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Jamaica Labor Force Assessment

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Academy for Educational Development

**ASSESSMENT OF JAMAICA'S WORKFORCE SKILLS NEEDS AND
TRAINING CAPACITIES IN FOUR LEADING EXPORT SECTORS**

**A Study by the
Academy for Educational Development
for the
United States Agency for International Development**

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CHAPTER I

EXECUTIVE SUMMARY

JAMAICA LABOR FORCE ASSESSMENT

In the past, Jamaica's workforce and its training institutions have been studied extensively. These assessments have, however, tended to focus on the supply side of the workforce issue, concentrating primarily on the development of Jamaica's institutional capacity to produce qualified workers and managers at all levels.

In spite of these good efforts and some notable progress within Jamaica's training institutions, the country's workforce still lacks most of the basic competencies and technical skills needed to build a modern and prosperous economy that can compete effectively in regional and international markets.

Recognizing this persistent dilemma, the U.S. Agency for International Development decided to analyze the country's workforce needs by studying both the requirements of Jamaica's leading export sectors and the capacity of the training establishment and employers to meet those requirements. The objective was to understand the dynamics of these industries and, from this vantage point, define the needs of Jamaica's companies in the future; therefore, this analysis is demand driven rather than supply driven. A corollary objective of this study was to determine the impact of Jamaican labor laws and regulations on the functioning of the labor market.

During May and June 1994, a team of seven contracted industry and training experts conducted meetings with approximately fifty firms in four leading export sectors—information services, food processing, light manufacturing, and tourism—as well as with training institutions and government organizations involved in workforce development.

BROAD CONCLUSIONS OF THE STUDY

Based on this brief, but intensive, analysis, the team unanimously agreed on the two most fundamental causes of Jamaica's workforce problems: the lack of strategic vision among Jamaica's managers and the decline in literacy, numeracy, and work ethic of the workforce.

The Lack of Strategic Vision among Jamaica's Managers

- The heart of the problem lies in the lack of strategic vision and growth mentality among many managers in each of the sectors studied.
- Jamaican managers tend to see their industry in static, rather than dynamic, terms with very little thought or planning given to the future growth or diversification of their enterprises.

- The results of this lack of vision are that many managers have little concept of how to expand or deepen markets for their goods and services in the future. Without these most basic strategies, there is no basis for them to develop an investment strategy or a human resource development plan, both of which are essential to a dynamic enterprise.
- The implications for the workforce of this lack of strategic vision are readily apparent: workers do not see clear career paths for themselves and have difficulty in focussing on developing technical skills to improve their own growth prospects.

The Decline in Literacy, Numeracy, and Work Ethic of the Workforce

- The alarming decline in basic educational levels of the Jamaican population has had a devastating impact on the country's growth prospects.
- Basic literacy and numeracy of the workforce are very poor among new labor force entrants and older workers, thereby making the training of technical skills all the more difficult.
- The absence of a basic work ethic among many employees further reduces the motivation of workers themselves to improve their skills.

RESULTS OF THE SECTORAL ANALYSIS

The centerpiece of the workforce assessment was the analysis of representative companies in four of Jamaica's leading growth sectors—information services, food processing, light manufacturing, and small-scale tourism. Summarized conclusions of these sectors are as follows:

The Information Services Sector

(data capture and entry services for export)

- Management issues
 - Senior management in the information services sector exhibits little awareness of the rapid global evolution of the industry and undertakes very little analysis or planning for future markets and technologies.
 - Top management's preoccupation is compensating for the deficiencies of a weak middle management structure that is unable to lift the productivity of the production process and maintain quality.
 - Poor production management hinders growth and productivity.

- Workforce issues
 - The workforce enters with very low levels of literacy, poor work habits, and very low technical skills.
 - Companies invest only minimally in creating proper technical skills, in part because of the aptitude of the workforce, but also in part because management remains stagnant in the low technology, low value-added part of the industry.
 - Even with in-house training, the productivity of the workforce is only one-third of foreign competitors in other developing countries.

The Food Processing Sector
(processed condiments, sauces, fruits)

- Management issues
 - Despite the potential for profitable niche export markets, most of the industry has no vision of product development or marketing strategy.
 - Little attention is devoted to product quality, packaging, or export market positioning.
- Workforce issues
 - Production uses very low technology, is labor intensive, and uses outdated capital equipment.
 - The principal requirement is unskilled labor that is limited to good a work ethic, good personal hygiene, and literacy.
 - The only technical requirements are for mechanics to keep outdated equipment running.

Light Manufacturing
(apparel industry)

- Management issues
 - Apparel industry concentrates almost exclusively on short-term contracts from U.S. apparel manufacturers where value added is extremely low.

- Management has no vision of either how to grow out of low margin, low value added stitching operations or how to create Jamaica-based design and manufacturing operations.
- Workforce issues
 - Employers do not require prior technical training for new entrants, only literacy and a good work ethic; the industry prefers to do its own basic training of unskilled workers in repetitive straight stitching processes.
 - Investment in workforce is minimal, as current apparel manufacturers are "body-shop" operations.

Small-scale tourism
(including ecotourism)

- Management issues
 - Small tourism operations are usually owner operated with very little vision or resources to upgrade a product or the quality of the workforce.
 - Operators are too small and dispersed to articulate growth objectives or workforce needs.
- Workforce issues
 - The labor force is unskilled and lacks the requirements for basic literacy, hygiene, and work ethic.
 - Service personnel receives very little training in the importance of service to customers and customer satisfaction.

ROLE OF THE TRAINING INSTITUTIONS IN ASSISTING THE SECTORS

The team reached the following conclusions about training institutions:

- Training institutions remain largely supplier driven with very little substantive interaction with the business community on the real needs of companies.
- Training is too heavily oriented toward formal, classroom teaching, which limits relevance to trainees and their ability to participate.
- The preemployment, entry-level training of these institutions does not focus on the needs of industry for more highly skilled craftspersons, technicians, and supervisory personnel.

- Quality and relevance is frequently poor; trainers are too often junior people who have just finished their own training and have no technical skills relevant to the industry's needs.

FUTURE ACTIONS

The assessment team identified five actions that need to be taken to upgrade workforce skills at the firm level:

- developing strategic thinking and a growth mentality within management of each of these sectors that induces managers to look seriously at the development of their productive assets over the next five years
- providing direct hands-on assistance to firms in developing export marketing strategies, analyzing investment requirements, and assessing workforce skills needed in current and future production processes
- delivering customized, on-site training for these sectors that is relevant to the firms' production and marketing plans, adaptable to the skill levels of their employees, and flexible in terms of time and place of the training
- support for computer-assisted literacy and numeracy training at the primary and secondary level and in non-formal training programs.

RECOMMENDED PROGRAMS

The assessment team has proposed options, based on the above areas of action, that should be considered both by Jamaican institutions and the donor community.

- Developing strategic thinking and a growth mentality within Jamaica's management community
 - a broad national awareness campaign, led by the Private Sector Organization of Jamaica, through the National Action Plan, and the Jamaica Promotions Corporation, that focuses on the need to improve the competitiveness of Jamaica's private sector and that uses "shock therapy" about Jamaica's economic future
 - workshops and conferences
 - media campaigns
 - "white papers"

- efforts at the sectoral level to inform managers of the precarious nature of their competitive position
 - workshops
 - assistance to associations, such as Jamaica Exporters Association, JMA, and JHTA in changing strategic orientation of members
- Providing direct hands-on assistance to firms, both individually and collectively, in formulating export and investment strategies
 - hands-on technical assistance in market and investment strategies, including human resource development plans, to representative (such as visible, pace-setting) exporting companies
 - assistance to joint export initiatives among related firms to establish Jamaican presence in overseas markets
 - visits by Jamaican producers to successful producers/exporters in neighboring countries to learn from 'best practices' of similar countries
- Delivering customized, on-site training programs, tailored to industry specifications and delivered by existing institutions
 - formation of training clusters of firms (region or sector-specific groups) for entry-level and more advanced training
 - development of flexible approaches and schedules
 - training trainers on shop floors

POSSIBLE ACTIONS BY USAID JAMAICA

- expansion of direct technical assistance to leading companies
- assistance to sector-based producer councils to organize management seminars for executives on a region-by-region basis
- assistance to joint export initiatives within sector
- sponsored visits by Jamaican entrepreneurs to neighboring countries to observe best practice operations

CHAPTER II

INTRODUCTION, OBJECTIVES, AND METHODOLOGY OF STUDY

BACKGROUND

Jamaica, like many developing countries in the western hemisphere, has been making strong efforts to reform its economy so it can be on a more competitive footing in the world economy. The process has not been an easy one. Over the last decade, Jamaica has faced severe problems that have caused it to lose much of the ground it had gained in previous decades.

During the 1960s and 1970s, Jamaica had been able to build up one of the region's best educational systems. For many years, Jamaicans entered the workforce far better prepared than most of their counterparts in Latin America and the Caribbean. Beginning in the late 1970s, however, the quality of that system began a steady decline.

Concurrent with the decline in educational quality was a serious economic downturn in Jamaica's economy. This decline led to major emigration of qualified people to other areas, namely the United States, where their skills would be rewarded. This emigration equalled half of the graduates island's training institutions from 1980 to 1986. The loss of these qualified people is still being sorely felt as the Jamaican economy experiences very severe shortages of qualified personnel.

Since the second half of the 1980s, Jamaica has been making a serious effort to reverse this emigration. The government continues to liberalize the economy, reduce the size of the public sector, and deregulate onerous regulatory regimes of the past. Major efforts have been made to build an effective training system for both entry-level workers and management personnel. The system has many strong features and, in principle, has the flexibility to respond to demand signals from the private-sector economy. The labor market itself functions rationally, and labor regulations do not impede the free movement of labor within the economy.

The donor organizations have been active, moreover, in funding many institutions and new initiatives, all in recognition of the vital importance of a qualified labor force. The training system has been frequently and intensively analyzed for problems, and many of these have been partially remedied. Resource constraints are not believed to be overly difficult either.

Nevertheless, improvements in the quality of the labor force and its ability to satisfy the needs of the economy do not appear to have significantly altered the economy's productivity. Observers have been puzzled by the situation, recognizing that something is stagnant in the training process. One general assumption has been that the labor market information system constitutes one of the main reasons that training institutions seem unable to be responsive to the needs of a changing economy. Another widely accepted explanation is that the country's basic education system has greatly deteriorated, producing poorly qualified individuals, ill prepared

in basic literacy, numeracy, and above all, work habits. In short, the system is producing people who are very difficult to train in technical and managerial skills.

OBJECTIVES

Recognizing that Jamaica is facing a difficult impasse in its efforts to make progress in the area of workforce improvement, the United States Agency for International Development (USAID) decided to commission a brief, but intensive, study of the situation in hopes of identifying new means for jump-starting the seemingly stalled training efforts in the country. A central premise underlying USAID's initiative in this area is that virtually all previous studies of this nature have tended to look primarily at the apparatus for developing skills, namely the supply of skills, rather than the demand for those skills.

In this study, USAID decided to analyze the problem from the viewpoint of the consumers of the skills to determine, first, if the training institutions are indeed getting clear and correct signals from the private sector on the needs for qualified people, and, second, whether the private sector itself is consciously developing human resource programs of its own to remedy the skills shortages. A related objective of this study was to determine whether Jamaican labor law serves to constrain employers and employees from investing in training, keep wages from adjusting to changes in labor demand and supply, and inhibiting labor mobility.

To execute this analysis, a technical team consisting of four industry analysts, a labor economist, a training specialist, and a team leader studied the problem in Jamaica from the demand side. An important aspect of this approach was to look at the dynamics of Jamaica's economy to determine both the direction in which the country's more growth-oriented sectors are moving and their projected needs over the next several years. The objective of the study was to better understand the role of these emerging industries in generating demand for new skills in the workforce.

The assignment had several specific objectives:

- to identify and explain current and anticipated imbalances in technical and managerial skills
- to determine the effect of national labor, tax and employment laws on productive employment, training, job mobility, and wage flexibility in the four target sectors
- to determine the relevance, responsiveness, and efficiency of nonformal technical and managerial training institutions
- to determine the extent to which reliable, current market data exist and are used to allocate training resources
- to determine the degree of, and reasons for, gender bias in the workplace

METHODOLOGY

Three sequential steps were followed to achieve the overall objectives for the labor force assessment:

- extensive preliminary work by the RSSA from AID/LAC/RSD/EHR and by USAID/Jamaica OEHR
- field work, including review of relevant studies and interviews by the four industry specialists, the labor economist, the first chief of party, and the vocational/management training specialist
- consolidation of the findings and finalization of the report by the second chief of party

Preliminary Work

The RSSA from AID/LAC/RSD/EHR traveled to Jamaica in mid-May for one week to work with the USAID/Jamaica OEHR to schedule assessment team interviews, to collect additional relevant studies and other secondary data sources, and to finalize the outline for the report. (The RSSA had visited Jamaica earlier in 1994 to gather information and to lay the groundwork for the assessment.) All of the information collected was shared with the members of the assessment team before their arrival in Jamaica. The first chief of party was to accompany the RSSA to review scope of work, determine information needs, finalize survey instruments, and review existing studies and databases. This did not occur as the contract to undertake the assessment was not completed until the RSSA returned to the United States and just before the entire team was cleared to go to Jamaica.

Field Work in Jamaica

From May 23, 1994, until June 3, 1994, a team of seven contracted industry and training specialists conducted interviews with approximately fifty firms in four leading export sectors identified by USAID/Jamaica and LAC/RSD/EHR—information services, food processing, light manufacturing, and tourism—and with relevant government of Jamaica and parastatal organizations, training institutions, and donors. Additional, relevant studies and statistical reports were also collected and analyzed during this period to expand the material gathered earlier by the RSSA.

The study did not attempt to conduct a thorough statistical analysis of these sectors because of the severe time constraints, but instead took a "snapshot" of their current and future evolution and the implications of these changes on the demand for workforce skills. A standardized questionnaire was not used by all four industry specialists, but all questions that were asked were guided by the key questions in the team's scope of work and the report outline. The labor economist and management training specialist provided the four industry specialists with specific questions that they wanted asked during each of the firm-level interviews. Each industry

specialist interviewed representatives from between nine and thirty firms. In addition to the firm-level interviews, the labor economist and management training specialist met with a number of key organizations and training institutions to obtain information on the overall labor market, labor market information system, and regulatory environment and to determine the relevance, responsiveness, and efficiency of key training institutions to meet demand.

An initial meeting was held with the director and staff at USAID/Jamaica on May 24, 1994, to clarify and confirm the scope of work for the team; to obtain guidance on a variety of issues, such as those related to the export processing zone, ecotourism, and small business tourism; to finalize a list of organizations that should be visited; and to schedule additional interviews. At this meeting with the director, the team was instructed to expand the study of ecotourism to include small business tourism. The team was also asked to observe and report on the extent of traditional versus progressive work place practices, policies, and procedures within firms. USAID/Jamaica also asked the team to observe and provide anecdotal information on any direct benefits to workers resulting from the IMF structural adjustment program.

Individual specialists held follow-up meetings with personnel in the USAID Office of Private Enterprise and Office of Natural Resources and Agricultural Development. The chief of party, who met daily with the director of the office of Education and Human Resource at USAID, served as the technical coordinator for the assessment. In addition, the team held regular internal meetings when travel and interview schedules permitted.

The group meeting at USAID was immediately followed by the beginning of sector interviews that lasted until June 1, 1994. These interviews were conducted primarily in the industrial areas of greater Kingston and Montego Bay. The ecotourism specialist also visited other parts of Jamaica.

Consolidation of the Findings and Finalization of the Report

The second chief of party worked in Jamaica from June 1, 1994, until June 16, 1994, to analyze the results of the sectoral interviews, to develop broad conclusions and recommendations, to conduct a number of follow-up interviews to confirm the overall findings, and to share results in presentations to USAID and to representatives from interviewed firms and organizations. The chief of party was assisted by the management training specialist.

PRESENTATION OF THE REPORT

The following chapters and the accompanying appendices summarize the findings of the study on a sector-by-sector basis. Efforts have been made to synthesize these diverse findings into a coherent explanation why Jamaica is experiencing such great difficulty today in upgrading its workforce as well as to make suggestions for actions that might be taken by both the public and private sector. Finally, the consulting team has attempted to draw some conclusions for the donor community, in particular USAID, in terms of new areas of emphasis within its current mandated program of activities.

The team has made a deliberate effort, not only to be brief in presenting its findings, but in particular to identify the causes of the problem rather than its symptoms. In such a complex field as human resource development, the temptation to pursue all aspects of the problem is strong. However, in so doing, it is easy to lose sight of the principal causes of the problem.

