistance. It is appropriate that they pay as much as they
can of the cost of such assistance. Also, numerous intermediary organiza­
tions (e.g., JDB) can pay for IASC services and should not benefit
from subsidized IASC efforts unless clearly appropriate.

Second, the requirement to pay something for IASC services eliminates
frivolous requests for assistance.

Third, the IASC should seek a degree of financial support and self­
sufficiency from user payment whenever this does not conflict sub­
stantially with its ultimate objective as a development assistance
institution. This helps prove the value of its work and enables it
to leverage contributed funds so as to accomplish even more.

It is proposed that every IASC user be requested to pay a certain
percent of the costs of the assistance requested (in local currency).
For those unable to do so, this requirement would be dropped. Those
able to pay more, of which there will be many in Jamaica, would be
requested to do so. A simple criterion or two should be developed by
IASC in establishing "ability-to-pay" so as to reduce complexity and
any appearance of favoritism in applying the concept.

The complexity of an ability-to-pay basis of operation is more
than offset by the need to assure equity in supplying IASC services to
various firms and intermediary organizations requesting it, and by
the imperative to put the IASC on a financially self-supporting
basis to the maximum degree possible.

2. **Exclusion of large agro-industrial firms in developing countries from IASC assistance**

The focus of the IASC on small and medium firms is deliberate.

**First**, such firms in Jamaica are: 1) labor-intensive, 2) major sources
of entrepreneurship, 3) an important factor in organizing and developing
agricultural, forestry and fisheries production and marketing, and 4)
an essential element in Jamaica's economic growth. When they grow,
the results often are more positive in terms of employment and entre­
preneurship development than those caused by large firms. The results
also are substantial in terms of increasing efficiency in the agro­
industrial system and enhancing economic growth. The results of
growth by small firms can also be important in import substitution and
exports.

**Second**, despite their importance, SMAEs in Jamaica are affected
by more fundamental constraints than large firms. Such impediments
often have little or nothing to do with the competence of management
or quality of the firm's products. Rather, they stem from the small
size and resource base of these firms which limits their access to
needed finance, technology, information, markets, etc.

Despite the best efforts of their owners and managers, small firms
in Jamaica often cannot by themselves remove the constraints affecting
their growth and performance. They require the same relative magnitude of assistance directed at their problems as the assistance and protection given to larger firms to enable them to break the most important of their constraints.

Third, large firms in Jamaica are clearly the first to receive a hearing from government, trade associations or others about their problems and the first to receive government assistance adequate to their needs. They also are usually the most able to obtain the particular private skills and resources needed to solve their own problems. Many large agro-industrial firms in Jamaica, for example, already have important relationships with major agribusiness firms in developing countries, and especially in the U.S.

Fourth, one IASC purpose is to widen the involvement of the U.S. private agro-industrial sector in the development process in developing countries. Since large U.S. agribusiness firms are already involved in Jamaica to a large degree, this appears to be most possible by bringing small and medium U.S. firms into relationship with counterpart firms in Jamaica. This expands international contact and participation by firms on both sides which have a high mutuality of interest and substantial contributions to make to each other. Emphasis on large-scale agro-industries in Jamaica is inappropriate anyway in the light of the degree of potential there. It also would eliminate the potential for involving more of the U.S. private agro-industrial sector's expertise in the development process.
3. **Linkage of technical, managerial, marketing and feasibility assistance to financial assistance**

In many cases, the effectiveness of technical or marketing assistance is constrained unless financial assistance is available to supplement or complement it. One of the conditions of IASC assistance should be a determination that financial assistance either is needed and available or is not needed before providing other kinds of assistance.

G. **Hypothetical Examples of IASC Assistance Mechanisms and Terms**

1. **Example la: IASC assistance directly to SMAEs**

An intermediary organization in Jamaica, such as the SBDC, receives a request for assistance from a medium-sized coffee processor to help assess the feasibility of producing instant coffee for the domestic and export markets. Having done substantial domestic marketing analysis already, the firm's major need is to assess the technologies available, select an appropriate scale and process, determine whether there is any export potential, and develop a detailed financial analysis for the firm's investment decision. The firm will need a bank loan for the project.

SBDC spends time with the firm on the phone exploring the problem and developing preliminary baseline data about the company. It also checks with the Jamaica Coffee Board for pertinent facts. Determining that the company is serious, the idea has possibilities and the company
needs assistance, an SBDC staff member visits the company. More pro-
ject and company-related data is gathered and the probable scope of
work for the needed assistance is discussed in depth. Also, the poten-
tial cost of the assistance is discussed and some idea of the firm's
ability to pay is arrived at by the SBDC staff member.

The SBDC decides, because it lacks the resources or expertise
required, that the assistance request should be forwarded to the IASC.
The request is logged on an IASC form (which includes all the above
information) and sent, cabled or telexed to the IASC.

The IASC assesses the project, scope of work and cost, making
adjustments as necessary. Deciding to provide the requested assistance,
it notifies the SBDC, suggests a payment level by the firm (which
the firm subsequently agrees to) and proceeds to identify two appropri-
ate U.S. agribusiness personnel (one technical, the other marketing-
financial) to carry out the assignment.

Once located, IASC reaches an appropriate agreement with these
persons and their companies, arranges their travel, per diem, briefing
and related support requirements, and sends them on their way.

Upon arrival in Jamaica, the two experts report to SBDC, which
handles some logistical and administrative chores for the experts,
provides information and contacts and some office support assistance.
Because the firm agreed to pay for the per diem, in-country travel,
and related direct costs and some professional service costs, SBDC
arranges for such payment; it disburses some to the experts upon their arrival and deposits the rest to a local IASC account.

The two experts carry out their work, developing more baseline information for eventual evaluation purposes and recommending a certain course of action. They jointly develop a written feasibility study with the owner of the firm. The effort requires two more days than anticipated, and an extension is easily arranged by SBDC telex to IASC. The study is typed by the firm for use in obtaining a bank loan, and one copy is returned to IASC headquarters by the experts. The SBDC and IASC receive a trip report from both experts, including substantial backup material.

The SBDC follows-up on the assistance effort in three months to find that the bank has questions regarding one point in the study. SBDC telexes the IASC staff who clear up the issue via contact with the technical expert. Subsequent follow-up by SBDC indicates that the loan was approved and that the equipment decided upon has been ordered by the firm. SBDC reports this to IASC as a courtesy.

Two years later, as part of an internal IASC evaluation, the instant coffee project is evaluated as to its output, employment, impact on coffee growers, etc. The original baseline material, feasibility study and trip reports are used for this purpose.

2. Example 1b: IASC assistance directly to SMAEs

A variation of this example could be IASC supporting the owner
of the coffee processing plant with a travel grant to explore the export market and the types and scale of technologies available to him.

3. Example 2: Provision of IASC personnel to an intermediary organization to work directly with SMAEs

This example would be the same as number 1, except that the intermediary organization accepts full responsibility for the assistance effort. Thus, the SBDC may be able to provide one expert, but would turn to the IASC for the required second expert. IASC would follow the same procedures, but would secund its expert to SBDC which would take prime responsibility for the assistance effort. In essence, the IASC would subcontract a person to SBDC to directly assist one or more SMAEs.

4. Example 3: Provision of assistance directly to the intermediary organization

In this hypothetical case, the Jamaica Development Bank (JDB) requests IASC assistance to improve its own ability to carry out feasibility studies for agro-industrial projects. The requested assistance includes:

- a long-term advisor (12 mos);
- a short-course program of four one-week sessions;
- adaptation of existing JDB materials and development of others to create a handbook on agro-industrial feasibility studies in Jamaica.

The IASC decides not to provide the long-term advisor, but agrees to discuss the request with AID and other donor agencies as part of.
the IASC's overall assistance effort. The IASC does agree to carry out the short-course program and to develop the handbook as a part of the short-course effort. The JDB agrees to pay 80 percent of all IASC costs. It also agrees to seek to increase its lending to SMAEs as a part of the IASC assistance agreement and to provide needed JDB baseline data within three months. IASC seeks other funding for the remaining 20 percent of its costs from the Caribbean Development Bank, private companies and other donors, but receives no help for this specific project.

The IASC identifies two persons in U.S. agribusiness firms and two freelance consultants to carry out the short-course program and develop the handbook. AID/Jamaica agrees to fund the 12-month long-term advisor position on a direct-hire basis and asks IASC to provide it with candidates, which it does.

The courses and handbook are completed and a joint IASC-JDB post-mortem is carried out on paper. Later, when one of the IASC senior staff visits Jamaica, there is a discussion of the program's successes and failures and a kind of informal evaluation of it. All the baseline, coursework and handbook material is available at IASC headquarters in the event that the JDB assistance effort is selected for in-depth evaluation by IASC itself or USAID.

5. Example 4: Arranging a joint venture

The IASC has provided assistance to an independently owned and operated wicker furniture plant on two different occasions in the
past. Now operating smoothly, the factory is backlogged with orders and seeks to expand its production capacity. It also has found it particularly difficult to handle export sales which have been slow, but show some growth potential. In expanding, the firm will have to automate some procedures due to throughput requirements, and it will have to substantially change its production layout and overall procedures.

After coming to the SBDC for assistance, the SBDC and IASC agreed with the owner of the firm that:

- The firm will finance all costs of an 8-person-week SBDC study of the feasibility of the prospective expansion, with IASC subcontracting one expert to SBDC for the study; IASC will be given an option on a joint venture arrangement by the Jamaica firm.

- If the feasibility study is favorable, the firm will sign a contract with IASC to find it a joint venture partner which could supply equity capital, export markets and marketing assistance and plant operating assistance. If the IASC arranges a satisfactory joint venture, a fee based on the value of the U.S. firm's contribution would be received by it from the Jamaican firm.

The feasibility study is completed with the help of a person from a high quality "cane" furniture company in South Carolina, and the Jamaica firm signs a joint venture arrangement agreement with IASC.

As it turns out, the IASC person on the feasibility study team goes back to South Carolina deeply impressed with the potential of the Jamaica firm's planned expansion. A month later his boss, the owner of the South Carolina furniture firm, vacations in Jamaica and
drops by the Jamaica wicker furniture firm. Seeing its potential and
drawing on past conversations with his employee, he pursues the
idea of a joint venture in his first meeting. At home, he contacts
the IASC which provides him with the feasibility study and begins to
"fill in the gaps" as questions arise.

Twenty days after one more trip of the owner to Jamaica, the
South Carolina company's Board of Directors approves a plan to seek
a joint venture with the Jamaica firm. With IASC's help, the joint
venture is concluded three months later. The total estimated value
of the U.S. firm's contribution is to be US$845,500 over a four-year
period. The IASC receives a 3 percent fee equivalent to US$25,350
from the Jamaica firm and deposits it to its Jamaica account to finance
future IASC assistance efforts in Jamaica.

Within a year, the new plant begins operations. The U.S. firm
arranges and handles all export sales using its own already-developed
distribution channels and provides operating assistance for the new
plant. The local firm deals exclusively with raw material supplies and
sales in the domestic market.
ANNEX 2-1
SCOPE OF WORK

STATEMENT OF WORK

A. The objectives of the work are as follows:

1. Determine the nature of, and alternative institutional forms, in depth, for an organization which would facilitate the transfer the needed expertise of small and medium sized (SME) U.S. firms involved in production in the food system to SMEs in LDCs involved in similar activities. (These would include, but not limited to, those organizations and institutions listed for the CIS workshop.)

2. Evaluate the financial, economic, and social benefits of the assistance that a center or organization would facilitate.

B. To achieve these objectives, Devres will carry out the following activities:

1. Design and conduct demand studies in two LDCs (Portugal and Jamaica) to be selected by AID. These studies will achieve the following:

   a. Identify potential LDC users of technical and managerial assistance to be facilitated by a center or organization. LDC users could include government entities serving small food system enterprises, private sector business groups, medium sized LDC enterprises, cooperatives involved in processing activities, etc.

   b. Delineate a list of services a center or organization could provide and then estimate the extent of demand for those services by potential users; including the demand if paying for those services would be required. Have users prioritize the list of services considered. Survey small and medium food system enterprises in LDCs to determine their usefulness of such services, including the usefulness of such services when coming to them indirectly through local user institutions such as business organizations, coops, government entities, etc.