These causes are indeed complex and difficult to solve by any one program of activities. A common understanding of the problem and a consensus in the business and training communities are needed by all parties involved, and a multifaceted approach is required to overcome both the practical and cultural barriers to changing the way Jamaica approaches its human resource development dilemma.

Chapter III

LABOR MARKET CONDITIONS

This section of the labor force assessment report covers the labor force, general labor market functioning, labor laws and regulations, labor-management relations and labor market information systems.

THE LABOR FORCE

In 1993, the annual average size of the labor force was 1,083,000; the employed labor force was 906,300. The unemployment rate was 16.3 percent while the job seeking rate was 7.1 percent (Planning Institute of Jamaica (PIOJ) 1993).

Age and Gender

Of the employed labor force, 509,200 were male; 397,100, female. Male youth constituted 14.4 percent of the employed labor force; adult males, 41.8 percent. Female youth constituted 9.1 percent; adult females, 34.7 percent.¹ Since 1992, both female youth and adult females had increases in employment while there were fewer male youth and adult males employed. These shifts in the composition of the employed labor force are associated with long-term growth trends in employment in the services sectors and the long-term decline in agricultural employment, respectively (PIOJ 1993).

Labor Force Participation

The overall participation rate in October 1993 was 43.7 percent, down from 44.1 percent in October 1992. The rate for males was 46.9 (down from 47.8 one year earlier) while the rate for females was 40.6, unchanged from 1992. By age group, rates peak for males between 25-54 at over 90 percent and then begin to decline. For females, participation rates peak at about 90 percent in the 35-44 year age group, and then fall off sharply (Statistical Institute 1994a).

Unemployment

The average annual unemployment rate in 1993 for females was more than double the rate for males (22.4 percent and 10.9 percent, respectively), although the proportion of the unemployed who were female declined from 1992 (68.1 percent to 54.2 percent) (PIOJ 1993).

¹ Youth is defined as ages 14-24 years.

Underemployment

There are no comprehensive estimates of the number or composition of the underemployed. Of the 906,300 total employees in 1993, 101,700, or 11.2 percent, were part-time (less than 33 hours of work per week). This number of part-time employees represents a dramatic increase (24.8 percent) from the 81,500 part-time employees in 1992. The number of full-time employees decreased (2.4 percent) from 824,100 to 804,600; 55.0 percent of part-time employees were female (PIOJ 1993).

Sectoral Distribution

The four most important industry groups for employment are agriculture, forestry, and fishing; manufacturing; wholesale and retail, including hotels and restaurant services; and community, social, and personal services. These four sectors account for 76.6 of the employed labor force. Agriculture, forestry, and fishing continued to be the largest single industry sector for males (32.7 percent of total classifiable male employment). Females, on the other hand, were disproportionately concentrated in the wholesale and retail including hotels and restaurant services and community, social, and personal services sectors.

Occupational Distribution

The occupational composition of the employed labor force is now based on the International Standard Classification of Occupations. The largest major occupational group (24.0 percent) in Jamaica elementary occupations includes street vendors, door-to-door and phone salespersons, domestic helpers, and laborers. Females comprise 61.6 percent of this group. The second largest category (20.7 percent), skilled agricultural and fishery workers, consists of both workers who are market oriented and those who produce for their own consumption.

The third largest occupational group (17.7 percent), craft and related trades workers includes the traditional craft occupations (such as carpenters, basket weavers, joiners) and is male dominated (over 80 percent male). Service, shop, and market sales workers comprise the fourth largest occupational group (11.4 percent). The largest four groups together account for over 70 percent of the total employed labor force.

The remaining groups include clerical workers (7.7 percent), plant and machine operators (6.1 percent), professionals (4.8 percent), senior officials and managers (3.6 percent), and technical workers (3.2 percent) (PIOJ 1993).

A noteworthy trend has been the continued growth of females in the senior management and professional occupations. In October 1993, over 65,000 employees, or 12.7 percent of the female labor force, were in this category. The comparable figures for males were only 47,300 employees, or 8.3 percent of the male labor force (Statistical Institute 1994a).

Education and Training

The average level of training among the labor force continues to be very low. A substantial portion (76.2 percent) of the labor force has had no training; 6.3 percent has had professional training with or without degrees or diplomas, while 4.1 percent has had formal vocational training with certificates and 2.5 percent has had vocational training but without certificates. The portions of the labor force that have had on-the-job training or apprenticeship training are 8.1 percent and 1.7 percent, respectively (Statistical Institute 1994a).

Wages and Salaries

The average weekly earnings of all employees in 1993 was J\$1,842.² At the current rate of exchange of approximately J\$32 = \$U.S.1, this corresponds to \$U.S.58. Of course, there is wide variation around this average among sectors. Bauxite mining workers receive nearly four times the average, while employees in the apparel industry receive less than 40 percent (J\$670) of the overall industry average. Workers in food processing and beverages receive weekly earnings near the overall average (J\$1,734 and J\$2,102, respectively). Furniture workers and employees in the hotel and lodging sector receive weekly earnings well below average (J\$1,099 and J\$1,113, respectively) (Statistical Institute 1994b).

Unionization

Unionized workers represented 16.3 percent of the labor force in both 1991 and 1992 (U.S. Embassy 1993). The incidence of unionization varies considerably among industrial sectors, however. The incidence of unionization is relatively low in each of the four targeted sectors, with virtually no unionization in either the small-tourist sector or the information services sector.

GENERAL LABOR MARKET FUNCTIONING

The Jamaican labor market does not suffer from any serious distorting influences, but, nevertheless, operates inefficiently because of constraints on the generation of both demand and supply of labor. The major market failures are imperfect information regarding the rate of return of investment in human capital, by both employers and individuals, and the exceedingly slow response times for the supply system to respond to increased demand for skilled labor when it does occur.

In other ways, however, the market operates in a predictable, rational manner. For example, the emigration of highly skilled members of the labor force to the United States and elsewhere is a response to constraints on employers' demand for labor, working conditions, and expected

² Employees in large establishments (50 or more employees) excluding agriculture, government, and Free Zones.

career development in Jamaica. Poaching is another example of how the market responds when there is a shortage of skilled labor being produced by the training and educational systems.

Improved information and its communication to students (in the form of career guidance) about the long-term economic rewards of many occupations that are not in favor because of cultural influences in the family structure and in schooling can help with the medium- and long-term mismatch problem. Improvements in the labor market information system can provide "signals" and diagnostics that can enable the supply system to respond more quickly to short-term mismatches.

LABOR LAWS AND REGULATIONS

Description

A number of statutes provide protection for employers or workers. These include the Employment (Termination and Redundancy Payments) Act of 1974, The Employment (Equal Pay for Men and Women) Act of 1975, The Factories Act of 1943, The Women (Employment) Act of 1942, the National Insurance Act, 1965, and The Labor Relations and Industrial Disputes Act (LRIDA). In addition there is minimum wage legislation.

The Termination and Redundancy Payments Act deals with the period of notice required for termination of employment and with employers' payment of redundancy pay. The act covers all private employees, including domestic household and seasonally employed, but excludes central or local government workers. It requires an employer wishing to terminate the contract of an employee who has been continuously employed for at least four weeks to give advanced notice, the length of time depending upon the length of employment. The minimum notice is two weeks and may go as long twelve weeks if continuous employment has been twenty years or more. The period of notice to be given by the employee is two weeks, regardless of tenure on the job. When an employee is terminated by reason of redundancy, the employer is required to pay that person two weeks pay for each completed year of employment with that employer. There are a number of provisions for exceptions, including termination without notice for misconduct and for change of business ownership.

The Equal Pay for Men and Women Act stipulates that men and women shall be paid the same amount for equal work.

The Factories Act provides for the registration and inspection of work places to ensure the health and safety of workers. The chief factory inspector must approve plans for establishing new factories and the Ministry of Labour must implement periodic inspections.

The Employment of Women Act allows for (1) the prohibition or restriction of employment of women in particular situations, including night-work (10:00 p.m. to 5:00 a.m.) except in certain exempted sectors, such as hotels, theaters, private households and (2) the ability to regulate employment before and after child-birth.

The National Insurance Act provides for a mandatory contributory system of social security for all employed and self-employed persons. The system provides financial protection to the worker and her/his family against the loss of income because of on-the-job injuries, sickness, or death.

The minimum wage legislation sets and periodically revises the minimum weekly wage that can be paid. The current, basic minimum wage is set at J\$300, or about U.S.\$9.40. A rise in the minimum weekly wage to J\$500 is scheduled to take effect in July 1994.

The Jamaican Constitution, Article 23 guarantees the right of workers to join unions. The Labor Relations and Industrial Disputes Act, in turn, codifies regulations on workers' rights, including the right to strike. However, LRIDA neither provides the right to strike nor prohibits it, but gives employers the right to replace striking workers. A number of LRIDA changes involving the right to strike have recently been considered; employers have staunchly opposed these changes in LRIDA because they potentially represent areas of strong conflict that, in turn, could upset existing labor-management relations.

There are no special exemptions to any of these laws to businesses operating in the Free Zones. The Free Zones are different, however, because it is more difficult for unions to organize workers because union organizers are not allowed to physically enter the Zones.

Enforcement and Compliance

There is general compliance with the set of labor laws except for some of the provisions of the Factories Act. The total number of complaints of violations of the labor laws made to the Ministry of Labour in 1993 was 1,204, a decrease of 16.8 percent from 1992, and down slightly from 1989 (1,295 complaints) (PIOJ 1993). However, a relatively small percentage of complaints are investigated by the Ministry of Labour. The annual number of investigations has declined dramatically since 1989 (495 to 85). The Permanent Secretary of Labour explained that these declines were largely due to budgetary cutbacks.

Inspections at the workplace by the Ministry of Labour are sporadic at best. The number of inspections conducted by the Ministry (285 in 1990 to 103 in 1993) has declined because of budget cuts (PIOJ 1993). The health and safety conditions at the workplace reported by the industry experts on this assessment seem to vary widely. While, on average, health and safety conditions in light manufacturing plants were judged to be reasonable (but below U.S. standards), some plants had problems with dust and with workers not using masks. In the information services firms, workers were not using devices to minimize the radiation emitted from the computer screens. No obvious health or safety problems were observed in the food processing plants or hotels. None of the firms visited reported having had any inspections within recent memory.

Impacts

No evidence indicates that any of the labor laws discussed above are distorting the operation or the outcomes of the labor market, in general. These laws neither inhibited businesses from meeting their labor supply needs or investing in training nor hindered the ability of workers to find new employment or upgrade their employment. Interviews with representatives from private sector umbrella organizations, organized labor, and training institutions yielded no mention of labor laws as barriers on the demand or supply side.³ Industry experts' interviews with business owners and managers yielded the same results.

In particular, the minimum wage legislation is set too low to be a constraint. Basic wage rates in the lowest-paid sectors were well above the present minimum and even the soon-to-be increased minimum. The effective function of the minimum wage is to serve as a threshold standard against which actual wages and their increases are measured.

To the contrary, other policies (or their lack), including inadequate public transportation and exceedingly high interest rates were mentioned repeatedly as constraints on the ability of businesses to expand and add employment. The absence of tax incentives for firms to invest in training was mentioned by a number of organizations and individual firms as a barrier. Crime was also mentioned with public transportation as a factor preventing businesses in the garment and food processing sectors from using multiple work shifts, thereby increasing demand for labor.

LABOR-MANAGEMENT RELATIONS

Over the recent period the overall number of labor-management disputes has declined. Although relationships at the workplace of the four targeted sectors are nonadversarial, they are not cooperative. Neither management nor organized labor can be characterized as progressive in terms of innovative work practices and the organization of the workplace.⁴

Objectively, the number of total workplace disputes reported to the Ministry of Labour has been steadily declining since at least 1989 (Private Sector Organizations of Jamaica (PSOJ) 1993). Two-thirds of all disputes have been within the manufacturing and services sectors. The number

³ Interviewees were first asked to identify any laws or government regulations that discouraged either business growth, capital, or investment in training. They were then directly prompted about any labor laws or regulations, specifically. Industry experts asked owners or managers, "Do any existing labor laws or regulations affect your ability to meet your labor supply needs?" and "Do any government policies discourage you from investing in the training of your workforce?"

⁴ See U.S. Department of Labor, "High Performance Work Practices and Firm Performance," 1993, for a discussion and list of characteristics of human resource practices in high performance firms.

of work stoppages, a subset of total disputes, has remained within a narrow range since 1989. Most of the work stoppages were associated with wages and conditions of employment, rather than with dismissals or suspensions of workers. The manufacturing sector accounted for about one-third of all work stoppages while the wholesale and retail trade sector accounted for another 23 percent. The two largest trade unions, the Bustamante Industrial Trade Union and the National Workers Union, were involved in the largest number of disputes and work stoppages (58 percent of disputes and 49 percent of stoppages) (PSOJ 1993).

At the firm level, labor-management relations observed by the industry experts working on this assessment were described as "paternalistic" in the food processing industry. One firm, however, did practice a more "modern" approach to human resources, including worker participation in discovering ways to raise productivity, interest in providing a safer and healthier work environment, and a view of its workers as firm assets, rather than as mere costs of production.

In the small tourism sector, the use of a team approach has not worked because of poor management and leadership, on the one hand, and because of a lack of a cooperative attitude among workers, on the other. When a team approach has been implemented, workers have tended to use it for covering chronic worker tardiness or absenteeism rather than to permit greater flexibility and productivity. Workers in this sector are not organized.

Relationships within the information services sector are described as highly traditional despite the high-tech equipment involved. Although there is virtually no unionization within this sector, there is also a very low incidence of workplace disputes or conflicts. Worker attitudes toward management were described as "passive" and "submissive."

In the garment manufacturing sector, relationships were described as nonadversarial and paternalistic. In some cases, genuine management concern for the welfare of its workforce were observed. On the other hand, workplace practices were traditional. There were no observable differences of relationships or of workplace practices between plants within or outside the Free Zones. In the sample of plants visited, there was no unionization, even outside the Free Zones.

There is no evidence that existing labor-management relationships are either enhancing or hindering productivity in the workplace. Interview responses to questions about the policies and attitudes of management and organized labor conducted in interviews were almost uniformly in support of both additional investment in training and in increased worker productivity.

While labor-management relations have been essentially neutral in changing productivity, it is difficult to attribute productivity changes to any particular factors. Two targeted sectors—food processing and garment manufacturing—have had little or no investment in capital equipment in recent years but have had gains in productivity. These gains can be attributed to improved worker productivity brought about by higher skill levels. In the information services sector, productivity has increased, but it has been more as a result of improvements in equipment than as a result of higher skilled workers. In the small tourism sector, there is no evidence of

productivity gains (although it would be difficult to measure). But since the tourism sector is highly labor intensive and low capital intensive, any productivity gains in the clerical and administrative functions of this sector would probably be due to investments in information processing equipment.

LABOR MARKET INFORMATION SYSTEMS

The labor information systems include (1) a formal system of generation and dissemination of current data on the labor force and projected demand and supply and (2) an informal system for matching supply and demand for current openings.

Many of the data in the formal labor market information are generated by government agencies (such as the Statistical Institute of Jamaica, the Ministry of Labour, the Planning Institute of Jamaica), some are generated by private sector organizations (the Jamaica Employers' Federation), and some are generated by the training institutions. Some of the data are published directly by the agencies collecting the data (such as the Labor Force Surveys of the Statistical Institute and the wage and salary data of the Jamaica Employers' Federation), but much of it flows to the Manpower Planning division of the PIOJ. The PIOJ, in turn, publishes a quarterly newsletter on labor market information that contains several articles as well as periodic employment projections.

The newsletter represents the principal product of the formal labor market information system. This newsletter, which is published on a regular basis is disseminated to university groups who do labor market research, to local manpower planning committees, to umbrella business and labor organizations, to various training institutions, and to other government agencies.

For the system to operate properly, there has to be an effective flow of information from employers to training institutions (and educational institutions) about current and future skill shortages.⁵ A number of alternative channels can potentially work. For example, the information can be channeled directly from firms to an organization that coordinates and leads the training institutions or indirectly through a central LMIS processing agency or through private-sector umbrella or sector-wide organizations. Information can be collected through firm-level surveys or, less formally, through meetings with panels of experts indirectly through private-sector umbrella organizations. What is critical, however, is that employers be sufficiently motivated and trustful to use the training system, while the training system must be able to communicate its capabilities and within its constraints be responsive to employer needs. When there are deficits in either motivation, trust, responsiveness, or capacity, the

⁵ Projections of future employment demand by occupation based upon exogenous forecasts of sectoral growth and industry/occupation (staffing pattern) data are parallel but not substitutable for information on short-term skill shortages from employers. The latter are most valuable for meeting current and short-term labor supply needs, while the former are appropriate techniques for estimating medium- and long-term (5-10 years) gaps.

communication channels break down. When this occurs, the damage can be long lasting because of the lag time between improvements in actual system performance and system reputation.