2. Determine the degree to which those services of greatest demand are already supplied through other international and national institutions (in country studies) to U.S. small and medium food system enterprises.

3. Examine and develop alternative institutional modes for the operation of a center or organization—alternative organizational structures, management systems, and financing alternatives of such alternative entities.

4. Assist AID in determining the economic and financial feasibility of the project.

5. Prepare social soundness analysis of the ability of the project to improve the welfare of the LDC rural poor as owners, employees, and suppliers of SMEs.
ANNEX 2-2
LIST OF PEOPLE MET IN JAMAICA

I. U.S. Agencies

USAID

- Harvey Blustain - Anthropologist/Christiana IRDP
- Cyril Buchanan - Agricultural Officer
- Gary Cooke - Health and Nutrition Officer
- Jerome Houlihan - General Development Officer
- Robert Mobray - Assistant Rural Development Officer
- Glenn Patterson - Mission Director
- Bryant Smith - Consultant, USAID/W
- Donald Yeaman - Chief, Agriculture and Rural Development Office

US Embassy

- Paul Daley - Economics/Commercial Officer
- Thomas Forbord - Economics Officer
- Damien King - Economic/Commercial Officer

USDA

- Lynn Engstrand - Office of International Cooperation and Development

II. International Organizations

Inter-American Development Bank

- Hernando Azevedo

Inter-American Institute of Agricultural Sciences

- Dr. Wahab
III. Jamaican Government Agencies

Ministry of Agriculture

Terrence V. Bennett - Regional Forest Office(s), Forest Department
Tom Bennett - Market Division Advisor (USAID Contractor)
Sadie Campbell - Officer in Charge, Food Science and Nutrition Division, Scientific Research Council
Novlette Jones - Program Coordinator for Rural Farm Development (Home Economics)
Roy S. Jones - Director, Forest Department
Daniel Lesley - Marketing Officer, Forest Department
Warren Nicholson - Fisheries Department
Ashok Sahney - Assistant Director, Data Bank
Frederick Zenny - Head, Marketing Division

Ministry of Industry and Commerce

Mr. Barnett
Johannes Fehrs - Consultant
Mrs. Sylvester

Ministry of Labor and Employment

Mr. Critchlon - Director, Manpower
Mr. Irons - Director, Industrial Relations
Mr. Courtney Prawl - Central Statistical and Analysis Unit
Henry Robinson - Director, Industrial Safety
Vince de Santies - USAID Direct Hire (from New York State, Department of Labor), Statistical Analysis Unit
Ministry of Youth, Sports, and Community Development

Lesley Johnston - Director, Vocational Training Division

National Planning Agency

Mr. Burnett
Mr. DaCosta
Mr. Steer
David Evans
- Advisor to Human Resource Project

Bureau of Standards

Beverly Bent
Marguerite A. Domville
- Section Head, Food Department
- Head, Packaging Centre

Department of Statistics

Mr. R. Boothe
- Deputy Director

Women's Bureau

Valerie Wint Bauer
Hazel Nelson
Jenny Smith
- Public Education Officer
- Director
- Project Development Officer

Bank of Jamaica

Carol Jackson
- Project Officer, Premier Investment Corporation

Jamaica Development Bank

Kenton G. Wilkes
Ms. Hume
- Manager, Appraisals Department
- Research Assistant, Appraisals Department

IV. Other Government or Government-Owned Organizations

Agricultural Development Corporation

Tony Clarke
Hugh Miller
- Director
- Consultant (Agribusiness)

Community Economic Organizations

Basil Ivey
- Director
Forest Industries Development Company (FIDCO)

T.G. Allan - FAO Forestry Advisor
Erik Garnum - FAO Advisor
Don Green

Jamaica Export Credit Insurance Corporation (JECIC)

E.G. Gooden - Director

Jamaica Export Trading Company (JETCO)

Hernal Hamilton - Product Sales Manager

Jamaica Frozen Foods

Sylvan Campbell - Managing Director
Keith Walters - Assistant Managing Director

Jamaica Industrial Development Corporation (JIDC)

Richard Byles
E.S. Kentish - Managing Director
Patrick Ritchie-Haughton - Public Relations Officer

Jamaica National Export Corporation (JNEC)

Peter W. Durber - Export Pricing and Financial Control Advisor
Peter King - Director
John Rickards - Manager, Trade Information Service
Derek Pilcher - Consultant on Post-Harvest Handling

Jamaica National Investment Corporation (JNIC)

Corinne McLarty - Managing Director
Hugh Shaw - Agricultural Consultant to the Investment Promotion Unit

Midland Enterprises Jamaica, Ltd.

Charles H. Hemans - Cold Storage Manager
Lloyd S. Wiggan - Managing Director
National Commercial Bank
Eldon Forrest
- Business Advisory Manager
Donald E. Menzies
- Agricultural Advisor

Nutrition Products
Foster Kelly
- General Manager
Donald Knight
- Quality Control Supervisor
Cynthia Wint
- Assistant to the General Manager

Project and Analysis Monitoring Company
Carlos A. Levy
- Agricultural Economist

Small Industries Finance Company, Ltd.
Barrie Walker
- Managing Director

V. Academic Organizations

University of the West Indies
Omar Davies
- Institute for Social and Economic Research (ISER)
Jay Green
- Deputy Director, Institute for Social and Economic Research
Elsie LeFranc
- Professor, Sociology
W. Persaud
- Professor, Economics

Caribbean Food and Nutrition Institute
Kenneth A. Leslie
- Agricultural Economist
Joan Peters
- Nutrition Educator

VI. Business Associations

Jamaica Agricultural Society
Sydney Litchmore
Associated Chambers of Commerce of Jamaica and Representatives

Kenneth H.M. Gray - Manchester Chamber of Commerce
Roy Heron - Ocho Rios Chamber of Commerce
Noel R. Madden - Secretary, Associated Chambers of Commerce of Jamaica and Jamaica Chamber of Commerce
Lucille V. Miller - President, Hanover Chamber of Commerce
Wellington V. Phillips - President, Associated Chambers of Commerce of Jamaica
Reuben Spencer - President, St. Elizabeth Chamber of Commerce

Jamaica Manufacturers Association

Mr. Eddie Hall - Secretary
Ms. Jean Ramprashad - Professional Staff Member

National Union of Cooperative Societies

Hector Detrick - Director

Private Sector Organization of Jamaica

Neville James - Director

Small Businesses Association

Adolph Brown - President

VII. Private Sector Agro-Industries

Collins Bakery, Mandeville

Ivan Collins - Owner

Darleston Cooperative Foods

Rupert Hamilton - Assistant Manager
Mr. Harol - Production Manager
Falchov Foods, Falmouth

Helen Chinsee - Owner

Grace, Kennedy and Company

Mabel Tenn - Director

Grace Meat Packing, Savanna La-Mar

Gatemen
Lorna Neita

Jamaica Citrus Growers, Ltd./Caribbean Preserving

A. Harrison - Assistant Manager

Jamaican Standard Products, Mandeville

John (Jackie) O. Minott - Managing Director

National Continental Corporation Bakery, Mandeville

Mr. Miller

Pickapeppa Co. Ltd., Shooter's Hill

Mr. Fong - General Manager

Pioneer Chocolate Company Ltd.

Mr. Cunningham

Stennett's Woodworking Co., Ltd.

Linval Stennett - Owner/Manager

West Indies Bakery

Mr. Price - Accountant

West Indies College Cannery and Bakery

Mr. Trevor Reid - Manager
Julio Figuero - Manager, Cannery
Morris Gentles - Assistant Manager, Bakery
Wickertan Products, Montego Bay

Mr. Hines - Quality Control
Mr. Jennings - Comptroller

VIII. Private Businesses - Other

Paul Chen-Young and Associates

Paul Chen-Young - President
Kathy Grant - Associate

Small Business Marketing Agency, Ltd.

A.B. Stone - Managing/Executive Director

IX. Private Non-Profit Organizations

Christian Action for Development and Education in the Caribbean (CADEC)

Lloyd Samuda - Agricultural Officer

Small Business Development Centre

Granville Dickson - Director

X. Other

Jack Banson - President, Developing World Industry and Technology, Washington, D.C.

Colleen Gardner - Jamaican Sociologist
### Table 2-1: Surveys of Agro-Industries Visited in Jamaica, April-May 1982 (continued)

<table>
<thead>
<tr>
<th>Type of Industry</th>
<th>Type of Product</th>
<th>No. of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biscuits</td>
<td>Bread</td>
<td>50</td>
</tr>
<tr>
<td>Crackers</td>
<td>Salt</td>
<td>100</td>
</tr>
<tr>
<td>Jams</td>
<td>Jelly</td>
<td>75</td>
</tr>
<tr>
<td>Pickles</td>
<td>Sals</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source Type of Operations</th>
<th>Main Problems</th>
<th>Potential Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Limited access to raw materials</td>
<td>Help to identify new technologies</td>
</tr>
<tr>
<td>Foreign</td>
<td>Limited access to raw materials</td>
<td>Help to identify new technologies</td>
</tr>
</tbody>
</table>

### Notes:
- Local industries are mostly seasonal, with production concentrated during harvest periods.
- Foreign companies offer year-round production, but face higher labor costs.
- Local industries face challenges with access to raw materials and machinery.
- Foreign companies benefit from lower labor costs but may struggle with access to local markets.
<table>
<thead>
<tr>
<th>Company</th>
<th>Type of Operation</th>
<th>Products</th>
<th>Size (Gross Sales)</th>
<th>N &amp; Type</th>
<th>Occupants</th>
<th>Problems</th>
<th>Type of Input</th>
<th>Financial Assistance Needed</th>
<th>Principal Activity &amp; Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>F.D.H.</td>
<td>Food Processing</td>
<td>Juice, Mashed Meat, Cheese, Flour, etc.</td>
<td>N.A.</td>
<td>20-person</td>
<td>$5,000</td>
<td>$10,000</td>
<td>20% of produce</td>
<td>Loan to buy equipment</td>
<td>Loan to buy equipment</td>
</tr>
<tr>
<td>Grace</td>
<td>Meat Processing</td>
<td>Beef, Pork, Herring, etc.</td>
<td>N.A.</td>
<td>50 full-time</td>
<td>$10,000</td>
<td>$15,000</td>
<td>10% of production</td>
<td>Loan to expand</td>
<td>Loan to expand</td>
</tr>
<tr>
<td>IB.</td>
<td>Footwear</td>
<td>Shoes, Sandals, Slippers, etc.</td>
<td>N.A.</td>
<td>100</td>
<td>$5,000</td>
<td>$10,000</td>
<td>10% of production</td>
<td>Loan to expand</td>
<td>Loan to expand</td>
</tr>
<tr>
<td>J.L.</td>
<td>Clothing</td>
<td>Shirts, Suits, Dresses, etc.</td>
<td>N.A.</td>
<td>20</td>
<td>$5,000</td>
<td>$10,000</td>
<td>10% of production</td>
<td>Loan to expand</td>
<td>Loan to expand</td>
</tr>
</tbody>
</table>

**ANNEX 2: IMPACT OF AGRICULTURAL INDUSTRIES VISITED IN JAMAICA, APRIL-MAY 1981 (CONTINUED)**

- **Social/Community Impacts:**
  - Improved living conditions for workers.
  - Local employment opportunities.
  - Increased economic activities in the region.

- **Potential Problems:**
  - Limited access to capital for expansion.
  - Difficulty in acquiring and maintaining equipment.

- **Financial Assistance Needed:**
  - Loans for equipment acquisition.
  - Assistance with marketing.

- **Principal Activity & Status:**
  -continued operations.
  - Expansion plans underway.

**Notes:**
- Estimated at least 500 employees benefit from the operations.
- Workers' health care is provided by the companies.
- All workers are members of the Union of Workers in Jamaica.
<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Type of Enterprise</th>
<th>Products</th>
<th>Main Problems</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nisim Products</td>
<td>Food Processing</td>
<td>Flavoring with a baked goods subsidy</td>
<td>- Labor shortage&lt;br&gt;- High energy costs&lt;br&gt;- Absence of Absenteeism&lt;br&gt;- Weather-related</td>
<td>- Additional funding for research and development&lt;br&gt;- Expansion of facilities&lt;br&gt;- Increased market share&lt;br&gt;- Government incentives for new projects&lt;br&gt;- Increased sales through advertising and marketing</td>
</tr>
</tbody>
</table>
Figure 3: Summaries of Small Manufacturing Plants in America, April 1981 (continued)

<table>
<thead>
<tr>
<th>Source Type of Issue</th>
<th>Main Problem</th>
<th>Principal Assistance Need</th>
<th>Feasible Strategies:</th>
<th>Social Characteristics:</th>
<th>Name of Firm, Industry, Location</th>
<th>Type of Enterprise</th>
<th>Size of Other Concerns</th>
<th>Wages, etc.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign labor, equipment, capital</td>
<td>- Lack of working capital&lt;br&gt;- Underutilized capacity</td>
<td>- Marketing, recruitment of new personnel</td>
<td>Accountable&lt;br&gt;labor&lt;br&gt;technical assistance&lt;br&gt;training assistance&lt;br&gt;short-term capital&lt;br&gt;clientele</td>
<td>Stable, young male worker&lt;br&gt;union&lt;br&gt;social security&lt;br&gt;medical insurance&lt;br&gt;deferred compensation</td>
<td>BEAGLEY'S WOODWORKING&lt;br&gt;Co.&lt;br&gt;St. Catharines&lt;br&gt;Ontario</td>
<td>Woodworking, woodworking</td>
<td>$300,000&lt;br&gt;Net worth $100,000</td>
<td>$100&lt;br&gt;month&lt;br&gt;work average</td>
<td>Small, 1 employee&lt;br&gt;with 3,000 customers&lt;br&gt;ties up $500/week&lt;br&gt;sales $100/week</td>
</tr>
</tbody>
</table>
### Annex 2-4

#### List of Agro-Industries in Jamaica

by Parish and Type of Agro-Industry - 1980

<table>
<thead>
<tr>
<th>CLARENDON</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preservation of Fruit &amp; Vegetables</strong></td>
</tr>
<tr>
<td>The North Clarendon Processing Co. Ltd. (17), Morgan's Pass</td>
</tr>
<tr>
<td>Citrus Co. Ja. Ltd. (550), May pen</td>
</tr>
<tr>
<td>Gore's Canning Co. Ltd., Tweedsdie</td>
</tr>
<tr>
<td>Ranger Foods Ltd., Sedge Pond</td>
</tr>
<tr>
<td><strong>Grain Mill Products</strong></td>
</tr>
<tr>
<td>Aenon Town Coffee Factory (10), Aenon Town</td>
</tr>
<tr>
<td>Clarendon Park Coffee Factory (9), Toll Gate</td>
</tr>
<tr>
<td>Trout Hall Coffee Factory, Trout Hall</td>
</tr>
<tr>
<td><strong>Bakery Products</strong></td>
</tr>
<tr>
<td>Spalding Bakery Ltd. (34), Spalding</td>
</tr>
<tr>
<td>Mother's Choice Bakery Co. Ltd. (15),</td>
</tr>
</tbody>
</table>

---

This composite list of agro-industries in Jamaica has been compiled from the following sources:

- List of Registered Factories, Factories Inspectorate, Ministry of Labor and Employment, Kingston (December 1980);
- List of Products Manufactured by Registered Food Factories, Food Science and Agricultural Commodities Departments, Bureau of Standards, Kingston (1980);
- Food and Agro-Industry Group List, Jamaica Industrial Development Corporation, Kingston (1981); and

To the extent possible, every effort has been made to list only those firms that are actually in operation. This is as comprehensive a list as the authors believe is possible short of an on-site survey of every agro-industry operation in each parish. The number in parenthesis following some of the companies indicates the number of employees working in that factory as reported by the Factories Inspectorate.
CLARENDON (cont.)

Bakery Products (cont.)

United Bakery (Owner N.C.F.) (6),
May Pen
United Bakery (7),
Alston
Western Bakery Ltd. (44),
May Pen
Chin's Central Bakery (6),
Chapelton
Croft's Hill Bakery (8),
Croft's Hill
The People's Favorite Bakery (9),
Four Paths
Peace Maker Bakery (15),
Green Bottom
Silver Star Bakery (7),

Sugar

New Yarmouth Ltd. (325),
Yarmouth
The Clarendon Sugar Co. Ltd. (732),
Moneymusk, Lionel Town

Sugar Confectionary, Cocoa and Cocoa Products

Morgan's Valley Cocoa Fermentary (30)
Morgan's Pass

Miscellaneous Food Preservation

Clarendon Food Mills Ltd. (15)
May Pen Ice Factory (10)

Beverage Industries

Clarendon Distillers Ltd. (57),
Moneymusk, Lionel Town

Paper and Paper Board Products

West Indies Pulp and Paper Ltd. (97),
Freetown

HANOVER

Meat and Dairy Products

Meat & Poultry Products Ltd. (19),
Long Acre Lucea

Grain Mill Products

Mahbee's Rice Mill (2),
Santoy P.A.
Mahabee
Mt. Pleasant
### HANOVER (cont.)

**Bakery Products**
- Central Bakery (6), Lucea
- Enterprise Bakery (9), Lucea
- Easton Bakery (7), Hopewell
- Tri-Me Bakery (4), Hamstead
- McPherson's Bakery (12), Kingsvale

**Sugar Confectionary, Cocoa and Cocoa Products**
- Haughton Fermentary (7), Lucea

**Miscellaneous Food Preservation**
- Hanover Spices Ltd. (30), Haughton Court

### KINGSTON

**Meat and Dairy**
- Hart's Butcher & Cold Storage (5)
- K.S.A.C. Abattoir (51)
- Processed Foods (Ja.) Ltd. (35)
- Daken Farm Ltd. (29)
- United Dairy Farmers Ltd. (168)
- Jamaica Frozen Foods Ltd., Newport West

**Preservation of Fruits and Vegetables**
- Sunkist Ltd. (20)
- DaCosta Bros. Ltd., Twickenham Close
- Musson Jamaica Ltd.
- Grace Food Processors Ltd.
- Citrus Co. of Jamaica Ltd., Food Technology Institute
- Jamaica Industrial Development Corporation
- Roberts Products Ltd.
- Tropic Foods Ltd.
- Wonder Chef Mfg. Ltd.
- Juicicles Ltd., Kingston

**Grain Mill Products**
- Jamaican Grain & Cereals Ltd. (58)
- Gelac, Corn Sale Co. (11)
- Jamaica Flour Mills Ltd. (128)
- Coffee Industry Board-Central
  Grading & Finishing Works (92)
KINGSTON (cont.)

Grain Mill Products (cont.)

Bakery Products

Sugar Confectionary, Cocoa and Cocoa Products

Miscellaneous Food Preservation

Beverage Industries

Tobacco Products

Jamaica Pre-Pack Ltd.
M.F.V. Ltd.
Albert Wong & Sons Ltd.

Odean Baking Co. (4)
New Lion Bakery (5)
Loyal Baking Co. Ltd. (10)
Nutrition Products Ltd. (218)
Honey's Bakery (5)
Falcon Bakery (2)
Hannah Town Bakery (1)
Carnation Bakery (8)
Lyew Brothers Baking Co. (4)
Hugh's Bakery (6)

Cocoa Warehouse (31)
Virginia Dare (Ja.) Ltd.
Hugh's Products
United Confectionery

Jamaica Flavoring Ltd. (8)
Acme Products Corporation (10)
Seprod Ltd. (87)
Beacon Cone Co. (45),
Kingston
Lipton Jamaica Ltd.
F.A. Headlam & Co.
Jamaica Feeds Ltd. (45)
Kingston Ice Making Co. Ltd. (56)
Willie Lee Ltd. (9)
General Blending Co. Ltd.
Lewis Kelly & Sons Ltd.
Mui Mee Food Products Ltd.
Bush Boake Allen (Ja.) Ltd.
Central Mfg. Co. Ltd.

Shims Wholesale Liquors (66)
Shims Wholesale Liquors Ltd. (3)
J. Wray & Nephew Ltd. (25)
Farquharson's Syrup Factory (3)

Zaynes Tobacco Factory,
Kingston
Combined Tobacco Co. Ja. Ltd.
Tobacco Industry Control Authority
KINGSTON (cont.)

Wood Products
Foster's Body Building Establishment (2)
Wherry Wharf Ltd. (16)
Roy White WoodWorking (10)
Chin's Cabinet Making (3)
Joseph's Box Factory (4)
Sam Issacs & Son Ltd. (9)
Madden's Funeral Supplies (10)

Paper and Paper Board Products
Pioneer Box Factories (10)
The Jamaica Box Making Co. Ltd. (14)
Roy White WoodWorking (10)

Leather and Leather Products
Paragon Mfg. Co. Ltd. (23)
Wherry Wharf Ltd. (16)

MANCHESTER

Meat and Dairy Products
Hi-Lo Food Stores (5)
Mandeville Abattoir (23),
Waltham
Mandeville Cooling Station (10),
Mandeville

Preservation of Fruits and Vegetables
The Pickapeppa Co. (29),
Manchester
West Indies College-Cannery (55),
Mandeville

Grain Mill Products
Jamaica Standard Products,
Williamsfield

Bakery Products
Coleyville Bakery Ltd. (27),
Coleyville, Manchester
Lyn's Bakery (8)
Rival Bakery Successor Ltd. (20),
Christiana
B.O.C. Bakery Co. (26),
Coleyville, Manchester
West Indies College Bakery (60),
Mandeville
Collins Bakery (6)
National Continental Foods (74)

Sugar Confectionery, Cocoa and
Cocoa Products
Pioneer Chocolate Co. Ltd. (22),
Williamsfield
M.G.B. Ltd.,
Williamsfield
MANCHESTER

Miscellaneous Food Preservation

PORTLAND

Bakery Products

Sugar Confectionery, Cocoa and Cocoa Products

Miscellaneous Food Preservation

ST. ANDREW

Meat and Dairy Products

Preservation of Fruits and Vegetables

Karjan's Products (2), Manchester

Lee's Bakery (17), Buff Bay
C.C. Bakery (10)
Carnation Bakery (28), Pt. Antonio
Three Star Lion Bakery (22), Pt. Antonio

Bybrook Candies (12), Bybrook

Gauron Food Products Ltd. (38), Boundbrook

Sunrise Supermarket
Caribbean Broilers (Ja.Ltd.)
Tropical Plaza Meats Ltd.
Hi-Lo Food Stores (Ja.Ltd.)
Jamaica Pre-Pack Ltd.
Hi-Lo Food Stores (Ja.Ltd.)
Hi-Lo Food Stores
Metropolitan Meat Market Ltd.
Havenbrook Supermarket
Universal Stores Ltd.
Master Corporation
Hi-Lo Food Stores (Ja. Ltd.)
Save-U-Meat Mart
Hi-Lo Food Stores (Ja. Ltd.)
Coombs Retail Meat Shop
Super Value Supermarket Ltd.
Harold Supermarket
Cremo Ltd.
Diary Industries (Ja. Ltd.)

Food of Jamaica Ltd.
Kiskimo Ltd.
DaCosta Bros. Ltd.
Ja. Frozen Foods Ltd.
Export Products Ltd.
Wonder Chef Sauce Mfg. Ltd.
ST. ANDREW (cont.)