The present formal labor market information system is inadequate. It does not seem to serve the needs of a number of users who require reliable and timely labor market information to be able to respond to supply and demand needs in both the short and long terms. Employers interviewed uniformly do not see any value in the information that is generated. They generally view the training institutions as not responsive. As a result, despite the availability of formal channels for employers to communicate their labor skill needs, they are often reluctant to take the effort to do so.

Training institutions, in turn, do not use the data generated by the Statistical Institute and PIOJ because the information is perceived as too aggregated (not sectoral specific) and does not translate anticipated employment shortages into trainable skills. The information products from these organizations are also perceived as not timely and, in some cases, not reliable. The Human Resource and Training (HEART) Trust, for instance, relies on firm surveys and expert panels to conduct its own sectoral studies to identify skill shortages.

The LMIS products are not used in school guidance because of lack of sufficiently disaggregated information on skills and because there is a weak institutional link between vocational education and the formal labor market information system. The net result is that hardly any potential users other than labor market researchers and government officials, use the formal LMIS.

The major problems facing the present labor market information system can be summarized as follows: (1) a lack of coordination among the various generators of data that results in important data gaps, such as insufficient disaggregation by sector and important labor market diagnostic indicators not being measured, (2) a "non-user-friendly" format to present the information, (3) a lack of access and awareness of the information by potential users, (4) ineffective channels of communication between employers and training institutions, and (5) lack of leadership, resources, and clout to move rapidly ahead to implement needed changes to the system.

These problems are all widely acknowledged, and most were included in the issues that were to be addressed by the LMIS Working Group formed about one year ago. A strategic planning process for the improvement of the LMIS has begun. So far, though, there is no product that evaluates progress to date or that describes in detail the products or results to be achieved. Many believe that the LMIS Working Group is on the correct track in terms of the directions for improving the LMIS, but that it lacks the resources, leadership, and power to implement the needed changes in a timely way.

Informal System

Working in parallel with the formal LMIS is an informal system that provides channels for flows of information on current labor supply and demand needs. These channels include word-of-mouth within neighborhoods or local labor market areas, communication among union members,

a small number of private employment agencies, and newspaper advertisements. There are several formal mechanisms for matching supply and demand for current job openings (the Employment Service of the Ministry of Labour and Welfare and the HEART placement office), but these are very few in terms of the number of persons served. The informal LMIS is highly inefficient because of limited geographic reach and irregular access. Yet, it does serve a function for matching short-term labor supply and demand in the absence of more formal mechanisms.

Impact of LMIS on Avoiding Skill Shortages

Unfortunately, the existing formal LMIS does not contribute nearly as much as it could to mitigating skill shortage problems. Yet, even if the various problems now afflicting it were solved tomorrow, the skill shortages probably would not be substantially reduced because there are more basic problems on both the demand and supply sides that make the system perform inefficiently. That is, an improved LMIS can achieve better matching of the demand for, and supply of, labor skills. But removing the more serious bottlenecks on the labor market lie with increasing employers' willingness to invest in human resources, on the one hand, and generating considerably larger cohorts of individuals with the basic educational skills for vocational and higher-level training.

CONCLUSIONS AND RECOMMENDATIONS

Several recommendations about approaches to mitigating mismatches between labor supply and demand stem from the analysis of the labor market conditions facing the four targeted sectors.

- Since existing labor laws and regulations do not seem to constrain the function of the labor market, USAID should not advise the government of Jamaica to reform these laws to achieve greater market efficiency.
- Developing more effective educational programs for both top and middle management workers on the benefits of introducing modern work place practices to should yield long-term improvements in the labor-management relationships, enhanced productivity, and improved economic well-being for Jamaican workers. Ideally, such a campaign would be best coordinated by private-sector business organizations and organized labor and supported by government agencies and USAID.
- USAID should consider using its influence to speed up the development and implementation of the planned improvements in the existing labor market information system by the LMIS Working Group. The LMIS Working Group needs additional staffing and cooperation from other government agencies to implement the needed changes in a timely fashion. In addition, the active support of a strategic labor market information system by key LMIS providers (such as the Statistical Institute) and users (public and private training providers, educational institutions) is a critical success factor. To this end, USAID might consider sending a delegation of high-level public and private

officials to the United States to observe several "model" LMIS and Career Information Development Systems developed by several states and supported by the National Occupational Information Coordinating Committee in Washington.

Chapter IV

INFORMATION SERVICES SECTOR

The information services sector has undergone a substantial change worldwide over the past ten years with initiatives being taken by governments, private institutions, and companies to benefit from the substantial offshore markets of the United States and Europe. Jamaica, in 1985 and 1986, entered the data capture/data entry market assisted by a government waiving of taxes. This initiative proved successful but, from analysis of the current sector status, requires additional refocusing to meet the demands and needs of an increasingly technological and extremely competitive market.

The results of the study have indicated that a number of deficiencies that contribute to the low level of expansion of this market sector in Jamaica relative to the growth of the international market. Some of the principal constraints on the sector are the high service costs prevalent in Jamaica, the lack of adequately skilled people in the current labor force, the poor level of supervisory and managerial competence, and the lack of attention to this industry sector's requirements from the educational institutions. Further, the potential growth of this industry is constrained by the lack of analysis of export market requirements.

DESCRIPTION OF INDUSTRY

Product Line

The information services industry has a number of products that can be categorized under the following headings:

- data entry/data capture
- imaging/scanning
- programming
- system development
- telecommunications
- telemarketing

These categories have a number of subcategories that comprise voice application, mailing lists, coupon fulfillment, text editing, coding, electronic publishing, and digitizing of maps and geographic information. The principal area that is being exploited in Jamaica is the data capture and text keying.

Upstream and Downstream Linkages

The process is principally one of data conversion; no end product requires additional working. In programming and system development, there is a possibility of additional work through the servicing of systems. However, this section of the industry is only in its infancy in Jamaica.

Sales Level

There are conflicting views in the industry as to the level of business conducted. These opinions and figures are difficult to quantify as the information from both private and public sectors is inaccurate. The businesses contacted indicated that their businesses had remained steady with limited growth over a three-year period because of skills constraints in the sector.

Employment Levels

The employment levels have also, according to the industry, remained stable with a slight upward movement. Employment levels for the last three years indicate an increase from 1991 to 1992 and a decrease from 1992 to 1993 as a result of cost, turnaround problems, and of market. This is in stark contrast to the figures, which indicate a substantial rate of growth, reported by bodies such as the World Bank and government agencies.

Export Market

The export market is comprised of a number of countries within North America, Europe, and the Caribbean. The largest of these markets is currently the United States (see Appendix D for a breakdown of markets and percentage allocations).

Foreign Exchange Earnings

Foreign exchange earnings account for 90 percent of the sector's earnings on average with some companies in the 100 percent area.

DESCRIPTION OF LABOR FORCE

Occupational Mix

The industry has a number of work categories, the largest of which is key entry in the data capture area. The companies that operate this area of the information services sector account for 80 to 90 percent of the people in the industry. The secondary areas are those of programming and systems where the split is due to the integration of jobs within those areas (see Appendix D).

Educational Mix

The principal pool for the sector is at the high school level, which provides an average from the companies polled of 78 percent of the intake. This figure was as high as 100 percent in many companies (see Appendix D).

Age and Gender

At the lower end of the industry (data entry) the population is almost exclusively female. This figure changes the higher levels of systems and programming but then becomes influenced by the type of operation being performed. For example, banking operations would have an almost fifty-fifty split. The sector average over the study was 88 percent female and 12 percent male. The age levels in this sector were almost entirely in the 16 to 35 range (see Appendix D).

Skill Level

A number of diverse skills, many of which do not relate to the technical aspects of keying or programming, are used within the industry and while the technical skills of those in the sector are moderate to good, (see Appendix D), the supervisory, management, initiative, and social skills are lacking.

Turnover

This does not represent a significant problem in the sector; many companies reported levels as low as 2 percent and those only due to pregnancies. Some companies indicated a level of 50 percent and cited diverse reasons—working environment, transport problems, pregnancy, and housing cost—but these were the exceptions, and there was no trend towards any one specific reason.

Income Level

The sector income levels are determined by each section of the sector. The banking sector is currently paying substantially more than the other less sophisticated areas. For the purposes of this report, it has not been included in ascertaining the industry averages, which range from J\$30,000 per annum to J\$73,000 per annum (see Appendix D note).

REQUIREMENTS AND DEFICIENCIES

Required Skills

The required skills break down into a number of categories, all of which are perceived as necessary to the sector environment. These skills are technical, tactical, social, and general educational.

On the technical side, the principal skill requirements are those of typing, reading, English language, and numeracy in data entry and programming capability, systems development, and operations in the higher end of the information services sector. Additionally, there is a requirement for human resource staff trained in supervision, management, and the process control requirements of the sector so that the operations run efficiently and profitably (see Appendix C for a list of these skill requirements).

Competency

The basic levels of data entry demonstrate a low to medium level of competency specifically demonstrated by the poor level of keystrokes per hour prevalent in the sector. Compared to the expected industry norm of 12,000 keystrokes per hour, entry-level key-entry personnel are achieving 1,000 keystrokes per hour, and once they become productive, 4,000 keystrokes per hour.

This requires employers to recruit additional staff, further reducing their ability to compete in the world marketplace. At the higher levels, the competency is comparable with other countries and the greatest problem is finding sufficiently trained people; thus, the industry is forced to recruit non-Jamaican nationals.

Areas of Deficiency

The following areas of deficiency impact upon the sector:

- high cost of telecommunications
- insufficient Free Zone office space
- insufficient housing near businesses
- poor and infrequent transportation
- skilled labor deficiency
- people unprepared to work
- poor work ethic
- insufficient and low skilled middle management
- lack of personal security
- low pay levels

WORKPLACE PRACTICES OF EMPLOYERS

Recruitment and Training

The industry principally recruits from advertisements in the newspapers, word of mouth, walk-ins, family, and the training establishments, such as HEART, the latter being the subject of a high degree of criticism from the sector in terms of the quality of individual that is produced. Comments such as "we have to completely re-train the people that we get" are not uncommon.

Whether this is only a perception and unsupported by facts is not the issue. This disconnection between the private-sector companies and training institutions must be addressed.

Promotion and Security

At the entry level, little promotion potential exists as the highest level attainable is a senior data entry person, which is only slightly different from an entry level. Also, the number of supervisory staff required is minimal, restricting the growth into supervisory and managerial positions.

At the programming and systems level, the opportunities are greater due to the technical differences in the grade of job and the market requirement for increasingly sophisticated software requiring divisional specialization. In both areas, there is a high level of job security at the company level or country level as the supply of persons in either field is substantially less than the market requirement for their skills.

Wage Policy

There is no apparent wage policy in either the private ex-Free Zone or the private in-Free Zone. Both groups informally agree on a range that is then interpreted by individual companies dependent upon their requirements in terms of skills.

Participation

Each of the companies visited operated a standard pyramidal structure. No investigation was undertaken to ascertain the effective operation of the structure.

Organizational Structure

Each of the organizations surveyed was a subsidiary of a larger group with diverse interests. The individual structures were standard pyramidal organizations with the reporting structure direct from shop floor to CEO, if necessary. The controlling officers were not usually from the information services sector and, as such, were not fully aware of the specific training requirements of the sector.

In companies with adequately qualified CEOs, the CEOs were constantly becoming involved in the day-to-day running of the departments because of shortcomings in the capabilities of their supervisory and middle management staff.

Quality and Customer Service

The quality of the operations being performed is monitored through extensive quality control checking, random audits on quality, and any mechanical checking programs applicable to the type of work being performed. In this area, a considerable burden is placed upon the quality control department as the finished quality requires correction rather than quality control. The customer service is not monitored. It is not seen to be necessary as the "customer will tell us if there is a problem."

Needs Evaluation

There is no internal needs evaluation. Additionally, there is no formal vehicle for conveying the industry needs to the training establishments, private or government funded.

Human Resource Development and Strategic Planning

There was no effort to integrate human resources development into the overall strategic objectives of the companies. Firms addressed workforce issues in an ad hoc manner, advertising for jobs as the need arose.

Gender-Promoting Opportunities

The principal intake into this sector is female, and, as such, there is no perceived gender bias as males typically do not choose to work in the sector.

IMPACT ON PRODUCTIVITY

There is a shortfall in the industry in terms of skills and people. These shortfalls combine to produce an inferior quality workforce at the lower end of the scale with low wages and over-employment in the sector, which forces costs up and reduces productive output, making those businesses less competitive in the world market. The problem of unskilled labor is principally influenced by the country's social problems, such as violence, transportation problems, housing costs, distances of the work place from home, and insufficient housing. The cost of this is in the sector's inability to secure the more long-term and complex contracts that necessitate those higher skills (see keystroke information in competency section above).

These skill deficiencies are being absorbed as operational costs removing the economic viability of those companies and restricting growth in the sector to the low-level data handling area, which is not viable in the long term for two reasons. First, the industry is moving away from key entry from hard copy to scanning and direct communication with large databases (interactive media), such as touch screens. This area requires higher skill levels and better equipment; Jamaica's advantage is the English language. Second, other countries, such as China, the Philippines, Mexico, and the Dominican Republic, can undercut the costs of their services for whatever remains of the key-entry-from-hard-copy market, thus forcing Jamaica out of the market.

INDUSTRY PROBLEM SUMMARY

Human Resource-related Problems

- no emphasis on human resource development
- unskilled and weak middle management and supervision
- poor comprehension, reading, and spelling skills

- insufficient depth of vocabulary specific to the sector
- short attention span problems causing repetition of instructions and increasing errors
- no production management skills
- lack of formal coordination with training bodies
- sector stigma—no career path development
- poor basic communication skills—language/vocabulary
- poor abilities in following instructions
- poor typing skills
- people not properly prepared for the work environment

General Industry-wide Problems

- insufficient understanding of international marketing
- insufficient incentives outside Free Zone
- high cost of telecommunications
- inadequate transport
- insufficient low cost accommodation
- no government ministry for information services
- competition from other emerging nations

RECOMMENDATIONS

A series of recommendations have emerged from this study, some focusing on short-term actions, others on longer-term, more structural areas.

- Establish formal and regular communications between private sector companies, The Jamaica Promotions Corporation (JAMPRO), and the training institutions to determine the exact sector requirements in skills, current and future.
- Establish industry standards in wages, educational requirements, and technical competence levels.
- Develop a defined career path by considering the future developments in the sector worldwide.
- Produce a high school curriculum designed to meet the needs of the industry with respect to basic skills.
- Initiate industry career seminars in schools and colleges.
- Identify information technology (IT) professionals in the private sector with information services sector-specific IT knowledge and incorporate these in the needs evaluation process.

- Create a vehicle for understanding the international requirements and direction in information services so that local development policy and marketing strategies can target those growth areas rather than depend on the domestic perception of these growth areas.
- Establish governmental policies for additional financial incentives for training programs.
- Target skills development towards high value-added products that are required worldwide. This must be matched to the particular skills of the Jamaican workforce, and therefore these skills, if existent, must be identified and developed.
- Revise the role of JAMPRO as a facilitator in the communication of worldwide industry needs and objectives making it more IT industry specific.
- Develop senior management awareness programs to ensure their understanding of the potential in the world markets and also the need for investment in human resource development and training.
- Give incentives to companies to relocate operations nearer to where workforce lives.
- Subsidize on-the-job training programs for recent school/college leavers who do not have the required skills to make them employable by the companies in the sector.
- Support further school group computerization.

CHAPTER V

FOOD PROCESSING SECTOR

The food processing industry is well established and, from a production standpoint, more than adequate for the domestic market. As a result, future growth will be based almost entirely on exports. Growth in exports has been a result mainly of the change of the North American diet from bland to hot. Other significant export markets are the ethnic Jamaican enclaves in the United Kingdom, Canada, and the United States.

At this point there are sufficient raw materials to meet production. There do not appear to be major problems in labor supply. The industry is very labor intensive and most equipment used is outdated. Further growth of the industry will be constrained by insufficient raw materials from the agricultural sector, inadequate variety and supply of packaging materials, and shortage of qualified technical personnel capable of operating and servicing automated equipment.