**Preservation of Fruits and Vegetables**
- Sausage Foods
- Food Technology Pilot Plant
- Roberts Products Ltd.
- Grace Food Processors Ltd.
- Tropic Foods Ltd.
- General Packaging Co. Ltd.
- Produce Center

**Grain Mill Products**
- Jamaica Popcorn Co. Ltd.
- Poly Foods Ltd.
- Langley Coffee Factory
- Salada Foods Ja. Ltd.
- Mavis Bank Central Factory
- Silver Hill Coffee Industry

**Bakery Products**
- Town Talk Pastries Ltd.
- Butterkist Ltd.
- Lucky Star Bakery
- Golden Bakery Ltd.
- Jamaica Bakeries Ltd.
- Tastee Ltd.
- Jamaica Biscuit Co. Ltd.
- Sunbeam Bakery Ltd.
- Powell's Ideal Bakery
- Seven Star Bakery
- Sugar & Spice Ltd.
- Unique Craft (Ja.) Ltd.
- Blake's Bakery
- S&S Distributors Ltd.
- Jacks Master Bakers
- Allan's Pastry Shop
- R.H.T. Bakery Ltd.
- National Continental Foods Ltd.
- Gilgal Bakers
- Alpe Foods Ltd.
- Chang's Bakery Successors
- Cookie Jar Pastry
- Grace Bakery
- Native Food Packers Ltd.
- Patty Palace
- Little Windsor Bakery
- Consolidated Bakeries (Ja.) Ltd.
- New Town Bakery Ltd.
### ST. ANDREW (cont.)

**Sugar Confectionery, Cocoa and Cocoa Products**
- Wander Jamaica Ltd.
- Cavell's Manufacturing
- Vendomat Ltd.
- Kiskimo Ltd.

**Miscellaneous Food Preservation**
- Stewart Bros. (Ja.) Ltd.
- Central Manufacturing Co. Ltd.
- Virginia Dare (Ja.) Ltd.
- Food Ingredients Ltd.
- Caribbean Products Co. Ltd.
- Jamaica Macaroni Factory Ltd.
- General Blending Company

**Beverage Industries**
- Doctor Ian Sangster & Co.
- J. Wray & Nephew Ltd.
- Kelly's Rum Company Ltd.
- Estate Industries Ltd.
- The Fortobello Co.
- Jamaica Wine Mfg. Ltd.
- D&G Wine Ltd.
- Desnoes & Geddes Ltd.
- Liquid Foods Ltd.
- Guinness (Ja. Ltd.) -Coca-Cola Bottling Plant
- Diamond Mineral Water Co. Ltd.
- Jureidini's Ltd.
- Lewis Kelly & Sons Ltd.

**Tobacco Products**
- Gradiaz Annis of Jamaica Ltd.
- Palmino Bros. Tobacco Co. Ltd.
- Jamaica Tobacco Co. Ltd.
- Ciguentes Y. Cia Ltd.

**Wood Products**
- Hardware & Lumber Ltd.
- Halliman's Woodwork Shop
- Mais & Sant Ltd.
- Ministry of Construction & Housing Workshop
- Wood Preservation Ltd.
- Greenwich Saw Mill
- Production Systems Sales Ltd.
- Gordon's Saw Mill
- Aiken's Woodwork & Joinery
- C. Lloyd 'Gentles (Lumber)
ST. ANDREW (cont.)

Wood Products (cont.)
- McGibbon's Industries
- Leonard Decordova Lt.
- Thompson's Saw Mill
- Jamaica Wood Products
- Tropical Woods Ltd.

Paper and Paper Board Products
- Khaleel's Paper Products Ltd.
- National Packaging Corp. Ltd.
- West Indies Paper Products Ltd.
- Reliable Packaging Co. Ltd.
- Ideal Industries Ltd.
- West Indies Containers Ltd.
- Paper Processors Ltd.
- C.M.P. Envelope Ltd.
- Containers Company Ltd.
- Industrial Products Ltd.
- Pyramid Bag Co. Ltd.
- Moore Steel Rule Die Co. Ltd.
- Jamaica Packaging Ind. Ltd.
- Cardem Ltd.

Leather and Leather Products
- Oates Leather Tannery
- Broadway Leather Products
- Smith's Tannery
- Tanner's Ltd.
- Kean's Industry Ltd.
- Exclusive Manufacturing Co. Ltd.
- Kean's Industry Ltd.
ST. ANN

Meat and Dairy

Reynolds Metal Co. (31),
Lydford
Shaw Park Dairies, Ltd. (102),
Ocho Rios
Bengal Dairy (3),
Bengal
B.S. Midland Enterprises (Ja.) Ltd.,
Lydford P.O.

Bakery Products

New Era Bakery (6)
Alexandria
Brown’s Town Bakery (10),
Brown’s Town
South Side Bakery (4),
Brown’s Town
Small’s Bakery (20),
Bamboo
Chuck’s Bakery (8),
St. Anne’s Bay
Golden Star Bakery (32),
Bamboo
Harris Bakery (13),
Brown’s Town
Golden Crust Bakery (21)
Ocho Rios
Lew Chong Bakery (11),
4 Musgrave St.
Lee’s Bakery (Successors) (20),
Borobridge P.O. St. Ann
Ashman’s United Bakery (4),
Claremont

Sugar

Broom Hall Deve. Co. Ltd. (10)
Cave Valley

Miscellaneous Food Preservation

Prospect Ice Factory (6),
Prospect

Wood Products

Maffessanti Woodworking Establishment (17)
White River
Nevers Saw Mill (2),
Inverness P.O.
Redway’s Woodwork Shop (1),
11 Church St.
F&E Boland Woodwork (4),
Ocho Rios
ST. CATHERINE

Meat and Dairy

Jamaica Milk Products Ltd. (362),
Bog Walk
Jamaica Broilers Ltd. Processing Plant
Bushy Park (200)
Agro-Industries Ja. Ltd. (66),
Bog Walk

Preservation of Fruits & Vegetables

Scott's Preserves Ltd. (34),
Twickenham Pk. Sp. Town
Jamaica Citrus Growers Ltd. (454),
Bog Walk
B.S. Caribbean Preserving Co. Ltd.,
Bog Walk
Tropical Frozen Novelties Ltd.
Salt Pond Rd.

Grain Mill Products

Bog Walk Coffee Factory (7),
Bog Walk
A.D.C. Rice Mills (60),
Burke Rd.
Master Blend Feeds Ltd. (65),
Old Harbour
Jamaica National Soya Products Ltd.,
Old Harbour
Central Soya of Jamaica
Old Harbour

Bakery Products

Aston's Bakery (9),
Wellington St. Sp. Town
Right Spot Bakery (10),
Cumberland Rd. Sp. Town
Sunrise Bakery ("),
Wellington St. Sp. Town
Sun Blest Bakery (5),
Goffe Rd., Glenqoffe
Supreme Bakery (13),
French St.
White's Bakery (10),
Beacon Hill Sp. Town
Superior Bakery (9),
Old Harbour Bay
Victory Bakery (6),
Mount Industry
Oxford Bakery (10),
14 Condrow Avenue
ST. CATHERINE (cont.)

Sugar

Bernard Lodge Sugar Factory (383),
Bernard Lodge
Innswood Estate Ltd. (294),
Innswood
Worthy Park Factory Ltd. (222),
Lluidas Vale

Sugar Confectionery, Cocoa and Cocoa Products

Food Specialties (Ja.) Ltd. (182),
Bog Walk
Blue Ribbon Products Co. Ltd. (27),
31 Old Harbour Rd.

Miscellaneous Food Preservation

West Indies Yeast Co. Ltd., (30),
Dob Lane
Specialist Mfg. Co. Ltd., (12),
Twickenham Park
Refrigeration Ltd., (3)
Old Harbour Rd.
St. Catherine Ice Factory (7),
Old Harbour Rd.
St. Catherine Ice Factory (2),
Old Harbour Rd.
Caribbean Foods Ltd., (23),
Twickenham Park Sp. Town
B.S. Reckitt & Coleman (W.I.) Ltd.,
Twickenham Park Sp. Town
Innswood Estate Ltd.
Jamaica Sauce Co.,
Hartlands
Alkali Ltd.,
Windsor Rd. Sp. Town (JIDC)
Betapac Products,
Twickenham Park (JIDC)

Beverage Industries

Guinness Jamaica Ltd. (290),
Central Village

Tobacco Products

Tobacco Ind. Control Authority (138),
Colbeck Estate
Cigarette Co. of (Ja.) Ltd. (280),
Twickenham Park


**ST. CATHERINE (cont.)**

**Wood Products**

National Lumber & Wood Prod. Ltd.
Ferry
Linstead Saw Mill
Linstead (1)
Saw Mill
Twickenham Park (40)
Stennents Woodworking Co.
Bog Walk

**ST. ELIZABETH**

**Meat and Dairy**

Taylor's Dairy
Bogur
Pepper Dairy
Pepper

**Preservation of Fruits & Vegetables**

Southern Processors Ltd.
Bull Savannah

**Grain Mill Products**

Maggotty Coffee Factory
Newton
National Cassava Products Ltd.
Goshen

**Bakery Products**

New Buttercrust Bakery
Hampton, Malvern (5)
Soares Bakery
Southfield (8)
Sunrise Bakery
Black River (21)

**Sugar**

Holland Sugar Factory
Holland (185)
Appleton Estate
Siloah (269)

**Miscellaneous Food Preservation**

St. Elizabeth Ice & Cold Storage Ltd.
Santa Cruz (13)
Thompson Hankey (Ja.) Ltd.
9 High St. Bull B/River (9)

**Wood Products**

Taylors Lumber Yard
Aberdeen (3)
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<th><strong>ST. JAMES</strong></th>
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| **Meat and Dairy** | Montego Bay Abattoir  
Tavern Bay Rd. (15)  
Northshore Dairies Ltd.  
Bogue - Industrial Estate (10)  
B.S. Cornwall Dairies Ltd.  
Montpella  
Montpelier Cooling Station  
Montpelier |
| **Grain Mill Products** | Catadupa Coffee Growers Co-op  
Catadupa (10) |
| **Bakery Products** | Wilson Young Hagstaff Bakery  
Maroon Twm (5)  
Sunlight Bakery  
Montego Bay (15)  
Taylors Bakery  
Montego Bay (2)  
Salmon's Bakery  
Montego Bay (19)  
Negros Bakery  
Adelphi (13)  
H.P.B. Bakery Ltd.  
Montego Bay (8)  
Adams Bakery  
Anchovy (5)  
St. James Bakery  
Montego Bay (17)  
Sunshine Bakery  
Montego Bay (4)  
Star Bakery  
Montego Bay (11)  
Regal Bakery  
Montego Bay  
Butterflakes Pastries Ltd.  
Montego Bay (20)  
Hilton's Bakery  
Montego Bay (10)  
Little Toy Bakery  
Montego Bay (1) |
| **Miscellaneous Food Products** | Montego Bay Ice Factory  
Montego Bay (18) |
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<tr>
<th>Industry</th>
<th>Company Name</th>
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<td>Desnoes and Geddes Ltd.</td>
<td>Reading (56)</td>
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<td>Leather and Leather Products</td>
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<td>Montego Bay (12)</td>
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<td>Devres</td>
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ST. MARY (cont.)

Sugar

Sugar Confectionery, Cocoa and Cocoa Products

ST. THOMAS

Preservation of Fruits & Vegetables

Grain Mill Products

Bakery Products

Sugar

Miscellaneous Food Preservation

Leather and Leather Products

TRELAWNY

Preservation of Fruits & Vegetables

Grain Mill Products

Gray's Inn (Ja.) Central Factory Ltd.
Annotto Bay (250)

Richmond Cocoa Fermentary
Richmond (45)
Highgate Food Products Ltd.
Highgate (75)

Fletcher Bowman Ltd.
Southern Yallahs-Yallahs (51)
B.S. Island Foods
Seaforth

May Hall Coffee Factory
Cedar Valley (8)

Young Sang Bakery
18 South St. Montego Bay (29)

Duckenfield Sugar Factory
Golden Grove (104)

The Louis Howard Hedmann Co. Ltd.
Yallahs (1)

Aristocrat of Ja. Ltd.
Poorman's Corner - Yallahs (128)

Factory Foods Ltd.
Carib. Road (22)
B.S. Falchay Foods Ltd.
Falmouth

Carib. Milling (Ja.) Ltd.
Rio Bueno (58)

Devres
TRELAWNY (cont.)

Bakery Products
- Hillside Bakery
- Duncan's P.O. (12)
- Sunshine & Co.
- Albert Town (11)
- Spicy-Nice
- 1 Duke St. (10)
- Gem Bakery
- Clarkes Town (7)
- Chin's Bakery
- 37 Market St. (6)
- Anchor Bakery
- Clarkes Town (5)

Sugar
- Hampden Sugar Estate
  Hampden (274)
- Long Pond Sugar Factory
  Clarkes Town (320)

Miscellaneous Food Preservation
- Falmouth Ice Factory
  Falmouth (4)
- Falmouth Spices Ltd.
  Falmouth

Wood Products
- Service's Saw Mill
  85 Market St. (6)

WESTMORELAND

Meat and Dairy
- Grace Food Processors Ltd.
  Paradise (103)

Preservation of Fruits & Vegetables
- Darliston Community Food Ltd.
  Darliston (20)

Grain Mill Products
- Nelson's Rice Hulling Plant
  Linton Pen (3)
- Subaran Rice Hulling Plant
  Fullersfield (2)
- Cheddishingh Rice Mill
  Savannah-La-Mar (1)
- Williams Rice Mill
  Little London (1)
- Bacchas Rice Mill
  Grange Hill, Belle Isle (1)
- William's Rice Mill
  Burnt Savannah (2)
WESTMORELAND

Bakery Products

People's Bakery
23 Dalling St. (16)
Walton's Bakery
Georges Plain (5)
Khan's Bakery
Strath Bogie (3)
Monarch Bakery
Bedford St. (19)
Pioneer Bakery
Smithfield (5)
Victory Bakery
Grange Hill (7)
Smith's Bakery
Galloway Withorn P.A. (13)
Sunray Bakery
4 Great George ST. (13)
Withorn Bakery Ltd.
Withorn (13)

Sugar

Frome Factory
Frome (900)

Miscellaneous Food Preservation

Dean's Valley Ice Plant
Petersfield P.O. (11)
B.S. Gray's Pepper Products
Savanna-la-Mar

Wood Products

Achergsingh Saw Mill
Townhead (2)
Kelson's Saw Mill
Grange Hill (3)
ANNEX 2-5

Brief description of selected intermediary institutions in Jamaica

1. Ministry of Industry and Commerce

The Ministry of Industry and Commerce (MIC) is the GOJ sectoral ministry charged with authority over industrial production and domestic trade and service.

No section exists within MIC which deals solely with agro-industrial affairs. However, two MIC agencies—the Jamaica Industrial Development Corporation and the Bureau of Standards—perform significant functions relating to agro-industrial development. These agencies are discussed below.

a. Jamaica Industrial Development Corporation

The Jamaica Industrial Development Corporation (JIDC) is a statutory body under the Ministry of Industry and Commerce and has been in operation since 1952. Its policy directions come from a Board of Directors, appointed by the Minister. Day-to-day management is provided by a managing director. JIDC's mandate is to "stimulate, facilitate and undertake the development of industry."¹

The JIDC's activities include:

- owning and providing free assistance to a number of parastatal firms, seven of which are in agro-industry;
- operating nine industrial estates throughout the island;

¹"The JIDC is About People — All Kinds of People" (JIDC, 1975)
conducting on-going in-service training under its "Training-within-Industry" Programme;

- conducting through its "Productivity Centre" training in management, engineering, accounting, and maintenance; and

- conducting through its Food Technology Institute development and demonstration projects in the food processing area.

The Seaga administration has indicated it will divest itself of some of the parastatal enterprises administered by the JIDC. To date, one firm, Hague Apparels, has been leased out to private hands.

Since 1978, the JIDC has lost a great deal of its capacity to plan, appraise, and implement projects, particularly agro-industrial projects. In that year, the GOJ decided to close the agro-industrial sector; its staff was distributed to other sections of the JIDC and to several of the parastatal firms as well. More recently, additional planning and evaluation technical staff members have been transferred to other duties in the Ministry of Industry and Commerce. In this context, and with the elections and attractions of private industry, attrition and demoralization has further stripped the JIDC staff ranks. It now has a much smaller, less-experienced staff than only three years ago. As a result, the JIDC at the moment of the Devres team's visit was not developing, appraising, or implementing projects. The Devres team understands that the JIDC is attempting to re-organize and re-build, but estimates that it will take a year or two before it will be in a position to undertake new projects. The agency is presently awaiting new policy directives.

The JIDC is providing some technical and managerial assistance to garment manufacturers through its Garment Development Unit. In the agro-industrial sector, the JIDC's only activity at present is through
the Food Technology Institute. At one point in the past, but not since 1978, the JIDC provided a limited amount of technical assistance to sawmilling operations.

b. Food Technology Institute (Jamaica Industrial Development Corporation)

The JIDC Food Technology Institute (FTI) is a research institute attached to the Jamaica Industrial Development Corporation. The FTI's main function is to develop and test-market new commercial processed food products for spin-off to private or public enterprises. It also provides information, on a sliding-scale fee basis, to soliciting Jamaican private businesses.

Since its establishment, the FTI has developed several products at its pilot plant. In the late 60s, the FTI developed processes for coconut cream and bammies, which were transferred to a JIDC subsidiary, Jamaica Frozen Foods. A formula for canning paw-paw chunks in syrup has recently been transferred for commercial production to two community organizations, the Sawhill Community Project and the Women's Federation in Kingston. Research work is currently underway on a limited basis on a tropical fruit salad and paw-paw pie filling and nectar. Marketing tests in cooperation with the AMC were carried out in May 1981. The FTI has also used Grace, Kennedy and Company to market its pilot plant production.

The FTI is staffed by 10 research officers and approximately 25 additional staff, 15 of whom work in the pilot plant. The pilot
plant, however, has not been operating since February due to the lack of marketing efforts since the death of the commercial officer last October and the decision not to replace him for the time being. No production specialists are employed by the FTI nor does it have a technical assistance office. However, on occasion some technical assistance is provided. For example, the JIDC provided the CEO with assistance in processing at one of the CEO's community enterprises. The FTI also responds to irregular requests for information from private enterprises, providing processing specifications, equipment listings, literature searches, and the like. Sometimes a fee is charged; however, matters that can be handled by phone are performed free. Two officers handle technical assistance requests. However, so many requests are received that these employees cannot handle them all.

The FTI has potential for assisting SMAEs in food processing technology and the introduction of new product lines. However, its performance to date has been on a limited scale. Furthermore, due to the budgetary and policy uncertainties surrounding the recent change in regime, particularly with regard to the JIDC and the parastatal sector, the staff is currently undermanned, demoralized, and in the process of losing additional experienced personnel to the private sector. Effective technical assistance by the FTI will require an explicit definition of policy and budget support by the GOJ, and time to reorganize.
c. **Bureau of Standards--Packaging Centre**

The Packaging Centre is a department of the Bureau of Standards, a statutory body of the Ministry of Industry and Commerce. The Centre, only recently established, has a young and skeletal staff of one person apiece in four areas: materials, retail packaging, transit packaging, and technical-economic studies, plus the director, a UNIDO consultant, two lab technicians, and a secretary. The Centre was formed with UNIDO/UNDP assistance, and staff members, through the UN, have received overseas training in their respective areas of responsibility.

The Packaging Centre offers services in:

- testing (materials, retail-pack, and transit-pack) to predict performance, make improvements, and assure quality;
- research and development to improve old packs and develop new packs;
- training in quality control, testing techniques, and other technical areas (e.g. flexible packaging technology), at the request of institutions such as the JMA;
- information on technologies, regulations, and the packaging industry;
- standardization and development of company purchasing specifications, company manufacturing specifications, and national specifications; and
- techno-economic studies.

The Centre's mandate is to assist small firms which find it difficult by themselves to develop and test new packaging materials, by providing an independent laboratory to give customized help.
The Bureau of Standards maintains an Industrial Assistance Program through which private businesses who join receive low-cost services from the Bureau's Packaging Centre and Quality Control, Chemical Analysis, and Macrobiology departments. Since 80 percent of packaging is for processed foods, this program should provide services mainly to food processing and other agro-industrial enterprises. However, this program appears currently underutilized, due to staff attrition and limited capabilities.

The Packaging Centre, just recently emerging from training, has assisted Grace, Kennedy & Co. by providing recommendations for chicken noodle soup transit-packaging, assisted the CEO by testing a retail pack for baked products, developed a better export package for Cornwall Dairies' long-life milk, and tested boxes for Jamaica Milk Products (Nestles). It is in contact with, and collected package samples from, many other agro-industrial firms, but to date has lacked the resources to systematically contact SMAEs.

Initially, in the opinion of a Centre spokesperson, most small business entrepreneurs think only about production and mark-up and not quality and packaging aspects. The Centre feels that small firms only come to it when they begin thinking about export. In the context of the present export promotion campaign, the Centre's director has noticed an increase in demand for its services.

The Centre originally received its funding from a UNDP project. It now receives support from the budget of the Ministry of Industry and
Commerce. In 1980, the Centre operated on J$60,000, plus a limited amount of income from services. This budget income will likely top J$100,000 in 1981. All services will be offered at a price equivalent to their direct cost to the Centre.

The present number of staff is clearly insufficient. The Centre has begun advertising for additional staff. However, salaries are relatively low, and final hiring decisions must await the policy and budget decisions to be shortly announced (late May-early June) by the new administration.

The Packaging Centre might be interested in receiving or channeling assistance from an IASC, including:

- financing of package testing for SMAEs;
- short-term management assistance to help SMAE entrepreneurs recognize the need and opportunity for improved packaging materials and technology;
- technical assistance to the Packaging Centre in areas of specific need (e.g., tin cans); and
- advice to SMAEs on graphic design to facilitate marketing (to date, the Packaging Centre has not done anything in this area, which is becoming important for small firms, and their over-extended owner-operators, which are seeking to expand into the export area).

d. Bureau of Standards—Foods Department

The Bureau of Standards, as its name implies, regulates standards for products manufactured in Jamaica. Its Foods Department, under the Food Inspection Act of 1955, protects the public against unsafe processed
food products. Agro-industrial firms producing any one of a list established by the 1955 law of "prescribed" processed foods must register with the Bureau's Foods Department, submit to batch sampling, inspection, and testing by Bureau inspectors, and obtain a "certificate for processed foods" authorizing distribution to the public. Batches judged unsafe may be ordered destroyed. The certificate is a prerequisite to export; in fact, most countries require issuance of such a certificate before accepting imported food products.

The Foods Department has a staff of 18, including 10 inspectors who regularly visit every registered factory. A department head, two deputy heads, two laboratory technicians, and three secretaries round out the staff.

The Foods Department has no special focus on SMAEs. However, in practice, inspection is only carried out for smaller food processing firms; the larger firms have their own quality control personnel who do the testing and forward samples to the Foods Department.

SMAEs need quality control information—on new products, formulas, equipment, etc. The Foods Department deals with quality control aspects at large and small plants. As a consequence, this institution could become an intermediary with which an IASC could work to channel information and technology.

However, the Foods Department is not adequately staffed at present to assist SMAEs to improve their quality control process. It needs a mandate, additional staff, and additional quality control equipment at its Kingston headquarters.
2. Ministry of Agriculture

The Ministry of Agriculture (MOA) is the principal state institution participating in the development of the rural sector in Jamaica. In a recent reorganization, two departments of MOA, the Agricultural Research and Development Department and the Production/Extension Department, were given priority emphasis. The former is the center for agricultural research, with divisions specializing in crop soils, plant protection, livestock, forestry and fisheries. The Production/Extension Department provides agricultural extension, emergency food production, financing, marketing, rural cooperative development and community development services. There is a strong liaison between the two departments intended to facilitate transmission of new agricultural methods to farmers. The reorganization also sought to reduce the functions of the Commodity Marketing Boards by incorporating their extension and research activities into the MOA. The Boards, which in the past carried out much of the marketing and processing of traditional export crops, generally suffer from obsolete plant due to lack of recent investment or investment in inappropriate technology. The Boards monopolized functions in most traditional crops including sugar, bananas, coconuts, coffee citrus fruit, pimento, tobacco and cocoa.

With respect to agro-industrial development, there are several other organizations under the aegis of the MOA. They include the following:

Devres
a. **Agricultural Development Corporation (ADC)**

The ADC is a statutory body of the Ministry of Agriculture founded in 1951. Its principal activities prior to 1981 were to monitor the livestock and rice milling industries. Recently, it has been delegated responsibility for channeling foreign and domestic private and public investment into agricultural production. As a clearinghouse for investors, it is to provide technical information, legal advice, and, eventually, assist in feasibility studies. However, the unresolved state of development policy and institutional relationships left key elements of the ADC's role, particularly in agro-industry, undefined as of the time of the Devres team's visit.