By far, the most serious problem confronting the industry's growth is management's inability or disinclination to think strategically about its growth and diversification prospects in export markets. The short-term perspective in management has implications that go directly to the development of the workforce in the industry. Little thought is given to the role of the labor force in improving the productivity or growth of the sector.

DESCRIPTION OF INDUSTRY

Products

The principal products in the industry are processed sauces of various types: jams and jellies, chutneys, ketchup, mayonnaise, mustard soy sauce, and a few other table condiments. Products in tins are mainly juices, canned fruits, and reworked imported cheese. In addition, smaller quantities of English style biscuits and cocoa products are produced.

Typical operations involve sorting, cleaning, and washing of the raw material, macerating, cooking in open kettles, filling into glass containers, cooling, and case packing. The same process is true for tins, except after filling, the tins are sealed by a double seamer machine and heated before sealing to exhaust oxygen and ensure commercial sterility. The cocoa industry is entirely dry packed for either hot or cold use. Biscuits are produced in a bakery, equipped with fairly modern and adequate equipment. There is only one plant each for these items.

Upstream and Downstream Linkages

Adequate quantities of suitable agricultural produce must be available at a low enough price to be purchased. Presently, very few of the manufacturers own farms and, thus, buy from individuals and co-ops. Increases in quantities of specific items are communicated from the

buyers to the farmers. Packaging materials are a problem, as glass containers are produced after the needs of the brewing industry are met. There is only one tin can manufacturing plant.

Sales Level

Generally, the domestic market grows a little each year, but export sales drive the industry. Sources report that their own increases and those of the industry as a whole average 20 to 25 percent annually. Bottled sauces and condiments are the leaders.

Employment Levels

Figures for employment in this subsector were not available. One factor is that much employment is seasonal due to raw material supply and is, for the most part, informal and casual. However, with increased production and lack of automation, it is certain that employment is increasing. Future growth will depend on an adequate technically trained group with specific skills in refrigeration, steam boiler operation and repair, and maintenance and repair of filling and sealing machines. At present, it is estimated by the industry that there is a shortage of between 75 and 100 qualified machine technicians.

Export Market

There are exports to the Caricom market, but main markets are the United States, the United Kingdom, and the smaller Canadian market.

Foreign Exchange Earnings

All respondents professed ignorance or refused to discuss foreign exchange earnings. Percentage of foreign exchange earning vary from 100 percent for companies, such as Jamaican Producers (mainly banana and some processed foods) and the IDC group to lesser amounts for the smaller companies.

DESCRIPTION OF LABOR FORCE

Occupational Mix

The majority of workers are unskilled, doing hand labor, which is repetitive. Supervisory personnel are most often promoted from within and have some skill in communications, labor relations, and an understanding of processing needs. Middle management and laboratory personnel tend to be graduates from the College of Arts, Science and Technology or the University of West Indies.

Age and Gender

The majority of the workforce is female and of relatively young age. The smaller plants visited were 80 percent female.

Skill Level

Skill levels on entry are very low. Women are preferred because of easy transference of home kitchen skills to production.

Turnover

After initial winnowing of new hires, all respondents agree that turnover hovers around 3 percent.

Income Level

Respondents were reluctant to answer in specifics. Most claimed to pay slightly above the minimum wage requirements or some unspecific amount called "what is paid in the area." All agreed that increases in wages were relative to inflation.

REQUIREMENTS AND DEFICIENCIES

Required Skills

At the entry level, basic work ethics, such as punctuality, loyalty, doing a good day's work, and basic literacy and numeracy are required. At higher levels, understanding of technical matters and better training to respond to specific recurring problems in production operations are needed.

Competency

This is relevant only to the small group of technical/management types needed. Most respondents replied that applicants have minimal qualifications, but needed better training.

Areas of Deficiency

The major problem is said to be the generational problem of the work ethic, namely getting people to work properly and understand the demands of the workplace including personal hygiene, good interpersonal relationships, and honesty.

WORKPLACE PRACTICES OF EMPLOYERS

Recruitment and Training

Recruitment is based largely on referrals by family members, friends, and walk-ins. Some private groups, such as church-sponsored programs, train prospective employees in the work ethic and some basic skills applicable to specific jobs.

Job Promotion and Security

Promotion is usually from within. Job security in this industry depends on the size of the plant. A small plant making few products will be seasonal depending on raw material supply. Larger plants with a mix of products make efforts to hold onto employees.

Wage Policy

There is no apparent policy in the industry. Wages are geared to the minimum wage and policies differ from plant to plant.

Participation

Grace, Kennedy Ltd. and Busha Brown, division of Scotts Ltd., have active programs forming employees into quality circles thus getting input from employees. Some of the other larger firms have some written policies, but these are usually not implemented.

Organizational Structure

All of the larger firms have divisions. Each division manager is responsible to upper management. A typical pyramidal structure is repeated in form according to size throughout the industry. Top management is kept informed of lower level operations by reports at regular intervals. In smaller firms the owner is usually the plant manager and may cover other areas.

Quality and Customer Service

This depends on company size. Small- and some medium-size firms only inspect samples of completed production. Large firms do have on-line quality control during production, but not on co-packed items. As a rule, quality control is ex post facto and could well be improved. Customer service is limited to the receipt of complaints and some level of response depending on many factors, including company policy and the nature of the complainant.

Needs Evaluation

If the industry is to grow and successfully compete globally, then adequate human resources must be trained. Responsible supervisory, technical, and computer literate employees who can

put new investments in automated equipment, higher output, and consistent product to best advantage are needed. This must be met by training marketing professionals who can find and hold markets made necessary by increased production. Top management must have well-designed plans and make the financial investments necessary to fuel these changes to a modern automated industry.

Other critical requirements in the industry include the following:

- a program of raw material procurement, including grading, ability to tailor crop size to processing needs, so as not compete with the fresh market
- increased supply and choice of packaging materials
- awareness of graphics, coupled with packaging, to be successful in a more competitive market
- marketing in an active form: searching for new markets and new products, if necessary, and gathering information for decision making
- quality control both on-line and ex post facto to ensure that export products are of replicable factors necessary for sale such as acceptable, replicable color, thickness, flavor, with strict attention to the food laws and other regulations of all overseas markets

Human Resource Development and Strategic Planning

Only Grace, Kennedy Ltd. has a human resource department fully implemented and empowered to work in this area. There is ongoing in-plant training enabling it to promote from within in all areas. There is also an understanding of the need to train employees outside the factory and a willingness to pay to have employees attend seminars and short courses in foreign countries. For example, Grace sent executives to the Juran Institute in Sweden for advanced training.

In speaking to responsible management in the larger firms, it was apparent that strategic planning was an idea whose time had not come in Jamaica. Even the larger producers, such as Grace, Kennedy; Jamaica Producers; and Industrial Commercial Development Export, do not plan strategically because of a strong risk aversion at the top management level.

Gender-promoting Opportunities

From the prevalence of women in all levels of this industry there appears to be no gender bias.

IMPACTS ON PRODUCTIVITY

Respondents were asked this question: "If a properly trained, motivated workforce at all levels were available what would be the increase in productivity?" A further condition was that no

further capital would be invested. The prompt reply was unconditionally "an increase of 20 to 30 percent." This answer and the unanimity of the respondents pointed out the problem that education could solve.

SUMMARY OF INDUSTRY PROBLEMS

The analysis leads to several conclusions concerning the food processing industry:

- Much of the industry has problems of quality control, hygiene, and production
- Equipment in most plants has not been upgraded for almost 25 years.
- Probable shortfalls of raw materials from the agricultural sector will cause severe problems for the industry.
- The supply of all packaging materials is inadequate and, thus, a serious obstacle.
- The shortage of trained personnel will be severe if industry should grow as expected.
- The lack of work ethic among entry level employees will continue to hinder productivity.
- The labor pool is becoming increasingly illiterate and unable to understand simple mathematics.

RECOMMENDATIONS

Several sector specific recommendations emerge from this brief analysis:

- Radically improve basic literacy and numeracy.
- Establish direct links on a frequent basis between industry and educational institutions for curricula changes.
- Transfer some training to the factory floor or factory office.
- Increase co-operative education, such as intern programs where students would work in the industry and receive pay and academic credits.

CHAPTER VI

LIGHT MANUFACTURING (Apparel Industry)

DESCRIPTION OF THE INDUSTRY

This sector of the Jamaican economy, while quite diversified (see Appendix E for a representative list), is dominated by the "for export," cut-and-sew apparel industry. Historically, during the 1950s and 1960s, the sector led the country in its growth rate contribution to the overall economy but faltered along with the rest of the economy as the business climate eroded during the 1970s.

A review of the past decades growth indicates a resurgence of manufacturing, although a different blend, as one of the more positive components of an expanding Jamaican economy. However, not all investors are confident at this point that the business climate has stabilized for the long term, given that industries, such as shoe manufacturing, have not returned in any great numbers.

The consultant team focused on the apparel industry and thus most of the findings result from contacts with these industries. Other industry-specific problems are explained.

Product Line

The apparel industry is generally taking advantage of the 807 provisions where U.S. originated fabric is shipped, either cut or uncut, to Jamaica for sewing and packaging before reexport to the United States. These products include T-shirts, athletic pants, women's and men's underclothing, jeans, and other simple stitch items. Value added is generally limited then to assembly labor and associated overheads.

Upstream and Downstream Linkages

The upstream and downstream linkages are very limited within the 807 apparel industry because all raw materials must be of U.S. origin. In fact, if the firm is within the Free Zone, material cannot even be sent out of the Zone to a local company for washing.

One proposed linkage was put forth during this study. Jamaica grows a very special soft cotton plant whose fibers can be spun and woven like silk. Currently, the Japanese purchase this special raw cotton for export and processing. The cotton could be retained, processed, woven, and incorporated into high-quality designer-wear fashions. Thus, Jamaicans would control and retain the value added through the entire process.

Sales

Annual sales are generally expanding across the manufacturing industry with the exception of those companies that are producing goods exclusively for domestic consumption. These companies are suffering from declining or, at best, stable sales in the current high inflationary period.

Employment Levels

The firms visited typically had employment rolls varying from 50 to 1,000 employees. Employment levels for the past three years have been increasing throughout the industry, but not at a rate proportionate to increased sales as owners and managers attempt to increase productivity and thus improve their profit picture.

Exports

Exports of apparel are 100 percent in the Free Zone and estimated at 75 percent outside the Free Zone. Approximately 80 percent of these exports are shirts, pants, and dresses. The average annual growth of exports has been only from 2 percent to 5 percent, although certain products such as T-shirts come closer to 20 percent. These figures represent information from the past three to five years.

Foreign Exchange Earnings

Foreign exchange earnings fluctuate from company to company in relation to their percent of export. Of those firms studied, this figure ranged from 0 percent (domestic market) to 100 percent (Free Zone). For those firms with a steady mix or percent, the foreign exchange figures are generally improving as both sales and profitability improve. However, owners and managers of individual enterprises and commercial bankers indicated that most of the increased foreign exchange is immediately converted to local currency and used to pay debt service.

DESCRIPTION OF LABOR FORCE

Occupational Mix

Generally, the occupational mix on the production floor within the manufacturing industry has remained unchanged for the past few years, but this may gradually change if current equipment is replaced with more up-to-date computerized machinery that allows for increased productivity. Because of the high cost of money, equipment is not now upgraded as often as international competitors. Generally, Jamaica is one or two equipment generations behind the pace of the state-of-the-art offerings.

Education/Skill Level

Nearly 100 percent of the entry-level positions within the manufacturing sector are filled by Jamaicans who possess basic reading, writing, and counting skills as evidenced by their ability to successfully complete an employment application without assistance. Most mechanics or technicians hired have already completed at least a basic level technical training course. In entry management levels, there is a trend to use more Jamaicans than foreign nationals where qualified or trainable individuals can be identified and retained. Middle and upper management positions are generally filled by university-trained individuals, both Jamaican and foreign.

Age, Experience, Gender

Workers in the manufacturing sector range in age from 18 years (the minimum) to more than 50 years. Some employees have been with the same firm for more than 20 years. With very few exceptions, the apparel industry employs women as machine operators, quality checkers, and floor supervisors. Men in this industry perform the heavier tasks. Employee turnover usually occurs during the probationary period (six weeks), and, thereafter, limited poaching creates some worker turnover.

Income Levels

While income levels are improving, it is quite difficult for Jamaican workers to stay ahead of inflation. Most workers are paid on a piece-work scheme (base plus production bonus), which generally provides a take-home wage much higher than the government mandated minimum wage. Wages are fairly consistent across the industry. Many workers have more than one job or operate a business of their own to provide for additional income. Furthermore, the extended family contributes some assistance through small monthly remittances from overseas.

In the apparel industry skilled labor and technical personnel (mechanics/engineers) command a higher wage based on qualification and supply/demand. Although it seems that the wage difference should be significant enough to encourage individuals who are not contemplating a management career path to strive for semiskilled and skilled technical positions, this is not the case. The demand for such trained or trainable persons does indeed far outstrip the supply, but the training institutions responsible for producing these graduates cannot fill the classes. This wage level is usually midrange between floor staff and line management. Income levels varied enormously from company to company because of poaching through an economic incentive to technically trained individuals. This poaching was a result of the manpower shortage.

SKILLS/CORE COMPETENCY REQUIREMENTS AND IDENTIFIED AREAS OF DEFICIENCY

Beyond the basic ability to read, write, and count, employers generally want entry-level employees to come to the work place with an understanding of basic work ethics, personal hygiene, team work, and rudimentary machine usage skills. In most cases, the public education

system is not properly preparing workers to enter the labor market with these skills. Employers prefer and are prepared to train entry-level employees in those industry-specific skills they will perform through on-the-job training.

For line management positions, operators demonstrating leadership traits are usually selected for promotion. However, in many cases their new management training program is either lacking in content or nonexistent. Machine technicians or mechanics come to the work place better trained because most of those in the industry have been trained through a proper vocational-technical preparatory program and technical skills institution. Comments made during the review tend to support the contention that this program needed to produce twice as many graduates who would be quickly absorbed by the industry.

Special efforts should be made to identify, through specific testing and interviews, those soon-to-be graduates at high school and, possible university-level individuals who would be best suited to pursue this career path. The demand is such that the manufacturing sector would most probably provide some scholarship assistance if it could be assured of a regular and adequate supply of trained graduates.

The pressure is so great that a private-sector training institution could be quite successful, as well as profitable, if it could meet this mandate. So far the public sector has not fulfilled its mission or objectives within the skilled technical arena.

WORK PLACE PRACTICES OF EMPLOYERS

Recruitment

Employee recruitment is handled in several different ways: prospective employees often line up outside the property gate seeking a job, employers may tell their employees to recruit in their neighborhood, or the employer may place an advertisement in the local newspaper. For direct-hire management positions, the employers generally seek out potential candidates before they graduate from a university.

Training

Training programs range from improvised on-the-job attempts to very well managed long-term systems. Generally, the level of training programs is directly related to the level of management understanding of the need for long-term investment in human resources or the involvement of an international investment or contracting partner in the enterprise.

Promotion and Job Security

Most local firms are closely held family operations that tend to groom family members for eventual succession of ownership. However, there is apparent promotion opportunity for qualified individuals to work their way into very responsible management or technical positions

within most manufacturing enterprises. Employee loyalty, productivity, and efficiency are rewarded with both job security and privileges.

Wage Policy

Within the manufacturing sector, and particularly in the apparel industry, the employers agree to pay a wage that is usually several steps ahead of the mandated minimum wage. A review of the wage structure reflected little difference in entry-level wages from company to company. Employers indicated that they usually discuss this circumstance and keep the average wage close to one another so as to preclude poaching. Middle management salaries for Jamaicans are less than half of their expatriate peers, but, generally, the expatriates possess higher levels of skill, education, or work experience. There does not seem to be any differentiation between wages and salaries paid to men and women possessing similar qualifications and holding similar positions of responsibility.

Employee Participation in Management Decisions

Only in rare cases was there evidence of employee participation in management decisions. Few owners and managers fully understand the concept, and some would not relinquish that authority.

Organizational Structure

Most owners and managers are dealing with growing businesses, and the demands on their time are becoming extremely costly. In many cases, owners and managers have a fear of failure if they delegate some of their responsibility and authority. In other cases, there simply is no qualified middle management staff to delegate to. Thus, nearly all the businesses, no matter their legal structure, are being operated as quasi sole proprietorships.