Left unresolved are such issues as:

- Whether agro-industry should be included in the jurisdiction of the Agricultural Ministry, the ADC, and other agricultural institutions or in the jurisdiction of the Ministry of Industry (no consensus exists within the government nor even within the ADC);

- What the relationship should be between the JNIC and the ADC in regard to channeling and coordination of investment (one ADC official remarked that the JNIC appeared to be attempting to "short-circuit" the ADC in this area);

ADC does not presently plan to undertake actual full-scale projects of its own. However, it may participate with equity and land, and initiate some small-scale pilot or experimental efforts, as yet undefined.

b. **Forestry Department, Ministry of Agriculture**

The MOA Forestry Department is the GOJ agency responsible for...
the management of public sector forests (excluding those leased to FIDCO for the operation of a demonstration sawmill) and for pilot projects in the processing of forest products. These projects presently contemplated include charcoal, particle board, toothpick, parquet flooring, matchstick and sawdust brick production. Efforts to spin off several of these research and pilot efforts to the private sector have yet to bear fruit. A marketing officer does sell some products, including lightpoles, fence posts, matchsticks, and toothpicks, on a regular basis to wholesalers. Furniture firms and sawmills obtain lumber and cane from Forestry Department lands in return for a small royalty.

The MOA has a mandate to assist the sawmilling industry. At one point, the Forestry Department was providing technical assistance to small sawmills, first through an FAO consultant (whose principal task was installing a Forestry Department demonstration sawmill) and then through one department employee who assisted firms in finding small sources of private timber. However, budget limitations caused the department to transfer the assistance officer to other tasks.

A Forestry Department spokesman felt that this assistance resulted in some upgrading of cutting skills and equipment for a dozen or so sawmills, but that a continuing need exists for help (see section on problems faced by SMAEs). However, the Forestry Department lacks the staff and resources to implement an assistance program. It is, however, seeking authority and funding from the Ministry of Agriculture.

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to organize the sawmills.

The Forestry Department has no authority over private lands.

c. **Scientific Research Council Technical Information Service**

The Scientific Research Council offers a number of technical services that benefit agricultural development. Its staff identifies appropriate technologies for specific needs, particularly in the area of small-scale agricultural machinery. It is, however, an information service with little outreach capacity.

The Council's Food Science and Nutrition Division does some research on new technologies for food processing and preservation and sells the patent on such processes to local manufacturers. To date the GOJ has supplied the funds for such developments. The SRC is also doing research on less traditional crops and processing and examining the potential of several other projects including 1) raising small stock, such as rabbits, as a source of food, raw materials for crafts and fertilizer, 2) using exotic seeds, e.g. pumpkin and sunflower seeds, for food and other products, 3) improving banana and bread fruit chip production and 4) making cheese from goat's milk. All these research projects are geared toward use of the final product in small-scale local operations. While the SRC is not working directly with agro-industries its knowledge of and contacts in the field could make it a valuable intermediary for certain types of assistance.
3. **Other government agencies**

a. **Jamaica National Investment Company, Ltd.**

The Jamaica National Investment Company, Ltd. (JNIC) is a government-owned corporation charged with the investing of resources from the Capital Development Fund, the depository of revenues from Jamaica's bauxite levy. JNIC analyzes and develops projects in agriculture, forestry, industry, and mining. Due in large part to this business orientation, the JNIC was recently given responsibility for investment promotion by the Seaga administration. JNIC, as an investment clearinghouse, will assist as appropriate and direct investment inquiries to the proper sectoral agencies. JNIC will follow up by monitoring these agencies and ensuring that any bottlenecks which may arise will be quickly removed.

The GOJ has also designated the JNIC as the secretariat of the Jamaican half of the U.S.-Jamaica Commission, a new bilateral entity representing U.S. and Jamaican public and private groups interested in building joint trade and investment.

The JNIC provides or arranges for technical assistance on project appraisal and feasibility studies for large projects of potential foreign investors through its 10-member Management Services Division (Department of Project Preparation) and 8-member Investment Analysis Division.

At present, the JNIC has no specific agro-industrial policy nor focus. However, it is a joint shareholder, along with the Ministry of Agriculture, in Midland Enterprises, a large meatpacking operation, and has financed a private consultant to undertake an overall evaluation of the business.
The JNIC might be interested in working with the proposed IASC in a catalyst role to promote joint ventures between U.S. and Jamaican SMEEs.

b. Jamaica National Export Corporation (JNEC) and Group of Companies

(1) Jamaica National Export Corporation

The Jamaica National Export Corporation (JNEC), established in 1969, is a statutory body of the GOJ, under the authority of the Ministry of Foreign Affairs. The JNEC is organized along functional lines, with divisions responsible for:

- development;
- market research;
- promotions;
- trade commissioner service; and
- finance and administration.

The JNEC has a staff of about 100, including 25 professionals contracted to JETCO. Its budget is appropriated yearly by the Jamaican legislature.

The JNEC's mandate is to facilitate and encourage the development of Jamaica's export trade. It does so through:

- training of personnel from private firms seeking to export. A fee is charged ranging from J$50 to J$400. A course will be offered this year in processed food exporting;
- Advice to exporting firms on technical and managerial problems;
Identification of opportunities for investment in exporting and for exporting in particular products. A nominal fee is charged for this service.

A large percentage of the firms the JNEC assists are agro-industrial. In fact, JNEC's director indicated recently he would have JNEC attempt to form a food processors' association later this year to facilitate processed food exports.

JNEC has in the past "loaned" a technician to work with the Bureau of Standards on food processing standards related to export, and often refers prospective exporters to the Bureau to consult on quality standards. However, the JNEC primarily works with middle and larger firms. This is because, having limited resources, JNEC must be fairly selective as to which firms it can help. The criterion which JNEC uses is essentially a firm's potential for quickly exporting and therefore generating foreign exchange. Some preference is also given to firms whose personnel have attended JNEC's training courses. In any case, it is generally the larger firms which have obtained JNEC's services.

JNEC primarily serves exporters of non-traditional products, over 90 percent of which are located within 30 miles of Kingston. Training courses are usually offered in Kingston (and, on occasion, in Mandeville and Montego Bay).

Major concerns expressed by a JNEC spokesman were bottling/packaging and input/raw material supply instability. The JNEC might be willing to work with an IASC to target assistance to SMAEs, particularly if an
IASC could provide financial and human resources, information on new technology in the agro-industrial area, and direct access to USDA data banks.

(2) **Jamaica Export Trading Company (JETCO)**

JETCO is an international trading company which is a subsidiary of the JNEC. It coordinates and executes marketing for GOJ agencies producing exportable commodities. It also offers a commercial marketing service to small and medium-size private sector companies which lack the overseas contacts and experience to export individually. JETCO either purchases certain products for cash and itself carries out all steps in the export process, or acts as an agent, on a commercial basis, for such services as identifying importers, negotiating contracts and financing, and following through to the documentation, warehousing, and delivering of the goods.

Other specific assistance which JETCO provides to its clients includes:

- locating and financing raw material supplies;
- scheduling production;
- monitoring quality control and providing quality control services through the Bureau of Standards and other national agencies; and
- arranging packaging.

JETCO often purchases the product locally, paying cash for client products in order to help maintain client cash flow. In either case,
JETCO takes the full commercial risk in export transactions.

JETCO has a staff of approximately 25, with a 1980 budget of about J$15 million for sales, salaries, and office expenses. JETCO works closely with the JNEC and the JNEC's Trade Commissioners overseas, and with the European-based Jamaica Marketing Company (JAYCO). To date, JETCO has assisted 70 clients, primarily medium-sized firms.

JETCO has a good reputation among other public institutions and among exporters. In 1980, it won two JEA awards for performance in the export of industrial and fresh agricultural products.

JETCO has no specific focus on agro-industry or on SMAEs. It does have one professional, a British consultant, dealing explicitly with post-harvest handling, including some limited processing, of food products. JETCO has also provided, through another consultant, technical assistance in design to a furniture firm. A new JETCO priority is floriculture exports. Because JETCO's mandate is to assist "smaller" firms lacking the contacts and resources to initiate exports, the JETCO director felt the company would be interested in working with an IASC, most probably through the channeling of additional consultants to assist SMAEs on an as-needed basis.

4. The Jamaican financial system

Government financial assistance to SMAEs has occurred through two parallel programs focusing on small and medium-sized businesses, respectively. The Small Industries Finance Corporation (SIFCO), created
in October 1980 and consolidating three earlier entities—the Small Business Loan Board (SBLB), the Development Venture Capital Financing Limited (DVCF), and the Small Enterprise Development Corporation (SEDCO)—seeks to assist small businesses grossing under J$300,000 annually (see description of SIFCO below). Another government program, the Small Business Financing Scheme (SBFS), operated by the Bank of Jamaica (BOJ) through its Premier Investment Corporation (PIC), was established in 1977 to provide financing through commercial banks and concentrating on the larger of the small enterprises. It has since been succeeded by the Modern Small-Scale Enterprise Development Project (MSSEDP). (See description of BOJ/PIC and of one commercial institution participating in the MSSEDP—the National Commercial Bank).

Future institutional responsibilities are unclear under the 1978-83 Development Plan. The SIFCO predecessor, SEDCO, was to be the major government institution through which financing, technical, and marketing assistance was to be provided to small-scale enterprises. High default rates, budget cutbacks, and related institutional obstacles handicapped SEDCO in this endeavor. The creation of SIFCO represented a significant consolidation. However, the new administration may further consolidate the many financial assistance programs (JDB, BOJ Premier Investment Corporation, SIFCO, Jamaica Export Credit Insurance Corporation—JECIC, etc.) into one institution with several "windows."
a. Small Industries Finance Company Limited (SIFCO)

SIFCO is a newly-created government-owned financial institution intended to lend to small and medium firms in manufacturing, tourism, and some industrial services. Loans to agro-industry, including food processing and canning and beverages blending and bottling, constitute a major share of SIFCO's portfolio.

SIFCO began operations in October 1980, succeeding and absorbing three other government-sponsored agencies serving small businesses: Development Venture Capital Financing Ltd. (DVCF), Small Enterprise Development Corporation Ltd. (SEDCO), and Small Businesses Loan Board (SBLB). SIFCO inherited its initial capital of $2.75 million from DVCF, but upon the final consummation of its mergers, SIFCO expects to have between J$8 and J$10 million. Included in this sum is J$2.4 million borrowed from the World Bank under GOJ guarantee.

To date, SIFCO requires loan applications to be made at its central office in Kingston. However, two agencies in Montego Bay and Mandeville are due to be contracted to facilitate the submission of applications and facilitate initial screening. Eventually, SIFCO intends to open several regional offices.

According to the SIFCO management, applications are evaluated based on financial, economic/social, technical, and managerial criteria, including:
o financial viability of the operation (i.e., can it repay the loan and survive);

o benefits to society (e.g., employment creation, foreign exchange generation or saving);

o use of local raw materials;

o expansion of export market;

o promoting new industries;

o technical feasibility; and

o quality of management.

To date, SIFCO has approved 38 loans ranging from J$500 to J$250,000, and totaling J$2.3 million. Some of this money has been in foreign exchange for the import of raw materials and machinery. Eleven of SIFCO's loans have been committed to food, beverage, or other agro-industrial firms (excluding garment and woodworking enterprises).

SIFCO's lending has been slowed by the lack of policy direction since the October 1980 elections. The new Board of Directors was still not functioning as of early May 1981. SIFCO has been instructed to freeze disbursements through mid-May; as a result, only J$1.2 million of the J$2.3 million committed has been disbursed or is being disbursed to borrowers.

Examples of agro-industrial firms loaned money by SIFCO include: Plantation Pride (approximately U.S. $100,000); Island Foods in St. Thomas; and Ranger Foods. The latter firm is reportedly not doing well.

Although loans are made in large part on a project feasibility basis, SIFCO generally still requires 100 percent collateral or more.
This collateral can be real estate, machinery, marketable securities, or third party guarantees supported by tangible assets. On "small" loans, SIFCO claims it is more flexible, accepting a guarantor, who may or may not pledge assets, for up to 20 percent of the loan. However, a small business spokesperson criticized SIFCO as being inflexible in its collateral and "track record" requirements, and noted that SIFCO's loan approval power was suspended pending a review of its lending criteria.

SIFCO has a small technical staff at present, consisting of three project officers/financial analysts, one director of projects, one marketing officer, one engineer, and one consultant engineer. Staff is generally young and inexperienced.

SIFCO provides limited services to borrowers, including assistance in obtaining required import licenses and some limited technical assistance. SIFCO requires, however, greater human and budgetary resources if it is to adequately address some of the priority areas where it feels small businesses have problems. These areas include:

- record-keeping;
- costing;
- quality control/hygiene;
- production engineering;
- plant layout; and
- energy.

SIFCO has inherited the mandate of several failed enterprises. These earlier programs had suffered from high default and delinquency
rates. It remains to be seen whether SIFCO can improve upon these predecessor agencies' performance.

b. Bank of Jamaica/Premier Investment Corporation

Jamaica's central bank, the Bank of Jamaica (BOJ), and its affiliate, the Premier Investment Corporation (PIC), are presently channeling US$5.5 million in market-interest loans to small businesses in general under the IBRD-supported "Modern Small-Scale Enterprise Development Project" (MSSEDP). Under this project, the BOJ/PIC distributes funds to the commercial banking sector for on-lending to small enterprises. The MSSEDP is the successor to a previous small enterprise program, the Small Business Financing Scheme, which provided funds through the banking system at below-market interest rates.

As of December 31, 1981, eight banks were participating in the MSSEDP and had distributed amounts (in percentages) as follows: Royal Bank Jamaica (28 percent); National Commercial Bank (23 percent); Bank of Nova Scotia (17 percent); Bank of Commerce (9 percent); Workers Savings and Loan Bank (8 percent); Jamaica Citizens' Bank (7 percent); Jamaica Development Bank (5 percent); and Citibank (3 percent).

Very few loans are made to SMAEs under this program. Most loans are in the urban sector. Reportedly, the financial institution with the greatest involvement in the agricultural and agro-industrial area is the National Commercial Bank (NCB). This bank is profiled below.
Essentially, the BOJ/PIC supervises this loan program. The commercial banks refer clients to PIC, the PIC officers visit and appraise the project, and the IBRD reviews and approves individual loan decisions before the commercial bank can disburse. The PIC does not give any technical assistance to applicants in any area.

c. Jamaica Development Bank

The Jamaica Development Bank (JDB) is a major GOJ financial tool for economic development. Its mandate, inter alia, is to "finance small-, medium-, and large-scale enterprises (and) to provid(e) technical advice and guidance to protect these investments." Between 1970 and 1980, the JDB provided a total of J$33.2 million to Jamaican agro-industrial firms, including food processing, sawmilling, and furniture firms, among others, about 18.2 percent of its total loan portfolio. However, these loans were primarily to large- and medium-sized firms. Of a sample of 13 agro-industrial firms receiving a total of 21 loans, the average loan size was J$666,000 and the average number of employees per company was 340. At the time of the JDB's loan approval, annual gross sales of these borrowers averaged J$3.7 million.

However, the JDB has had a poor track record in processing and recuperating loans, and its prestige has suffered. At the time of the Devres team's visit, the JDB was awaiting a new director and new policy decisions regarding its future structure and funding. Present indications are that the GOJ feels there are too many state financial institutions and
that the sector should be streamlined, folding such entities as SIFCO into a restructured JDB, or, because of the sentiment that the commercial bank community ought to lend long-term as well as short-term, the JDB might become a "wholesale" bank.

The JDB has received large industrial and agricultural sector foreign loans in the past for which agro-industrial firms were eligible. However, at present, the JDB has no international soft loans available for agro-industry.

One JDB vice-president felt that the JDB could lend J$20 million annually in quality agro-industrial loans, assuming an average loan size of J$1 million. Although JDB lends at commercial interest rates, its loans do possess "soft" features, i.e., JDB finances up to 75 percent of project costs and it allows for flexible payback matched to the estimated life of the asset, or cash flow. In some cases, terms have reached 12 years.

A JDB fund for pre-feasibility studies in industry and agro-industry went substantially unused ($1.7 million was returned to the IDB) because of the JDB's requirement that all loans were to be repaid. Clients feared that the funded feasibility study would find their projects to be infeasible, leaving them without a means of generating the funds necessary to repay the loan.

A Technical Services Division, composed of engineers, agronomists, marketing experts, and other professionals, exists to assist project
officers. However, in relation to the needs of project officers and clients, it is generally understaffed.

d. **Community Economic Organization (CEO)**

The Community Economic Organization program promotes community-owned businesses through providing financial and technical support to local groups which it has organized. The CEO began in April 1979 and now has created some 80 small enterprises in manufacturing and crafts, agriculture, and services. Four businesses fall in the agro-industrial area:

1. **Salisbury Bammy Organization, Salisbury, St. Mary** (sells bammy to north coast communities);
2. **Red Ground Bammy, Red Ground, St. Catherine** (sells bammy in Kingston area);
3. **Oracabessa Chips, Oracabessa, St. Mary** (sells banana chips to north coast communities); and
4. **Wickertan Furniture, Montego Bay** (sells wicker furniture to the tourist trade).

The CEO is also considering dairy processing and fish processing projects, but has not yet reached the planning stage in these areas.

The CEO is a corporation owned by the Ministry of Youth, Sports and Community Development, and receives general operational support for this ministry. Its budget in 1981-82 is about J$4.5 million, a four-fold jump from 1980-81. In addition, CEO has obtained monies for specific projects out of IDB loan funds, and is beginning to receive
income from its loans to individual enterprises.

The CEO has a staff of 86, 28 of whom are project officers (development analysts, implementation staff, training and community relations personnel). The project officers go on-site once a week to monitor projects and identify needs.

The CEO staff provides community enterprises with:

- marketing research;
- feasibility studies;
- technical assistance in production;
- financial/managerial analysis and assistance; and
- audit services.

Technical services are provided free, and CEO staff members may be stationed on-site for up to a year if necessary (for example, the Wickertan manager is a CEO officer).

Financial assistance is provided at interest rates between three and five percent. The default rate on CEO loans is still low—below five percent—but a judgment on repayment is premature since the loans are still young. Community enterprises encounter cash flow problems from time to time, and the CEO often gives loan advances.

The CEO faces several problems in its efforts to promote community enterprises. A major consideration is how to create independent local management skills. To accomplish this, the CEO feels it must change local attitudes to better understand the concept of local ownership, and to improve accounting skills.
CEO's needs, according to the new director are to:

- strengthen staff training/community relations skills;
- strengthen financial staff, particularly in project development, implementation, bookkeeping/accounting, and general financial management; and
- acquire as needed, specialists in particular production areas, such as an industrial engineer experienced in production systems, production scheduling, packaging/food preservation, etc.

At present, the CEO has one resource person in general electrical engineering and a draftsman in electrical engineering. On one occasion, the CEO obtained lab research and background information from the MOA Scientific Research Council on a rancidity problem at Oracabessa Chips, on another occasion the CEO received a brief technical assistance from the JIDC Food Technology Institute, and on a third occasion it obtained expatriate assistance in the garment industry.

The CEO expressed interest in channeling technical/managerial assistance from the proposed IASC to its member enterprises.

e. National Commercial Bank (NCB)

NCB (formerly Barclay's Bank) is the principal "private" (it is actually government-owned) lender to the private agricultural and agro-industrial sector in Jamaica. NCB has 33 branches nationwide, 15 in the Kingston metropolitan area and 18 elsewhere.

In contrast to the declining economic environment of the last several years, NCB since 1977 has increased its assets by 62 percent to over
$600 million, going from a base profit of J$3.9 million in Fiscal 1977 to a profit of J$9.8 million in 1980. NCB's aggressive lending increased by 130 percent from 1977 to 1980, compared with a 42 percent increase in the whole banking system, and substantially outdistancing inflation.

Of a loan portfolio of J$402 million, approximately J$50 million, or 12.5 percent, was in agricultural and agro-industrial loans as of May 1, 1981. Only J$4.78 million was classified as "agribusiness"; however, some agro-industrial loans were classified under manufacturing, so the dollar figure for agro-industry may be understated (by as much as J$5 million, according to the Bank's agricultural advisor).

NCB tends to loan to the larger Jamaican agro-industrial enterprises, including:

- Fletcher-Bowman;
- Jamaica Citrus Growers;
- Caribbean Broilers (J$3.2 million);
- Christiana Cooperative (J$770,000); and
- Brico Ltd.

However, its lending criteria appear to be flexible, concerned primarily with project viability as determined by financial projections and a subjective evaluation of the entrepreneur, and less with collateral. For larger loans, clients are required to conduct technical feasibility studies, often leading to delays, but for smaller firms, NCB spokespersons indicate the bank has compromised and done less rigorous, "rule-of-thumb"
analysis by its loan officers, agricultural advisor, and business services manager.

In 1977, NCB established a Business Advisory Service to assist clients and other interested businesses (see Figure 1). One officer provides management assistance—in cash flow analysis, budgeting, equipment purchasing, general marketing strategy, etc.—to approximately 70 firms/year, including follow-up. Last year, four of the firms receiving such assistance were food processors. All firms to date have received these services for free, either because they were NCB clients or because (in a few cases) NCB felt they might ultimately become so.

NCB generally has good loan coverage, but for larger firms. SMAEs receive inadequate attention. Similarly, NCB provides technical assistance to clients, who are usually medium and large firms. Small firms, for the most part, are not reached. However, the possibility exists that these can be reached if NCB is given some incentive.

5. Multilateral Institutions

a. Inter-American Development Bank (IDB)

The IDB currently has no projects nor plans exclusively concerned with agro-industrial development in Jamaica. However, a significant proportion of a recent US$ eight million loan to the JDB for financing of industrial sector imports (principally machinery and raw materials) went to medium-and large-scale agro-industrial firms. Eight loans,
...ing in size from less than US$100,000 to US$500,000, went to the following firms:

- Grace Food Processors Ltd.;
- Highgate Industries;
- Jamaica Central Foods;
- Jamaica Citrus Growers, Ltd.;
- Jamaica Grains and Cereals;
- Master Blend Feeds, Ltd.;
- Shaw Park Dairies, Ltd.; and
- Sunkist, Ltd.

Sunkist, for example, received US$23,000 from the IDB plus J$3,000 from the JDB. Jamaica Central Foods received US$580,000 from the IDB plus J$50,000 from the JDB. The US$4 million in Jamaican currency made available by the JDB has attracted little interest by borrowers and has only been partially committed; firms feel their principal constraint is foreign exchange and it is this to which they are attracted.

b. Caribbean Development Bank (CDB)

The CDB has contracted Paul Chen-Young Associates to undertake two studies, one on food processing and one on baby food, as a part of the financial institution's "Regional Industrial Programming" effort. The food processing study contains brief descriptions of the food processing industries in each country or territory in the Caribbean region. Both studies, due by the end of June and publicly available...
after September 1981, will serve as the basis for arranging investment packages for public and private investors.

c. **International Institute for Agricultural Sciences**

The International Institute for Agricultural Science (IICA) is part of a network of international research institutions supported in large part by the World Bank and other international financial institutions. IICA's small Jamaican office advises the MOA on food-related topics. Its present major thrust is in food production, particularly on hillsides, and specifically in designing cropping systems for small farmers.

IICA has recently turned its attention to possible agro-industrial processing of crops which would be grown under the multiple-cropping programs. IICA is advocating the processing of peanuts for human consumption or for edible oils, because domestic peanut supply at present fails to meet demand. A second IICA agro-industrial proposal is to manufacture salt from seawater and employing the services of rural women.

IICA is awaiting a decision at the ministerial level on whether or not to prepare a feasibility study in these areas for foreign donors.