Ensuring Product/Service Quality

All of the factories visited had quality control systems in place. These range from simple final pre-pack checks to highly sophisticated integrated in-line quality control programs. Quality of the Jamaican worker output appears to be reasonably good even to the point of costing owners several percentage points of profitability because of conflicts between quality and productivity. Several companies have regularly won worldwide quality competitions awarded by the multinational contractors.

Integration of Human Resource Practices and Long-Term Company Strategy

There appears to be an obvious correlation between owner and/or management skill and knowledge levels and the amount of long-term human resource investment. Generally, unless there is an international partner, companies tend to expend only minimum amounts of their profits in this critical area. Very few of the companies exhibited an understanding of the need for a strategic plan. Of those local companies reviewed that did have a plan, many plans were

found to be ignored or rarely reviewed during the management decision-making process; no plans were regularly updated.

Promoting Opportunities for Women

Within the apparel industry opportunities for advancement for women are much greater than for men. In the other manufacturing enterprises reviewed, men have the better chance for advancement. This does not appear to be an obvious case of discrimination, but rather, is as a result of the core employee mix.

IMPACT OF SKILL DEFICIENCIES AND WORK PLACE PRACTICES

Generally, the entry-level operator skill deficiencies are a short-term problem obstacle because the employers are anticipating an initial investment in each employee relative to garment-specific sewing techniques that can only be mastered through controlled and supervised repetitiveness. The employers do not desire to change this specific incoming deficiency through outside training.

The shortage of trained/skilled mechanics impacts on productivity and production costs. When manufacturing machinery is down for any length of time, a domino effect usually occurs forward and backward from the point of the breakdown in the production line. If spare parts are not available or if a mechanic must be contracted to repair the machinery, schedules can be missed, temporary layoffs can occur, or contracts can be cancelled. In some cases, equipment has to be sent out of the country for repairs because of the shortage of knowledgeable technicians.

SUMMARY OBSERVATIONS

Before any action is taken regarding further development of the Jamaican labor force, certain other actions should be considered as a higher priority.

Overall Health of the Apparel Industry

Generally, the manufacturing industry and, in particular, the apparel industry, is not as healthy as might appear at a casual glance. Most are only surviving by a full-order book that, in most cases, is based on negotiated one-year contracts. If demand had not grown as it did, many of the businesses reviewed would be put into liquidation. In the current financial arena, extremely high interest rates coupled with heavy asset debt means that most current business owners are using current cash and possibly some accrued profits (if any exist) to pay as they go. That is to say, the owners are paying for today's costs with tomorrow's profits. Any downturn in the international market place or other negative intervention will most probably lead to an instant collapse of the sector. Unless immediate strategic planning and good conservative financial controls are put into place immediately, most businesses are facing a precarious future.

Absence of Long-Term Strategic Vision for Developing the Industry

Two factors are currently limiting the manufacturing industry and one of these is particular to the 807 apparel industry. First, both local and international investors seem to be less than confident with respect to investing in Jamaica over the long term when the government has failed to establish either a long-term strategic development goal or objectives that can survive possible future changes in leadership. An economic vision and strategic plan with at least a five-year life need to be articulated and formulated into appropriate legislation.

Second, the 807 apparel industry is limited in its ability to plan for the long term because its international contracting partners refuse to offer contracts over one year in duration. In any other industry, most financial institutions would refuse even medium-length financing on such short commitment.

POSSIBLE OPTIONS FOR ACTION

Management Assistance

Implementation of a program to offer direct assistance to groups of locally owned manufacturing businesses should be considered. This assistance could be a program to create basic courses related to developing company strategic plans and financial management for managers. The banking and accounting industries should be invited to participate in a program to provide in-depth analysis of each company's true financial position, and appropriate remedies should be put forth by the experts and implemented by management.

Business-School Partnerships

Partnerships between businesses and local schools might offer a mechanism for making basic education more relevant to Jamaica's export economy. Partnerships might be a tool for introducing basic employment requirements into both the primary and secondary systems. Such linkages could be designed to allow the teachers to visit and gain an understanding of the current business world while simultaneously the business leaders would make inputs into the teaching of relevant skills. The business community could assist in the design of an effective work ethic curriculum as well as provide guidance on developing appropriate skills.

Specialized Courses in Secondary Schools

Secondary schools should offer a short course on basic sewing machine operation in the home economics curriculum and make it available as a standard course for students. An active co-op work study program should be established for last-year students in senior secondary and technical schools to better equip the student for careers in the apparel industry.

Management Courses Specific to the Apparel Industry

Courses in modern management practices should be offered by the relevant institutions for all levels of management. These courses should be scheduled for evenings and weekends to allow the business community an opportunity to attend with minimal disruption to their businesses. Formalized "new manager" training should be made available within one month of the appointment to every person who is promoted or directly hired into the position. Such an investment and early intervention will pay off in the long term for the business owners.

New Recruitment Practices

The use of hiring halls or private employment agencies should be considered a recruitment tool for the manufacturing industry. These facilities would then provide a valuable service to potential employers. The staff could take applications, assess qualifications, check references and send only qualified personnel for interviews. If deficiencies were detected, they could be corrected where possible by offering appropriate training and by using some of the government training funds, institutions, and plans. Furthermore, an employment database that tracks employment histories, training qualifications, and points of contact for all workers during their active work life should be established.

Use of Equipment Manufacturers Training Materials

No great study needs to be made of the needs of the apparel industry to determine the core competencies or job skills that will be needed by future workers in the industry. Training courses being used by the United States and Pacific Rim-based multinational firms, even those applying to an older generation of equipment, would be useful and affordable training tools. Their current equipment and that which it replaced will be the next change within the Jamaican enterprises.

CHAPTER VII

SMALL-SCALE TOURISM SECTOR

A twelve-day project was undertaken to investigate the labor needs of the small-scale tourism attractions and ecotourism sectors of the Jamaican economy. Statistics were not available to qualify or quantify only the small hotels and attractions. Statistics from the overall industry offer background information that relates to the context for the specific analysis on small hotels and attractions and in interviews with key people in the tourism industry.

The methodology was to interview industry leaders, attractions managers, and entrepreneurs by focusing on their perspectives and gathering anecdotal data and formulating conclusions based on these conversations. In addition, the team was able to personally experience many tourism attractions.

Several trips were taken to see key tourism attractions, restaurants, and sites. Visits included Port Royal, Port Antonio, Crystal Springs Hotel, Café Central (a restaurant entrepreneur in Kingston), Blue Mountain/John Crow Mountain National Park, The Gap Cafe at Hollywell, The Town House Restaurant in Montego Bay, and various other tourism sites. A trip was taken to the thirty-third annual Jamaica Hotel and Tourism Association meeting in Montego Bay. In addition, a trip to Port Antonio with many intermediary stops was included to attend a local ecotourism planning conference.

The interviews took place at the various sites, in the offices of industry leaders, and in ad hoc sessions at the three-day Jamaica Hotel and Tourism Association meeting. Interviews were occasionally conducted by telephone. All information helped to determine trends and attitudes and to obtain a broader view of the labor market and some possible initiatives for USAID to adopt in Jamaica.

Ecotourism was initially to be a substantial part of the report. As the report progressed, the focus increasingly shifted to a labor assessment of the small tourism attractions and hotels as the current labor market in ecotourism is quite small. Thus, data have been gathered to analyze ecotourism potential in Jamaica, not just in terms of future labor needs, but also in terms of what role USAID may play in this field.

Finally, because of the anecdotal nature of the report, many of the data and numbers describing the industry are secondhand reports taken either from individuals, institutions, or other management reports, not verifiable by this consultant. Statistical data was gathered from the Jamaica Tourism Board (JTB), Tourism Action Plan (TAP), and various other sources. In particular, a Human Resource and Training (HEART) study conducted by Trevor Hamilton and Associates was useful. Statistics referred to are not annotated, but are taken from these sources.

DESCRIPTION OF THE INDUSTRY

Overview

The tourism sector of the Jamaican economy is of critical importance to Jamaica's economy. In 1993, 1,616,340 tourists visited Jamaica, 610,600 from the United States. This generated U.S.\$950,000,000 in revenue. Tourism leads the other major sectors of the economy in foreign exchange earnings. It has been estimated that tourism accounts for 63.4 percent of the overall foreign exchange earnings of Jamaica.

Trevor Hamilton, a local consultant, estimates that tourism accounts for approximately 11 percent of the gross domestic product (GDP), equal to the financial services sector, and larger than the construction, mining, and quarrying sectors. Trevor's formula indicates that tourism is 37 percent larger than the agriculture sector.

Trends

The industry has the potential to grow to about 18 percent of GDP over the course of three to five years because it is growing at about 7.7 percent annually while the national GDP (according to government figures) is growing at less than 3 percent annually. Also, there is a greater rate of return on investment in this sector than virtually any other sector of the economy, and, as such, private investment is projected to grow by about 15 percent annually in the medium term.

In relation to other Caribbean nations, Jamaica is holding its own. There was an 8 percent overall increase in visitors to the Caribbean in 1993, with Jamaica experiencing a 7.7 percent increase. This is different from previous years when growth in Jamaica was a much higher percentage relative to other Caribbean destinations' growth. These other countries (particularly Aruba and Barbados) are effectively marketing their destinations and spending much more than Jamaica on advertising and overall marketing budgets (according to the Caribbean Tourism Association). Results are starting to be felt from these campaigns as tourists are shifting to other Caribbean destinations.

While Jamaica may not easily compete with Costa Rica, Belize, the Galapagos Islands, or Africa as a singular ecotourism attraction, ecotourism can still play a major impact in the conservation and development of major tourism attractions throughout Jamaica. Some of these destinations include Blue Mountain and John Crown Mountain National Park, the Montego Bay Marine Park, the proposed Port Antonio Marine Park, Cockpit Country, Port Royal, Black River, and many other prime ecological sites. Developing singular attractions, such as a day trip to explore the varieties of fern in the Blue Mountains or to see a pristine waterfall in a newly preserved watershed corridor near Port Antonio, both preserves the natural resource base and provides a financial justification for doing so.

Ecotourism, in its broadest sense, includes the areas of conservation, sustainable and equitable economic development, community development, transparencies of the benefit of

conservation to the local communities, and the ability to create a synergistic approach to solving environmental problems. This approach brings key people together and leads to cooperation and the greater benefit of all.

There are problems confronting the development and management of ecotourism. There is a lack of coordination of research and development work within the scientific and conservation nongovernmental organization (NGO) communities. Also, a lack of coordination exists among the travel industry, governmental organizations, and NGOs. Many individuals in the travel industry expressed concern about conservation groups' and government agencies' lack of knowledge about the needs of the traveling public and the travel industry in general. In short, consumers, tour operators, government agencies, NGOs, and local communities can be committed to the same general ends, but it is unclear to most how they can work together.

Issues in ecotourism present both problems and opportunities for nature tourism initiatives. On one hand, the existing problems are (1) threatened viability of natural resources by local communities and by overzealous industrial or tourism development without regard for the environment and (2) limited traditional uses of parks and protected area reserves. On the other hand, ecotourism is an opportunity to (1) preserve the natural resource base, (2) provide impetus for community development and benefits for local people, and (3) support tourism by local people, adding a cultural dimension and diversity to attractions.

Positive Factors

Jamaica is endowed with all the necessary factors to make it an outstanding tourism destination. Jamaica possesses consistently good weather, great scenery, natural beauty, excellent beaches, an abundant supply of labor, a variety of agricultural products, a unique cuisine, clean water, stable government, an adequate infrastructure, an interesting culture, local music, and close proximity to the best markets in the world for tourism.

The small-sale tourism attractions and hotels, which are not dominated by large multinational corporations, allow for very good income-earning potential by local Jamaicans. This spreads much of the benefits of tourism around the countryside and leads to a more balanced tourism economy. This aspect of the overall tourism industry is in need of much support because organizational capacity is low, entrepreneurs and senior management people are short-sighted as to the potential available for growth and development, and support systems are not yet fully developed.

Jamaica has not reached its potential from all these outstanding attributes. The Jamaica Tourism Board does a good job marketing, but competition has increased and the JTB's budgets are down. The overall budget has not been finalized for 1994/1995, but projections indicate a decrease of at least 10 to 15 percent. The great assets of Jamaica are underused.

Constraints

In spite of a steady increase in tourism, the Jamaica Tourism Board had its budget cut in 1994. In addition, Jamaica is becoming less price competitive as a tourist destination because prices keep going up as the general consumption tax is due to be increased soon, airport departure and security taxes have increased, and the government is proposing a new tax on tourism attractions to fund infrastructure improvement.

Small hotels and tourist attractions have problems attracting and keeping quality staff. Once they have staff, it is difficult to get staff trained, largely because of the demands of the job. That is, if only two receptionists are employed, it is difficult to send one out for training because someone has to fill in while that individual is gone. In addition, financing is a problem because many small hotels are just barely surviving, either crushed by long-term debt or unable to borrow to finance upkeep and modernization.

Economic Overview

Tourism is effectively paying for much of the overall economy through the huge amount of revenue generated from taxes. There is relatively little investment in infrastructure or return to the tourism sector. Recently, to stimulate exports, the government launched some initiatives to make either interest-free or low-interest loans available to the "export sector" of the economy. Tourism, however, is not considered an export under this initiative.

Clearly, revenue is coming in from tourism and being distributed to other segments of the economy, including the agricultural sector and other "export sectors." For example, the largest eleven hotels are paying approximately U.S.\$5 million a year in direct taxes alone. Overall, hotels are paying approximately U.S.\$25 million in direct taxes. Almost none of this revenue returns to the industry or goes towards infrastructure improvement in the tourism sector. Rather, the revenue is apparently diverted to other sectors of the economy through other development initiatives.

Some want to include government budgets to market Jamaica or the limited police budgets that go towards increased security for tourists or even HEART training as examples of what the government is doing with income from tourism. HEART training revenue comes directly from private-sector industries from a special training tax. The JTB receives a very small budget each year that more than pays for itself in terms of the return for spending by the government; it outperforms the rest of the government's development schemes in the return per dollar spent.

This redistribution of revenue does not produce the benefits that increased and better-quality tourism could produce in many sectors of the economy. Left to its own devices and based on growth solely within the tourism sector, tourism creates enormous numbers of jobs in the country with countless downstream and upstream linkages. Tourism stimulates the agricultural industry by approximately U.S.\$1.4 billion dollars each year; stimulates concrete, construction,

and manufacturing sectors of the economy; and increases all other service sectors of the economy.

Product Line

The tourism industry in Jamaica can be said to include about seven clusters of activities, with food and beverage accounting for approximately 39 percent. These sectors include accommodation, food and beverage, transportation, tours, and entertainment including sports and recreation, attractions, and water sports.

Upstream and downstream linkages include many segments of the economy, including agriculture, construction, concrete, manufacturing, banking, financial services, music, cultural attractions, roads, infrastructure, port upgrading, natural resource management, and many service sectors of the economy.

Ecotourism is a tiny portion of the tourism industry. There is very little labor force to speak of, and although everyone in the tourism industry eagerly welcomes whatever they consider ecotourism to be, very few people agree on the same definition for ecotourism.

Small-scale tourism is a small, but significant, portion of the overall tourism industry. Small-scale dive operators, small tour companies that conduct local excursions, and small attractions companies contribute a great deal to the overall tourism experience.

Ecotourism Potential

A brief survey of the nature tourism possibilities reveals a wealth of natural beauty that is not being marketed. It is only now starting to be protected and appreciated, but there is not much understanding as to what resources are actually here; how unique the flora and fauna really are relative to the rest of the Caribbean, or the world; and what priority the government is giving to protecting and maintaining its natural resource base.

The "day-tripper" market must be developed and the demand for Jamaica as an ecotourism destination relative to Costa Rica and Belize must be explored. This is only now starting to be done.

THE LABOR FORCE

The overall tourism industry employs approximately 97,000 persons. Men account for 59 percent of jobs while females account for 41 percent. Women represent 70 percent of employees in the accommodations sector. Men represent the majority of employees in all other sectors of the tourism industry.

There is very little personnel administration because only 30 percent of the employees are hired by using formal interviews or job specifications or descriptions. Only 40 percent of employers

have established consistent rates or pay scales for jobs, only 40 percent of personnel receive performance appraisals, only 15 percent of the firms have employee development programs.

Most employees are locally based near the hotel or attraction; over 90 percent originate in the local community. Advantages include the reduced cost of travel, housing and other costs, and the availability of staff for flexible or emergency staffing requirements. Minimum wage is approximately J\$500 per week (approximately J\$40 to J\$50 per hour).

Small-scale tourism attractions and hotels attract workers in a similar way to the large-scale tourism attraction and hotels. Employment seems to include less training, less performance appraisals, and much more parochial working environments.