6. **Private and non-profit business associations**

a. **Small Business Development Centre**

The Small Business Development Centre (SBDC), a private non-profit limited liability corporation, began in 1972 as the outgrowth of discussion and concern among public and private agencies and individuals
regarding the need to strengthen Jamaican small business and entrepreneurial skills. Three full-time professionals and three support staff provide or coordinate services to businesses grossing less than J$300,000 yearly and falling in the areas of manufacturing, commerce, service, construction, transportation, or communications. The SBDC's services include:

- management training and development to existing, predominantly urban businesses (see attached copy of part of SBDC 1980 Annual Report);
- identification of business opportunities for potential entrepreneurs ("Small Business Promotion Programme");
- information and advisory services to soliciting firms and individuals; and
- public education (via the "Entrepreneurial Education Programme" in schools, colleges, and other vocational institutions).

The SBDC is not a revenue-generating organization, although it does charge nominal fees for consulting services (J$20-30/hour), course (J$70-125 apiece), and seminars ($20-70 apiece). Many other services are offered free. It therefore depends on contributions from the private business sector, the BOJ, the JDB, and foreign donors. Its budget for October 1980-September 1981 is J$124,000, not including an estimated J$200,000 in volunteer time.

To date, the SBDC has predominantly assisted urban businesses. In response to the perception that its services were not reaching rural enterprises, the SBDC has initiated a program to create parish chapters.
The Centre conducted six-week management training courses, seminars and panel discussions during the period covered by this report.

(a) **SIX-WEEK COURSES**

We were successful in implementing six management courses, details of which are shown below:

<table>
<thead>
<tr>
<th>Management Courses</th>
<th>Duration</th>
<th>No. of Trainees</th>
<th>No. receiving Certificates</th>
<th>Sponsors</th>
</tr>
</thead>
<tbody>
<tr>
<td>27th</td>
<td>10/9/79 - 28/10/80</td>
<td>19</td>
<td>16</td>
<td>National Commercial Bank</td>
</tr>
<tr>
<td>28th</td>
<td>23/1/80 - 12/3/80</td>
<td>21</td>
<td>19</td>
<td>Royal Bank</td>
</tr>
<tr>
<td>29th</td>
<td>28/4/80 - 9/6/80</td>
<td>13</td>
<td>12</td>
<td>National Commercial Bank</td>
</tr>
<tr>
<td>30th</td>
<td>11/6/80 - 23/7/80</td>
<td>26</td>
<td>18</td>
<td>None</td>
</tr>
<tr>
<td>31st</td>
<td>14/7/80 - 25/8/80</td>
<td>10</td>
<td>10</td>
<td>None</td>
</tr>
<tr>
<td>32nd</td>
<td>8/9/80 - 21/10/80</td>
<td>15</td>
<td>11</td>
<td>Royal Bank</td>
</tr>
</tbody>
</table>

The venue for the courses was the auditorium of the Jamaica Employers Federation situated at 2A Ruthven Road, Kingston 10. The course content is given hereunder:

- Government Regulations and Small Firms: 2 hours
- Organization: 2 "
- Communication: 2 "
- Record Keeping: 4 "
- Costing: 4 "
- Production Operations: 2 "
- Personnel Supervision: 2 "
- Marketing: 2 "
- Finance: 2 "
- Basic Commercial Law: 2 "

Total: 24 hours
These chapters, to be comprised of small town and rural entrepreneurs, would operate independently of the SBDC but receive and/or channel SBDC services. One chapter has been formally created in Mandeville, comprising one food processing plant and furniture, craft, garment, and construction firms. This chapter has received one seminar on financial management and marketing, and now desires a course on export development which would include a session with JETCO. The Canadian-based Foundation for International Training is sending a consultant in June to assist the SBDC in building its rural organization.

The SBDC's referral service channels an average ten requests/day for information, advice, and consulting services, the majority from individuals thinking about going into business or expanding their present businesses. The SBDC refers most to the appropriate assistance agencies: SIFCO for financing, JNEC for exports, MIC for import licenses, etc. Perhaps 250 requests yearly lead to the provision of consulting services for up to one or two weeks apiece by consultants from among three SBDC permanent staff members or an advisory panel of 80 individuals. SBDC offers a range of services, concentrating in designing costing and accounting systems, marketing plans, marketing services, etc., but also including technical assistance in specific production sectors. SBDC currently has available three consultants in agro-industry: Keith Walters and Val Seymour of Jamaican Frozen Foods, and Leo Pinnock, an independent consultant in Mandeville.
The SBDC has also provided since September 1979 consultancy services totally J$20,000 to 22 projects throughout the eastern end of the island funded by CADEC. At last report, negotiations were in progress with SIFCO to undertake consultancy services worth J$150,000 with SIFCO clients.

The SBDC feels it is only scratching the surface in its efforts. A spokesman indicated the institution would welcome an IASC to supplement its technical, managerial, and information services to SMAEs.

The SBDC has several limitations, including:

- limited funding;
- urban orientation;
- limited ability to address diverse specific needs of all program participants, particularly SMAEs; and
- limited offering of "hands-on" training and technical assistance.

b. Small Businesses Association

The Small Businesses Association (SBA) is a non-profit association consisting of some 1,000 Jamaican small businesses. Approximately 20 members may be considered agro-industrial in nature. The SBA was founded in 1974 and presently has a paid staff of one secretary. In addition, 2-3 individuals manage the SBA-sponsored trade center which assists in marketing member business products.

The SBA provides the following services to its members:

- represents the small business community before government institutions;
o advises on trade, customs, foreign exchange regulations and other government regulations;

o acts as middleman in putting members in touch with sources and outlets for goods and services;

o offers assistance to its members by means of bulk purchase of raw materials (The Association obtains economy of large-scale purchase. This benefit is passed on to members);

o keeps its members informed of government policies and changes affecting their businesses; and

o provides actual business service (secretarial, accounting, customs, etc.) to its members who require it.

Advisory and information services are provided free to dues-paying members. Additional services in specialized fields are provided at reduced rates by qualified member firms.

The SBA is a member of the Private Sector Organization of Jamaica (PSOJ) and, along with SIFCO and the SBDC, the incipient National Council of Small Business Development.

The SBA is currently talking with USAID officials regarding possible activities in the food processing area. Ideas discussed with USAID and other agencies include (1) lending to small businesses where SIFCO fails to act, and (2) finding and supplying U.S. firms with certain processed food products. SBA would have to do considerable organizational work to bring together small farmers to achieve sufficient produce volume to support this activity since at this time it has no existing farmer network.
c. Associated Chambers of Commerce

The Associated Chambers of Commerce (ACC) represents all Chambers of Commerce on the island, with a broad-based business membership including large, medium, and some small firms. It has a full-time staff of seven, two of whom (the director and his assistant) are professional and the remainder clerical and custodial. N.R. Madden is the Secretary of the ACC, as well as the salaried full-time Secretary of the Jamaica (Kingston) Chamber of Commerce.

The ACC at present meets every eight weeks, but increased activity in the past year has led to a push by some to meet every five weeks.

Six chambers currently are active; another six are inactive (see attached list). Close to 20 committees exist on paper. No information was obtained on their activities. A quarterly journal was published up until last year.

The ACC’s mandate is to represent its members before public institutions and to assist in making investment and trade-related contacts both overseas and in Jamaica with foreign trade missions. The ACC to this end maintains relations with JNEC/JETCO, the JEA, and the Ministry of Industry and Commerce. The ACC President, Bruce Rickards, is a member of the U.S.-Jamaica Committee. No technical assistance referral service, such as offered by the SBA and SBDC, is offered at present; reportedly it was attempted by a committee, but no member took advantage of it, and it died-stillborn.
Active Chambers of Commerce: Portland, St. Mary, Ocho Rios, Hanover, Manchester, Jamaica (Kingston)

Inactive Chambers of Commerce: Montego Bay, St. Elizabeth, Clarendon, St. Catherine, St. Thomas, Westmoreland

d. Jamaican Agricultural Society

The Jamaican Agricultural Society (JAS) is the largest agricultural producers' association, claiming 100,000 members in approximately 1,000 branches. Most of the members are small farmers, although membership on the Board of Directors has recently been opened to the various agricultural commodity associations. Where the JAS branches are active, they provide an effective chain of communication with the GOJ on farmers' needs.

The JAS's principal activity at the present is to channel inputs, particularly fertilizer, to members through eight stores. Due to the difficult economic conditions during the last few years, particularly inflation, five other JAS stores have become decapitalized and closed. The new administration has recently made a commitment to revitalize the JAS by guaranteeing a J$1.25 million commercial bank loan to enable it to pay off store debts (J$900,000) and use the remainder (J$350,000) as working capital. The JAS hopes to open three or four of the closed stores within six months.

Government-salaried organizers and assistants assigned to each branch society also carry out a marketing function, helping to assemble small lots of farmer produce, and to conduct leadership training.
However, the JAS's involvement in agro-industry is marginal to date. Its orientation is predominantly to the primary agricultural producer, although the organization realizes that "basic agricultural production can't be isolated from processing." While one stated priority is the "development of (co-op) food-processing plants," to strengthen the rural sector, the JAS to date has participated in only two such endeavors, primarily as majority stockholder and not as a technical assistance provider. Both projects, North Clarendon Processing Company and National Cassava Ltd., suffer from inadequate raw material supply due to farmer dissatisfaction with offered prices.

The JAS has been termed by one observer as a "sleepy giant", with a national outlook and grassroots base, but lacking organization and dynamism. Whether recent government initiatives will enable the JAS to become more active in the agricultural/agro-industrial sector is an open question. Certainly, for the time being, the JAS role in agro-industry will be limited.

e. Jamaica Exporters' Association

The Jamaica Exporters' Association (JEA), founded in 1965, is a business association representing the majority of exporting companies on the island. It seeks to promote the expansion of the export sector through cooperation with all agencies in the public and private sectors which have to do with exports.
The JEA's activities include:

- lobbying and representation before public and private agencies;
- staging a trade show at least every other year, exhibiting the products exported by members;
- undertaking trade missions to promote products for export and to open or expand markets where possible;
- representing Jamaican exporters at trade shows overseas (in close cooperation with the JNEC); and
- educating its members through seminars, workshops, and training sessions.

The JEA maintains an office headquarters and meeting room in Kingston, where it carries on its day-to-day business of representing the interests and serving the needs of its members. It serves as a clearinghouse for requests for information about exports and exporters, inquiries about products and raw materials, and answers to operations problems of its members. It assists small businessmen and persons venturing into exports for the first time to become informed in the intricacies of exporting. It also maintains a small library of general information on exporting, including various publications both national and international of interest to exporters.

As the representative of the export sector of Jamaica, the JEA through its committees and their active undertaking of specific projects produces from time to time reports of plans designed to encourage the further development of Jamaica's export potential. It cooperates closely with the National Planning Agency, feeding this body its
suggestions and proposals for incorporation, where possible, into national policy.

The JEA has produced a detailed plan for the institution of export incentives as well as an outlined development plan for exports, both of which have been presented to the GOJ for consideration and parts of which are already forming part of official policy.

f. Private Sector Organization of Jamaica

The Private Sector Organization of Jamaica (PSOJ) is an umbrella organization of the Jamaican private sector, encompassing the Associated Chambers of Commerce, the Small Businesses Association, Jamaica Manufacturers Association, and numerous corporate and individual members. It was formed in 1978 to protect and "high-profile" the interests of the private sector through the facilitation of consensus among members and articulation of private sector positions vis-a-vis GOJ policy.

The PSOJ has no staff capacity to implement or evaluate projects or to provide concrete services of any other kind to members. It merely passes identified tasks and ideas back to members for action.

g. National Council of Small Business Development

The National Council of Small Business Development is an incipient umbrella organization for the small business sector. It was created to coordinate small business activities and to represent the interests of Jamaican small business. The three founding institutions are the Small
Businesses Association (SBA), the Small Business Development Centre (SBDC), and the Small Industries Finance Corporation (SIFCO). Additional agencies will participate based on function, i.e., the specific expertise each can provide to small businesses. These include to date: Operation Friendship (skills training); CADEC (finance and technical assistance); Mel Nathan Institute (human resources development, particularly relating to changes in attitudes); Jamaica Institute of Management (private training institution for personnel of large- and medium-sized firms); and Institute of Management and Production (private, non-profit training institution).