SKILLS/CORE COMPETENCY REQUIREMENTS AND DEFICIENCIES

Trevor Hamilton has estimated that over 50 percent of employees do not have the requirements for the jobs they occupy. These deficiencies range from a lack of technical expertise in a few areas, to gross incompetence in understanding and being able to perform even the most basic functions of their jobs. When polled, 76 percent of employees said they felt the need for additional training in their present jobs.

The average length of service in firms that have been established for at least twelve years is four years. However, the dropout rate for entry-level positions is extremely high. Firms are constantly recruiting for these entry-level positions as the pay is quite low, respect for the workers is virtually nonexistent, and very little connection exists in the workers' mind between the job they are taking on and any kind of a career path. A sense of "familial" connection or "belonging" within the corporate structure is also lacking.

Several skill shortages exist in customer-contact positions:

- chef/cook
- waiter/waitress
- receptionist
- tour guide
- secretary
- cashier
- driver
- accountant
- maintenance worker
- bar tender

Turnover rates for these jobs are high. Employers do not seem to realize the benefits to them of having a trained workforce that stays on; they do not value their employees or the skills they deliver.

Some of the skills that must be delivered at the most basic levels of employment for the categories listed above are as follows:

- communication
- customer service
- quality control
- safety procedures
- security procedures
- customer relations
- sanitation
- human relations
- first aid

Trevor Hamilton's assessed that 61,500 employees (across the entire range of employees) will require training over the next five years. This training includes both customary and remedial training and is offered at a number of training facilities, including HEART, the College of Arts, Science and Technology (CAST), and TAP. Of these, about 31,000 employees need skill upgrading in the areas mentioned above; 13,500 will need training to fill vacancies; and about 17,000 will need training to fill new positions in the next five years. The range of employees is from entry-level employees to experienced employees taking on new skills (see Chapter VIII, The Education and Training System).

Approximately twenty-six functional areas are considered to be critical success skills in the Jamaican hospitality industry. To properly upgrade each functional area, different training skills need to be applied. The hospitality industry can and does give specific hands-on training in each of these areas. It is unclear what capacity Jamaica has to provide these skills since the current training is lacking. A proper assessment needs to be done of the quality and capability of the training that is provided.

Functional areas include

- food preparation
- food hygiene
- food storage
- food grading
- sanitation
- textile/fabric care
- human relations
- cost control
- customer relations
- safety procedures
- supervision
- first aid
- service quality

- purchasing
- communications
- office practices
- plumbing
- security procedures
- drink preparation
- report writing
- inventory management
- sales/marketing
- financial administration
- electrical
- foreign language
- mechanical

In the new distinction "ecotourism," skills needed include language skills, interpretive skills related to describing the attraction, greater sensitivity to the clients' perspectives, greater scientific understanding of natural attractions, and first aid.

WORK PLACE PRACTICE OF EMPLOYEES IN SMALL HOTELS AND SMALL-SCALE TOURISM ATTRACTIONS

Small hotels and tourist attractions have many varied working structures. While 60 percent of the hotels in this country have less than twenty-five rooms, most are run inefficiently, certainly in relation to the larger hotels. TAP did a survey, conducting inspections of 1,330 tourist attractions, including hotels, villas, restaurants, rental car agencies, and dive shops. Between 43 percent and 56 percent of the various attractions surveyed did not meet the operational standards set by TAP to measure quality of services. Stephanie Belcher, director of TAP, states that these standards were set quite low. Some of these standards included cleanliness, basic levels of service, friendliness, and the presentability and clarity of information.

The small-scale sectors of the tourism industry suffer from a lack of qualified labor. The primary factors have to do with mismanagement, a poor educational system in Jamaica, and the poor financial status of these smaller hotels and attractions. Small hotels, in many cases, are barely managing, heavily leveraged, and unable to borrow at reasonable rates because of problems with government classifications of hotels and policies on interest rates. For example, there are classifications for all the larger hotels, but small hotels can be villas, bungalows, cottages, "ecolodges," "Great Houses," and many other distinctions that the government does not recognize. Therefore, a large hotelier will be granted certain government tax credit benefits for which the smaller properties do not qualify.

Marketing does not happen efficiently, and the occupancy tax unfairly hurts small operators since it is calculated on a per head or per night basis, which unfairly taxes the smaller properties vis-à-vis the larger hotels on a percentage basis.

In addition, training is not happening because smaller hotels have staffing problems and cannot replace someone for a short time. Training needs to be more community-oriented so that staff do not have to travel far to receive it.

There does not appear to be a regular process for promotion, job security, wage policy, employee participation in "management decisions," organizational structure, ensuring product/service quality, integration of human resource practices, long-term company strategy, or special opportunities for women. Rather, these entrepreneurs seem to do most things on an "ad hoc" basis, without much thought for long-term planning, budgeting, or analysis. Many of these small businesses are not easy to change and may not be open to much change, as is often the case with small "ma-and-pa" type businesses. Because the range of data varies greatly, it is difficult to understand much of the information gathered.

Entry Level

According to industry experts, including director of JTB, JHTA, and TAP, the lack of secondary education in the sector is a tremendous problem. While this may not be key to every job, certain general skills are presumed to be needed in most of these jobs. One statistic was that only 15 percent of entry-level employees are high school graduates. Basic needs identified at this level include communication, human relations skills, personal hygiene, service skills, safety skills, security procedures, and first aid.

Evidently, modern management practices and team approaches do not work in Jamaica. The theory is that if two employees are illegitimately absent, everyone else would "cover" for them (that is not tell the employer about their absent colleagues). The employers had a greater fear of collusion from their employees to protect each other, steal things, and organize dissent, than they perceived additional benefits for themselves and their employees.

Finally, work ethic and personal responsibility are missing. It is difficult to have employees understand the importance of being on time. There is no level of personal responsibility for performance at this level. Accountability was weak.

Middle Management

Very few middle managers are well trained. There is resistance to paying for the training, as the perception is that highly skilled middle managers will leave the firm for more money elsewhere or for jobs overseas. The perception fuels the attitude "why train anyone anyway when they'll soon leave...?" Expatriates are occasionally being hired at international salary levels because owners claim they cannot find the skilled employees they need here in Jamaica. It is unclear how widespread this practice is.

Basic skills in this sector include learning how to manage people, how to read and write a report, how to prioritize and work on several things at once, how to take initiative, how to write or manage a marketing campaign, how to increase efficiency, and how to motivate employees.

Senior Management

There seems to be a problem in this sector of the labor force as small hotels and attractions have unique needs. Many owners do not seem to know what it takes to run a business successfully or what special skills and knowledge are needed to succeed in the tourism and hospitality industries. Some of these needs include tight management, an ability to manage employees so they are able to perform many tasks, a clear vision of how to market the hotel or attraction, and the marketing niche (if any) one is pursuing.

Many of these owners do not live on site and do not manage day-to-day affairs. Further, many of them do not seem to have much background in the travel industry and do not necessarily understand how to run a small hotel or tourism attraction. They do not understand many concepts basic to the tourism industry including how to market, how to pursue niches, how to improve quality of service and operations, how to build repeat clientele, and how to cut costs. Senior management is often the source of most of their own problems.

POTENTIAL ACTIONS

Several initiatives were reviewed by the team as possible means to improve the skills base of the sector:

- Fund the International Executive Service Corps regionally based training programs. This could help smaller hotels and attractions obtain the localized and regional training required in the smaller hotel and attraction sectors. This kind of hands-on training is necessary for staff who cannot leave these smaller hotels and attractions. This can also impact senior management.
- Work with TAP to organize seminars that focus on the smaller hotel and tourism attraction labor needs.
- Support public education about tourism, such as public awareness programs that are crucial to the success of the tourism industry. Tourists need to feel welcomed by Jamaicans; if the perception is that these visitors are contributing to the economy and creating jobs and a much greater tax base, perhaps Jamaicans can be more welcoming, smile more, and treat tourists better. As mentioned above, tourism is of critical importance to the Jamaican economy.
- Fund better linkages between private-sector tourism operators and the public education system so that basic educational needs are better met. There seems to be a disconnection between what is needed in tourism sector labor market and what is being produced by both the secondary education system and the vocational training and technical schools.
- Similarly, establish a mechanism for good dialogue among the private tourism industry sector; the University of West Indies, CAST, and HEART; and the government

ministries responsible for education and training. This currently does not exist as the perception in the industry is that none of the training entities do that good of a job. Therefore, many of the larger hotels pay for their own training programs, and many of the small to midsize tourism firms are not organized well enough to collectively train their employees.

- Help fund a mechanism that will pull together all smaller hotel/tourism attraction entities. This entity could focus on the special labor needs of small tourism and ecotourism attractions and include training and upgrading of the labor force throughout the small hotel and attractions market.
- Educate the public about responsible ecotourism. Through development education programs, USAID should support NGOs to expand the effort they have already begun to reach the Jamaican public about the importance of ecotourism, what responsible travel and conservation is, and where to find it.

CHAPTER VIII

THE EDUCATION AND TRAINING SYSTEM

The skills training system is comprised of a network of public and private institutions. Training is provided in the formal system in secondary and tertiary institutions and in nonformal facilities operated by a variety of public and private entities. The training system is fragmented and characterized by insufficient resources, including staff, infrastructure, and equipment and inadequate information for effective planning. Until recently, there were no occupational standards for guiding skills training and no mechanisms for certifying worker's skills or for accrediting training institutions.

Recent government initiatives to strengthen the system include (1) restructuring of the national training agency to provide more coherent management of the system and (2) establishing the National Council for Technical Vocational Education (NCTVE), the legal entity mandated to establish occupational standards, certify skills workers, and accredit training facilities.

At present, the skills training system is not adequately training for the key sectors. Training positions are inadequate to meet demand. In addition, the system emphasizes preemployment training with little provision for upgrading the existing workforce, and the vast majority of training resources are devoted to training for entry-level occupations rather than to addressing the critical shortage of more skilled artisans, craftspersons, and supervisory and management personnel. No industry-specific management training is geared to the needs of the medium and small businesses that dominate the food processing, light manufacturing, information processing, and hospitality industries.

PREPARING CURRENT AND FUTURE LABOR FORCE

Formal Education

The formal education system is comprised of public and private preprimary, primary, secondary, and tertiary institutions. Enrollment rates are 98 percent at the primary level, 83 percent at the junior secondary level (grades 7-9), 63 percent at the upper secondary level (grades 10-11), and approximately 5 percent at the tertiary level. It should be noted that the statistics on enrollment rely on data produced by the Ministry of Education and Culture (MOEC). These statistics inflate enrollment to an unknown degree, however, no alternative source of data on the education system is available.

The quality of the education system has declined. Public primary education is characterized by inadequate financial resources; inadequate teaching materials; a relatively well-trained, but poor quality teaching force; and a dysfunctional examination system. Estimates indicate that between 30 and 40 percent of sixth grade students are functionally illiterate.

Secondary level education is provided in a stratified and inequitable system characterized by wide disparities in the type and quality of programs offered. Under the current system, there are six types of secondary level schools: all-age schools, new secondary schools, traditional high schools, technical high schools, comprehensive high schools, and vocational/agricultural schools. These schools differ significantly with respect to the ability of students recruited, curriculum, expenditure per pupil, teacher qualifications, facilities, instructional quality, learning materials, and institutional support.

Vocational programs are offered in all types of secondary schools; however, the system does not have the financial resources to support the range of vocational course offerings that currently exist in the secondary school system. Workshops and teaching materials are inadequate, there is a chronic shortage of qualified vocational instructors, and practical work-experience opportunities are very limited.

Pass rates on exit examinations from the secondary school system are low. In 1989, only a quarter of all eleventh grade students in new secondary schools passed the language arts exit examination and only 5 percent passed the mathematics examination. Performance on exit examinations from the more prestigious high schools is also poor, and the performance of Jamaican students lags behind that of students from other Caribbean countries.

Data from the recently completed UNDP/MOE tracer study of secondary school graduates indicates that all types of secondary-level schools are doing a poor job of preparing graduates for the labor market. One year after graduation, unemployment rates among labor force entrants ranged from a high of 41 percent among graduates of traditional high schools to a low of 25 percent among graduates of the technical high schools.

Jamaica has already begun to address the quality of education at the primary level. Curriculum reform, provision of complementary inputs, upgrading of instructional quality, decentralization of schools administration, and beginning establishment of a national assessment program have been implemented with assistance provided through two USAID and two IDB projects.

The government is also committed to improving the quality and equity of secondary education. A major reform of secondary education has been officially adopted. With assistance from the World Bank, this reform program will replace the existing system of lower secondary education with a junior high school program that provides a common curriculum giving more equal education opportunity to students. The common curriculum will include consolidation of specialized vocational curricula into a technological studies curriculum.

Tertiary-level technical and management education is provided in public and private institutions including the University of the West Indies (UWI), the College of Arts, Science and Technology (CAST), the National Tool and Engineering Institute (NTEI), the Maritime Training Institute, the Institute of Management and Production, the Jamaica Institute of Management, the West Indies College, and others. A striking feature of the tertiary system is its inability to attract sufficient numbers of students with the minimum entry requirements. As a result, most tertiary

institutions offer remedial programs in which students spend a year upgrading their entry qualifications. The result is provision of secondary education at tertiary-level costs.

Development needs for tertiary-level technical education programs include upgrading of curriculum, laboratories, and workshops to reflect scientific and technological advances. Several externally funded initiatives have been directed at upgrading the quality of tertiary-level technical education and training. Recent project support has provided assistance to CAST to strengthen the Building Department (USAID); establish the Caribbean School of Architecture (EEC and ODA); establish an Entrepreneurial Extension Center; strengthen the business education, computing, hospitality, and tourism programs (CIDA); strengthen health science programs; establish a B.S. in Health Science (Kellogg Foundation); establish a B.S. program in Physical Planning and prepare a postgraduate program in Urban and Rural Development Planning (Netherlands); and upgrade the bakery project (USDA).

The IDB, with cofinancing from the Caribbean Development Bank, is providing support to the UWI to strengthen offerings in science and technology and to improve distance education facilities. USAID support is directed at institutional strengthening of the management and training capabilities of the Department of Management Studies at UWI. CIDA is providing assistance for improving management systems, extending the distance education facilities, and upgrading teaching and curriculum in sustainable development. The EEC is providing assistance to strengthen agricultural training and research and to expand dormitory facilities.

Nonformal Training

Employment related training in Jamaica is provided by a variety of public and private institutions including the Human Employment and Resource Training Trust/National Training Agency (HEART/NTA) through its seven academies including School Leaver's and Apprenticeship Programs, Vocational Training Centers, the Jamaican German Automotive School (JAGAS), and over forty community projects; CAST; the Vocational Training Development Institute (VTDI); NTEI, a Division of the National Tool and Engineering Company, previously operating by Jamaica Promotions Corporation (JAMPRO) as the Tool Makers Institute; and numerous private and nongovernment-operated programs.

The system is fragmented by the provision of training by numerous agencies with no consistency in the quality of training between providers. There is considerable duplication in programs in urban areas and limited access in rural areas. This is especially true outside the greater Kingston area. Nonformal training is heavily weighted in favor of preemployment training at the lower skill levels, and opportunities for continuous upgrading of skills among employed workers are limited. Training for the higher skilled and more technical occupations is extremely limited and essentially nonexistent outside of Kingston.

HEART programs, including the academies, School Leaver's Program, the VTDI, HEART special projects and now the programs formerly administered by the Ministry of Youth and Community Development (the Vocational Training Centers and JAGAS) are supported by the

HEART 3 percent tax. HEART also provides a partial subsidy to the NTEI. Firms pay a 3 percent HEART tax on payrolls in excess of J\$7,222 per week. The HEART tax is fully dedicated to training. In FY1992/1993, revenues to the HEART/NTA were equal to J\$378 million, including J\$318 million from the HEART 3 percent tax. In FY1992/93, expenditures by HEART/NTA were equal to J\$213 million.

The effectiveness of the nonformal training system is seriously impaired by the weak academic preparation and poor work attitudes of trainees. Most programs suffer from a chronic shortage of trained instructors with relevant industrial experience and from a lack of well-equipped and technological relevant workshops. Before the establishment of the NCTVET in 1994, there was no mechanism for accreditation of skills training of programs and certification of the occupational skills of graduates. Linkages between training institutions and the private sector are weak. Training programs are poorly articulated, and progression among programs at different levels is unclear. Program planning is constrained by the lack of adequate labor market information. HEART/NTA has undertaken two sector studies in an attempt to move toward more market-driven planning. However, studies such as these are static and do not provide up-to-date information to guide program planning and vocational counseling.

There is little information regarding the outcomes of nonformal skills training. A tracer study of HEART 1991 graduates indicates that approximately 69 percent of graduates were employed. This is significantly higher than a control group that did not receive training. However, 51 percent of employed graduates of the data-entry program and 45 percent of those trained in garment construction are working in an area unrelated to their field of training. The relevance of HEART hospitality training programs appears higher. Employment rates among graduates of the hospitality training program are higher than those among graduates of other programs, and between 65 and 85 percent of graduates of the hospitality training academy are employed in their field of training. There is no information about the effectiveness of other nonformal training programs.

Two recent developments in the management of the training system have been the establishment of the National Training Agency and the NCTVET. The HEART Trust was restructured as a national training agency (HEART/NTA) in 1991 to enable it to better carry out its mandate to develop, coordinate, monitor, encourage, and provide finance for the training, employment, and placement of various levels of skilled personnel. Since then, consolidating the nonformal system and rationalizing the provision and financing of nonformal programs has progressed somewhat.

Enacted into law in 1994, the NCTVET is the legal entity that will be responsible for approving standards of competence for technical vocational occupations, certifying persons who meet these standards, and accrediting training providers. The NCTVET is also mandated to consolidate the nonformal training system, to focus training activities more clearly on productive employment in the priority growth areas, and to foster greater private-sector participation in the planning and delivery of training.

HEART/NTA, with input from industry representatives, is establishing standards for entry-level skills. To date, standards have been established for entry-level occupations in the hospitality, building/construction, commerce/business, and cosmetology sectors. Curriculum that reflects these standards has been developed by HEART/NTA and are to be implemented during 1994 in HEART programs and in new secondary and technical high schools in the formal system. Graduates will be certified by the NCTVET.

Other recent developments in the nonformal system include the restructuring of the JAMPRO Toolmakers Institute as a private company and the divestment of the HEART data-entry program at one of the two academies providing this training. HEART is exploring possibilities for divesting other programs.

QUALITY, RELEVANCE, RESPONSIVENESS, EFFICIENCY, AND CONSISTENCY OF EDUCATION AND TRAINING SYSTEM

Earlier business surveys, studies, and anecdotal evidence from the present study indicate that employers are dissatisfied with the quality of labor, that the quality of training varies by sector and by training provider, and that the public-sector agenda has been heavily dominated by preemployment training for entry-level skills, although the most critical skills gaps occur with respect to higher skill level occupations.

This report reviews training for the core occupational competencies as identified by the industry specialists on the Labor Force Assessment Team to assess the quality and relevance of the training system. The core competencies by sector are given below. (It was impossible to quantify the present or projected supply of training for these core competencies during the brief period of the mission.)

- Information Services
 - programming
 - data entry
 - telemarketing
 - management
- Food Processing
 - machine mechanics
 - management
- Light Manufacturing
 - machine mechanics
 - management

- Tourism
 - housekeeping
 - accounting
 - front office
 - food/beverage preparation, service, and management
 - sales/marketing
 - guides/naturalists
 - management

Information Services

The primary source for data-entry training is HEART. Reports from employers in the sector indicate this training is of poor quality and that graduates perform well below the industry standard. Training in programming is provided at UWI, CAST, and several private institutions. CAST graduates enter the workforce with relevant skills, however, the supply of CAST graduates is not meeting existing demand. The training provided at UWI and private institutions is more relevant to work with information systems than in information service firms. No industry-specific management training for managers of information processing firms is available. The UWI graduate program in information systems management is designed for individuals who will manage information systems within a company rather than for managers in the information services sector.

The industry specialist identified telemarketing as an area in which the Jamaican information services industry should begin to orient itself. If demand from industry increases, it appears that the system can provide telemarketing training. Although there are no ongoing telemarketing training programs, HEART has provided tailored telemarketing training at the request of industry.

Food Processing

The food processing industry is labor intensive and relies primarily on unskilled labor. Demand for preemployment training is limited. Managers emphasize that the relevant skills for entry-level workers are literacy, numeracy, and workplace attitudes. Machine mechanics are essential to the food processing industry. Training in machine mechanics is provided by CAST, JAMPRO (through the National Tool and Engineering Institute), the technical high schools, and the apprenticeship program. There appears to be a critical shortage of skilled machine mechanics. Interviews with managers of food processing firms indicate that CAST graduates are of high quality and come with relevant skills. Assessment of the quality of the other major provider of machine mechanics training, NTEI, is mixed. Anecdotal evidence provided by the industry specialist is positive; however, case material from UWI Management Studies Department indicates that the quality of output is not satisfactory. To date, the restructuring and privatization of this training program has not had an impact on the quality of training. There is no industry-specific management training for managers in the food processing industry.

Light Manufacturing (Apparel)

Preemployment training for machine operators is provided by secondary level schools in the formal system and in HEART programs and other public and private nonformal programs. HEART programs include GARMEX, a nonresidential training academy for the garment industry. Data from the present study indicates that preemployment training programs are not relevant to the needs of the industry. Managers report that new employees must be literate, numerate, and be able to sew a straight stitch.

Machine maintenance is a critical competency for the food processing industry. Training for sewing machine mechanics is provided by HEART and training in general machine maintenance by CAST, NTEI, the technical high schools, and the apprenticeship program. The same issues as identified in the discussion of machine mechanics training for the food processing industry apply to light manufacturing. There is no industry-specific management training for managers in the apparel industry.

Tourism

There is a widest diversity of programs for the tourism sector. Programs are offered for all skill levels from entry level to senior management and by a variety of providers including formal system schools, HEART, CAST, UWI, several community colleges, TAP, and others. Industry-specific training for middle and senior management offered at CAST and UWI, however, focuses on larger hotels and not on the needs of medium or small facilities or on the management of ecotourism facilities. Existing training programs can supply only a fraction of the required training for the industry. The only skill identified by the sector specialist as specific to ecotourism is that of nature guide. At present, there is no nature guide training offered in Jamaica.

The impact of recent reforms in the system is evident in the tourism sector. Occupational standards and accompanying modularized curriculum have been developed with industry input for housekeeping, accounts, food/beverage preparation, food/beverage services, and hotel maintenance. This curriculum will be introduced in HEART programs, technical high schools, and new secondary schools in 1994. The impact of these reforms on training for the tourism industry remains to be evaluated.

Gender Biases in Training

Significant gender differences in training are present. Existing employment patterns in which female workers are concentrated in occupations and businesses with low economic return are largely determined by a training system that channels females into programs that prepare them for lower-paying occupations. Female trainees enroll primarily in the commercial, home economics, garment, and housekeeping trades; males enroll primarily in industrial arts and related subjects. These enrollment patterns have shown little variation during the last decade. In the four key sectors, employment in the low-paying entry-level occupations, such as data-

entry clerks in information services, machine operators in apparel, cooks in the food processing industry, and housekeepers in tourism, is almost exclusively female while machine mechanics are predominantly male. These patterns reflect the gender bias apparent in the training system. An interesting exception to this is the growth in the number of females in management training and management occupations.

CAPACITY TO MEET JAMAICAN LABOR FORCE REQUIREMENTS IN KEY SECTORS

The present review of the training system indicates that, at present, the system is not doing an adequate job of training for the key sectors. The training system emphasizes preemployment training with little provision for upgrading the existing workforce. The vast majority of training resources are devoted to training for entry-level occupations as opposed to training skilled craftspersons, artisans, and supervisory and management personnel.

Private Sector Linkages

Traditionally, linkages between training institutions and the private sector have been weak, and few programs provide work experience or cooperative education programs of sufficient duration to enhance the relevance of training. The most notable exception is CAST, which is repeatedly singled out by employers as a training institution that provides high quality and relevant training. CAST programs are designed with industry input and that most CAST programs include a cooperative work experience.

Recent Training System Reforms

At the present time, the training system is in transition. The reforms being undertaken through HEART/NTA, including establishing a legal entity to certify occupational skills in workers and accredit training institutions, developing occupational standards and modular curriculum based on these standards, and divesting training institutions and programs, are designed to enhance the quality and relevance of nonformal training. The initiatives are in progress and their impact on the skills training system cannot be evaluated at the present time. The team does not recommend intervention in the institution-based training system until these initiatives have been fully implemented and their impact on the training system has been evaluated.

Management Training

A critical gap in the training system exists with respect to management training for the key sectors. There are no management training programs that provide industry-specific training or that focus on the needs of medium and small enterprises. When such programs exist, they tend to emphasize marketing strategies and not strategic planning, such as human resource development planning. This is a particularly critical gap given the management weakness in the four key sectors.

On-the-job Training

Investment in on-the-job training, the most cost-effective vehicle for delivery of relevant skills training, is insufficient. Several factors constrain the effective provision of in-plant training in Jamaica, including the lack of orientation to human resource development by managers, the lack of training expertise within firms, and the reliance on obsolete technology within firms. Finally, the only tax incentive for training is the credit on the HEART 3 percent payroll tax granted to a firm that provides on-the-job training for a trainee in the HEART School Leaver's Program.

Training provided on-site by training institutions at the request of a firm or group of firms and tailored to the individual needs of the firm(s) is an effective vehicle for enhancing the quality of on-the-job training. HEART, CAST, the Institute of Business at UWI, and private management schools provide tailored programs for individual firms; however, all institutions report that limited number of requests from the private sector have been forthcoming.

Information Gaps

The training system suffers from a lack of information about the requirements of the labor market. As a result, programs are essentially supply driven. In addition, there is very little information about the outcomes of training and no information on the relative cost effectiveness of different training programs. This information vacuum inhibits the development of relevant, responsive, quality, and cost effective training.

Academic Foundation of the Workforce

The academic foundation of the workforce is poor and significant numbers of new labor force entrants and older workers are functionally illiterate. Nonformal formal vocational programs are constrained by the lack of basic academic skills in trainees. HEART programs do not attract sufficient numbers of trainees who function at a ninth grade reading and mathematics level; therefore, HEART has, as a result, introduced a remedial year for applicants who do not meet academic qualifications for entry.

RECOMMENDATIONS

Several recommendations emerge from the above review:

- Develop a series of seminars to provide industry-specific management training geared to the needs of medium and small enterprises for managers in the four key sectors.
- Strengthen in-plant training capability through increased reliance on tailored programs offered to individual firms or groups of firms at the request of the private sector. The lack of orientation on the part of management to human resource development needs with their firms implies that firms will need assistance in identifying their human resource needs. This assistance should be provided as part of more general technical assistance

to firms designed to assist them in developing a strategic plan for the enterprise, including a plan for capital and human resource development, marketing, etc.

- USAID should work with the IDB to coordinate the developing of this strategic plan and to increase sensitivity within the government and with the donor community about the need to strengthen the labor market information system. (The IDB Human Capital Development Project will provide assistance for the formulation of a strategic plan for the development of the Labor Market Information System.)
- Use existing tracer study and budgetary data for the secondary school system and for HEART programs to undertake cost-effectiveness analysis of formal and nonformal technical/vocational education and training programs.
- Increase support for computer-assisted literacy and numeracy training (such as that introduced into secondary schools through Jamaica Computer Society) and make computer-assisted learning facilities available to existing workers as well as to trainees in vocational programs.

CHAPTER IX

MAJOR HUMAN RESOURCE CONSTRAINTS

AND RECOMMENDED ACTIONS FOR THE DONOR COMMUNITY

FINDINGS

The consultant team undertook both a broad overview of Jamaica's labor market as well the deficiencies of the labor force in the four export sectors studied. Four major constraints have affected the labor force: low levels of basic skills of the workforce, employer practices that do not reward new skills, a training system that is supplier oriented and disconnected from the needs of the private sector, a labor market information system that does not provide practical guidance to the training institutions.

Low Levels of Basic Skills of the Workforce

The essential literacy and numeracy skills of the labor force are lacking. Jamaica's basic education system, at both primary and secondary levels, has been declining at an alarming rate over the past decade. Functional illiteracy among school leavers is high.

The implications of this condition are two fold. First, employers have difficulty finding people with minimum competence. Second, once such people are employed, their ability to be trained is more difficult because of the shortfalls in their basic education.

Finally, as a corollary to the low level of competence, school leavers have a poor work ethic and are not well adapted to the changing and disciplined environment of the work place. Their attitudes toward work frequently make them resistant to a disciplined work schedule as well as resistant to developing the new skills required to advance in the work place. From the workers' viewpoint, there is no evident career path they can follow, thereby stifling motivation to improve their own well-being on the job.

Employer Practices That Do Not Reward New Skills

As most employers do not have human resource development plans for their operations, few incentives are offered in the work place to motivate the labor force. Although employees may develop new skills, they are not typically rewarded by significant changes in their wages or even responsibilities.

In-house training programs in the firm are rare, and where they do exist, they are for developing very minimal skills (such as straight stitching in the apparel industry). Employers generally do not grant work release for employees to attend outside training programs, nor do they finance many of these programs. Employees must, therefore, undertake training after hours, frequently

far from their work place or homes, contending with poor public transportation and security problems.

Few employers are actively involved with local schools to assist teachers in transferring to students the most appropriate skills. Therefore, the relevance of school education to both students and employers is usually lacking, with the exception of basic literacy and numeracy.

A Training System That Is Supplier Oriented and Disconnected from the Needs of the Private Sector

Jamaica's training system has made many strides forward and is relatively experimental and adaptable to new demands. However, it does not interact naturally or easily with the ultimate consumer of workforce skills—the business community. The natural orientation of the training system is toward developing new programs without close consultation with the firms who will use the new skills. The result is a disconnection between the supply and demand sides of workforce development.

A Labor Market Information System That Does Not Provide Practical Guidance to the Training Institutions

A series of mechanisms for broad consultation between the institutions and the private sector exists. The flow of information, however, seldom reflects the real-life situation of the firm. The relative ineffectiveness of these formal channels is acknowledged by both sides, pointing to the need for more informal and direct communication between firms and trainers.

RECOMMENDED ACTIONS BY USAID/JAMAICA

The thrust of this workforce assessment has pointed to the weaknesses of four components:

- the lack of strategic management in Jamaica's private sector, including human resource development
- the lack of management training that addresses these issues on a practical, sectoral basis
- the decline of Jamaica's basic education system and the lack of basic literacy, numeracy, and work ethic
- the weakness of the institution-based training system in tailoring its programs to the needs of employers and employees alike

The consultant team was asked to address the needs of the four leading export sectors and outline a range of options that the donor community, in general, and USAID, in particular, might consider within the context of their existing programs to alleviate some of the most severe constraints. These actions fall into four categories:

- creating sectorwide awareness within the management community of the need for competitive strategies
- directly assisting exporting companies to develop export strategies, including investment and human resource plans
- strengthening the various components of training related to the sectors, such as management, technical, and basic skills
- improving the information flow between employers and trainers

The following actions represent means that USAID can undertake within the context of its existing program mandate to assist these four export sectors.

- Raising the awareness of managers of the need for competitive export, investment, and human resource strategies
 - Within the context of the Export Development and Investment Project (EDIP), the Agricultural Export Services Project (AESP), and the Development of Environmental Management Organizations (DEMO), work with Jamaican groups such as the PSOJ's National Action Plan, the Jamaican Exporters Association (JEA), and the Jamaican Tourism Association to draw national attention to the precarious state of Jamaica's economic competitiveness and the need for action by the export sectors.
 - Assist in developing a series of workshops and conferences sponsored by these groups to discuss the future competitiveness of Jamaica's export industries and the urgent need for an active competitiveness policy.
 - Consider sponsorship of business missions by industry leaders to "best practice" industries in neighboring countries to observe how successful investment and export policies have been formulated.
 - Jointly sponsor with sector associations in the tourism, food processing, information services, and light manufacturing industries sector-specific workshops to discuss competitive strategies for these industries and required investments in labor, capital, and product development.
- Directing hands-on assistance to firms, individually or collectively, within each sector to define export, investment, and human resource strategies
 - Within the context of EDIP (working with JEA) AESP, and DEMO, expand assistance in working with managers to develop strong growth strategies, including human resource development strategies.

- Promote (with JEA and the Jamaica Promotions Corporation) sector-specific joint export and production initiatives, such as
 - developing a distinct market image for Jamaican tropical food products in the North American market through cooperative efforts among producers
 - developing Jamaican designs of clothing and joint marketing of different types of apparel through cooperative efforts by the apparel industry
 - positioning Jamaica for higher value-added operations through concerted efforts of information services industry
 - differentiate Jamaica as the Caribbean's premier ecotourism destination through efforts by the tourism industry
- Developing sector-specific training programs for managers and workers within context of EDIP, AESP, and CLASP II.
 - Direct management training assistance to managers in each sector to plan development strategies and promote possible joint operations. (These efforts might take place within the current USAID assistance programs CLASP and the UWI Management Project.)
 - With EDIP/AESP/DEMO assistance, provide customized on-site technical training through CAST, the Human Employment and Resource Training Trust, NTEI, IOB, and training of trainers.
 - Strengthen vocational instruction through work-release programs for instructors to participate in industry familiarization programs.
 - Assist training organizations in designing industry-specific, on-site training programs, using different delivery systems, such as
 - geographic clustering or grouping of firms for both training and information purposes; creating "training districts"
 - rotating training by using firm facilities or centralized public facilities
 - regularly and frequently surveying cluster members to gain better understanding of needs on plant floor and in hotel and tourist facilities
- Funding of individuals to act as agents or catalysts whose job is to put together training proposals and develop plans for business, including human resource development plans

- Put an activist go-between at work to "get things moving" within a sector. Funding would come from donor agencies.
- Possibly use an IESC employee to be a catalyst who is neutral, experienced, and dynamic in getting things done.
- The decline in the education system has been noted as a critical weakness. The USAID Primary Education Assistance Projects I and II and numerous other externally funded projects are directed at enhancing the quality of the education system. In combination, these projects are designed to strengthen curriculum at the primary and lower secondary levels, improve teaching capability, improve the physical infrastructure of schools, develop alternatives to the present dysfunctional examination system and enhance the management capability in the central MOEC, in the Regional Offices of the MOEC, and at the school level. Additional large-scale efforts to improve the quality of education are not recommended until the impact of existing efforts can be evaluated. However, the team does recommend support for computer assisted literacy and numeracy training at the primary and secondary level and in non-formal training programs. Computer assisted literacy and numeracy training programs, such as those piloted in secondary schools by the Jamaica Computer Society, have been shown to be cost effective in increasing literacy and numeracy skills among Jamaican school children.

APPENDIX A

INDIVIDUALS INTERVIEWED

Government, Association, Training Institution, and Donor Agency Officials

Dr. Arnaldo K. Ventura
Special Advisor to the Prime Minister on Science and Technology
Office of the Prime Minister

Tony Irons
Permanent Secretary
Minister of Labour and Welfare

Charles Ross
Executive Director
The Private Sector Organization of Jamaica

Glenford G. Millin
Economist
Private Sector Organization of Jamaica

Dr. Robert Chambers
Consultant
Private Sector Organization of Jamaica

I.V. Polly Brown
President
Jamaica Promotions Corporation

Donald Foster
Group Director
Industrial Training and Engineering Services Division
JAMPRO

Pauline Gray
Executive Director
Jamaica Exporters' Association

Robert Gregory
Executive Director
HEART

Tom McArdle
Consultant Corporate Planner
HEART

Alfred Sangster
President
College of Arts, Science and Technology

Cezley I. Sampson
Director
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Peter R. Houliston
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Canadian High Commission

Margery A. Newland
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Francine Hanna
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Jerry Wood
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William Craddock
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Chris Brown
Office of Natural Resources and Agricultural Development
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Chapter III—Labor Market Conditions

Jeannette Grant-Woodham
Executive Director
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Doret Crawford
Program Director
Jamaican Institute of Management

Jennifer Green
Planning Institute of Jamaica
National Manpower Committee

Vilma Freedman
Planning Institute of Jamaica
National Manpower Committee

Ted Seay
Labor Attache
U.S. Embassy

Robert Chambers
USAID Consultant

Polly Brown
President
Jamaica Promotions Corporation

Donald Foster
Director of Industrial Training
Jamaica Promotions Corporation

Charles Ross
Executive Director
Private Sector Organization of Jamaica

George Fyffe
Executive Secretary
Bustamente Industrial Trade Union

Alvin Sinclair
Bustamente Industrial Trade Union

David Gordon-Rowe
Research Director
Joint Trade Union Research and Development Center

Albert Gray
President
Small Business Association of Jamaica

Robert Gregory
Executive Director
HEART/NTA

Tom McArdle
Director for Planning and Program Development
HEART/NTA
Ministry of Labor and Welfare Anthony Irons, Permanent Secretary

Chapter IV—Information Services Sector

Promotional Organizations

I.V. Polly Brown
President
JAMPRO (Jamaican Promotions Corporation)

Donald Foster
Director Industrial Training and Engineering Services
JAMPRO (Jamaican Promotions Corporation)

Jean Chan
Director Information Services
JAMPRO (Jamaican Promotions Corporation)

Lisa Grant
General Manager
International Information Processing Inc.

Lee Bailey
Chairman
Montego Bay Chamber of Commerce

Ambassador P C.V. King
The Textile and Apparel Institute

Ex-Free Zone Companies

Carol Watson
General Manager
DPK

Lennox Robinson
Managing Director
Transfer Data

Wendell Smith
Chairman and Managing Director
M C Systems

Hugh Croskery
General Manager
Eagle Information Systems

Robert Bedasse
Treasurer
Eagle Information Systems

In Free Zone Companies

Maxwell Wynter
President and CEO
Digiport

Sandra Peart
Marketing Director
Digiport

Michael Hicks
Managing Director
Baytel Marketing Agency

Michael HoSue
General Manager
Mona Informatix

Political and General Business

Seymore Mullins
Vice President Jamaica

Bobby Pickersgal
Minister of Transport
Vice President Jamaica

Howard R. Taylor
President and CEO
Airports Authority of Jamaica

Howard McIntosh
Managing Director
Corporate Merchant Bank

Chapter V—Food Processing Sector

Christopher Bond
Industrial Relations Manager
Grace, Kennedy Ltd.

Miss Mabel Tenn
Division Manager, Hi-Lo Chain Stores
Grace, Kennedy Ltd.

Michael Canton
Director
Island Food Processors

John Burrowes
Director
Busha Brown Company Ltd.

Sandra Morgan
General Manager
Ind. Commercial Developments

Joy Williams
Plant Manager
Canco Ltd.

Patrick Smith
Export Sales Manager
Jamaica Biscuit Co. Ltd.

Vanessa Spencer
Manager, Project Analysis
Jamaica Producers Ltd.

Claude Clark
CEO
Highgate Foods

Anne Ramsdell
Allied Business Consultants

Robert Gregory
HEART

Trevor Hamilton
Consultant

Robert Chambers
Consultant

Chapter VI—Light Manufacturing

Kirk Taylor
Jacon Industries

Peter King
Jacon Industries

Michael Seepersaud
Crimson Dawn

Paulette Rhoden
Crimson Dawn

Maurice Rhoden
Crimson Dawn

Stuart Anderson
Jamaica Promotions Company

Polly Brown
Jamaica Promotions Company

Donald Foster
Jamaica Promotions Company

Howard Taylor
Jamaica Promotions Company

Omar Davis
Allied Business Consultants

Patrick Sleem
Satisfaction Garments

U. Philip Alexander
Grace Kennedy and Company, Ltd.

Webley Hollis
Airport Authority of Jamaica

Kenneth Morgan
Morgans Industries Limited

Dorothy Ramsey
Montego Bay Free Zone

Sheila Stephens
Montego Bay Free Zone

Patrick Gray
Small Business Association of Jamaica

Albert Grey
Private Sector Organization of Jamaica

Charles Ross
Private Sector Organization of Jamaica

Trevor Hamilton
Trevor Hamilton and Associates

Lee Bailey
Montego Bay Chamber of Commerce

Kenneth Morgan
Polyflex Foam Limited

Kenneth Morgan
Ther-A-Pedic cc Ltd.

Kenneth Morgan
Feeds and Grains Limited

Ultramod Ltd.
Norman McDonald

Barbara Smith
Ultramod Ltd.

Dorothy Over
LaModa Export Ltd.

Velma Sharpe
Jamaica Manufacturers Association

Seymour Mullings
Government of Jamaica

Howard McIntosh
Corporate Merchant Bank

Sharon Nickolson
Bike Athletic (Jamaica) Ltd.

Leo B. M. Ris
Bike Athletic (Jamaica) Ltd.

Valerie Viera
Textile and Apparel Institute

Pauline Gray
Jamaica Exporters Association

Anthony Hyde
Airwatt Company

Anthony Hyde
Travel Goods Ltd.

USAID Staff

Chapter VII—Tourism

Terry Williams
Bluefields Project

Josef Forstmayr
Managing Director
Round Hill Hotel and Villas

Caroline Thomas
Resort Holiday Service Manager
Villawise
Ocho Rios

Gregg Keesling
Marketing and Sales
Summerset Villages

Ricardo and Zola-Betancourt
Secretary General
Inter-American Institute of Tourism

Robert H. Mareneck
Director of Operations
International Executive Service Corporations

Dr. Trevor Hamilton
Chairman
Invercauld Great House and Hotel

Yvonne Walters
Regional Manager—Kingston
Jamaica Tourist Board

Desmond Henry
Managing Director
Countrystyle
Treasure Beach

Vernon Chin
Managing Director
Sea Shell Inn
Montego Bay

Jeanne Dixon
Director
Selective Vacation Services
Ocho Rios

Marcia Bullock
Manager
Groups and Conventions
Jamaica Tourist Board

Lionel Reid
President
Jamaica Hotel and Tourist Association

David C. Smith
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Jamaica Conservation and Development Trust

Steven Watson
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Jennifer Hylton
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Language Service Center
Ocho Rios

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Diana McIntyre-Pike
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Astra Hotel
Mandeville

Barbara Lulich
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Jamaica Grande

Gina C. Green
Director
Jamaica and Belize
The Nature Conservancy

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Jamaica Tourist Board

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Camille Needham
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Maurice Facey
Tourism Action Plan

Mrs. Stephanie Belcher
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Tourism Action Plan

Marguerite Gauron
Portland Environment Protection

Natascha F. Kessler
Caribbean Travel and Tours

Lynda Lee Burks
The Touring Society of Jamaica

Ann Adams
Jamaica Alternative Tourism and Hiking Assoc.

Rhema Kerr
Hope Zoo
Hope Gardens

Chapter VIII—Education and Training System

Ann Adams
Maya Lodge and Sense Adventures

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Donald Foster
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Technical Services Division
JAMPRO

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Alfred Sangster
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College of Arts, Science and Technology

Gordon Shirley
Chairperson
Management Studies Department
University of the West Indies

Althea Young
Consultant

APPENDIX B

DOCUMENTS REVIEWED

- "Economic and Social Survey of Jamaica," Planning Institute of Jamaica, 1989-1992
- "Labor Force Survey," Statistical Institute of Jamaica, 1993
- "Establishment Survey," Statistical Institute of Jamaica, 1992
- "Doing Business in Jamaica," Price Waterhouse Information Guide
- "Mid-Term Evaluation of the Export Development and Invest Project (EDIP)," USAID
- "Labor Market Diagnostic Study," Human Capital Development Pilot Project, IDB
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- "High Performance Work Practices and Firm Performance," U.S. Department of Labor
- "The Workplace Issues Discussions Guide," A Tool for Investors, U.S. Department of Labor
- "The New Workplace," Training Policy Staff, OWBL
- "JMA Buyers Guide"
- "Business Proposal for National Tool and Engineering Company"
- "Jamaica—A policy for Trade," Jamaica Confederation of Trade Unions
- "Jamaica Private Investment and Export Development Project: Staff Appraisal Report," World Bank
- "Heart Program Overview," HEART
- "Report on Jamaican Business Behavior," Chambers
- "Potential Effects of NAFTA on Apparel Manufacturing Among CBI Beneficiaries," USITC

- "Mid-Term Evaluation of Micro-Enterprise Development Project of Jamaica," GEMINI, USAID
- "Action Plan FY 1995/96," USAID—Jamaica
- "Country Profile," Jamaica, The Economist
- "Creating A High Quality Workforce," USAID
- "The Way Forward—A Strategic Plan for the Manufacturing Sector," JMA
- "Jamaican Information Services Sector Study," Intex, JAMPRO, 1992
- "Labor Market Newsletter," Planning Institute of Jamaica, 1991-1993
- "Manpower Analysis and Strategies for the Jamaican Hospitality Industry," Trevor Hamilton and Associates, HEART/NTA, 1993
- "Private Investment and Export Development Project," Staff Appraisal Report, IBRD, 1993
- "Statistical Bulletin," Ministry of Labor and Welfare, 1992
- "Technical Vocational Education and Training: Donor Assistance Position Paper," Lorraine Blank, MOE/USAID, 1991
- "Textiles and Sew Products," Sectoral Training Study, HEART/NTA, 1993
- "Tracer Study of 1990 Academy Graduates," HEART/NTA, 1992

APPENDIX C

SKILL LEVELS REQUIRED FOR INFORMATION PROCESSING

Chapter IV

- ability to follow instructions
- typing 40wpm +/- HEART diploma
- good English vocabulary
- production management skills
- basic comprehension
- programming
- reading skills
- memory retention
- human resource skills
- communication skills
- presentation skills
- development and procurement skills
- systems analysis capabilities
- programming skills cobol fox oracle etc
- numeracy
- good general knowledge
- accuracy

APPENDIX D

STATISTICS FOR INFORMATION SERVICES

Chapter IV

The following information represents actual replies from individual companies. Rather than using specific names, the companies have been labeled A to H.

GROWTH
(in percent)

	A	B	C	D	E	F	G	H	Average
1991-1992	30	65	33	0	20	0	25	0	21
1992-1993	20	60	25	0	30	0	25	0	20
1993-1994	20	na	na	0	na	na	25	0	11

Note: An "na" indicates that the information was not available.

EMPLOYEE LEVELS
(in percent)

	A	B	C	D	E	F	G	H	Average
1991-1992	20	0	33	0	10	0	na	0	11
1992-1993	15	50	25	0	10	0	na	0	21
1993-1994	0	30	na	0	na	na	na	0	8

Note: An "na" indicates that the information was not available.

DEMOGRAPHIC MAKEUP
(in percent)

	A	B	C	D	E	F	G	H	Average
Male	1	5	2	0	0	6	15	0	11
Female	99	95	98	100	100	40	85	90	88
Indigenous	100	100	100	100	100	70	95	100	96
Alien	0	0	0	0	0	30	5	0	4

EDUCATION
(in percent)

	A	B	C	D	E	F	G	H	Average
University	1	8	20	1	0	0	0	0	4
High School	60	90	75	99	100	100	100	0	78
Basic	38	0	5	0	0	0	0	99	17
Illiterate	0	2	0	0	0	0	0	1	1

SKILL
(in percent)

	A	B	C	D	E	F	G	H	Average
Is Fully Trained	45	80	35	90	100	90	na	0	55
Needs Training	30	10	55	10	0	10	na	100	27
Is Being Trained	25	10	10	0	0	0	na	0	6

Note: An "na" indicates that the information was not available.

AGE PROFILE
(in percent)

	A	B	C	D	E	F	G	H	Average
16-25 years	29	50	80	100	100	50	100	50	70
25-35 years	70	50	5	0	0	50	0	50	28
35-45 years	1	0	7	0	0	0	0	0	1
45-65 years	0	0	8	0	0	0	0	0	1

INCOME LEVELS PER ANNUM
(in thousands)

	A	B	C	D	E	F	G	H	Average
Base	36	38	24	48	14	250	31	24	31
Trained	60	47	48	na	48	400	63	60	54
Supervisory	75	na	73	72	na	600	na	120	85
Managerial	150+	na	200+	na	na	800	159	na	169+

MARKETS SERVED
(in percent)

	A	B	C	D	E	F	G	H	Average
United States	80	90	100	100	90	0	85	50	74
Dominican Republic	20	5	0	0	10	20	0	0	7
Europe	0	5	0	0	0	0	0	0	1
Carribbean	0	0	0	0	0	80	0	0	10

APPENDIX E

PRODUCTS MANUFACTURED IN JAMAICA (a representative list)

Chapter VI

craft boxes, bowls, toys, vases and jars
agro-chemicals
suitcases and handbags
pesticides, insecticides, soaps, cleaners, solvents
garments
fertilizers
pimento leaf oil
cosmetics
awnings
fabricated steel construction components
spices and seasonings
processed foods
furniture
paint
metal beds
mattresses
sanitaryware
window frames
kitchen cabinets
aluminum cooking utensils
foodstuffs
ceramics
batteries
cigars
foam
beer and other beverages
frame moldings
shoes
toiletries
newspapers and books
tires
transport vehicles
pantyhose
facial tissue
boxes
twine and cord
wicker furniture

woven polypropylene sacks
molasses
carpet
cattle feed
dog and cat foods
modular buildings
bed linen
building blocks