

HUMAN RESOURCES DEVELOPMENT AND THE SERVICES SECTOR IN THE EASTERN CARIBBEAN*

by

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1 Introduction

Over the past decade, the governments of the countries in the Eastern Caribbean (that is, Barbados, the Leeward and Windward islands) have actively sought to promote the services sector as an alternative path of economic development¹. Traditionally, these countries have relied on agricultural (sugar, bananas, nutmeg, etc) and light manufacturing production as an avenue for economic growth, employment creation and foreign exchange generation. Changes in the international economy and technological developments have resulted in a change in domestic economic policy. With world trade becoming more liberalized, the special preferences and trading arrangements which aided producers in the Eastern Caribbean are gradually being removed. The World Trade Organization (WTO) has been established to oversee the movement to a liberalized international trading environment. Developments in production and materials technology, including biotechnology, have reduced the demand for the products of the region. These developments have resulted in a change in the economic policy orientation in the Eastern Caribbean as the traditional sectors have been unable to meet the level of production needed to increase the standard of living of the population.

The governments of the region have therefore turned their attention to the promotion of the services sector in an effort to meet the economic needs of the population. Although early models of the economic transition of countries suggest a movement of production from agriculture to industrial then to services production, the focus of recent economic policy has been to push the development of the services sector rather than to expand the industrial (i.e., manufacturing) sector. The services sector, especially tourism and related activities, financial services and information services have been viewed as providing the means whereby the needs of the population can be met in the quickest time.

The transition from the production of goods, as in the case of agricultural and industrial activities, to the production of services however requires a new configuration of resource needs and relationships. Although the production of goods requires various types of services, the new focus on the services sector require a new set of skills which may not have been in existence before. For example, the cultivation, harvesting and distribution of bananas require a different set of human and non-human resources than the production of banking and insurance services. Therefore, as

governments seek to promote the services sector as an alternative path of economic development they must be cognizant of the new type of resource needs. In effect, the resource needs of the 'agrarian age' differ from those of the 'industrial age' and the 'information age'. With developments in information technology (i.e., hardware and software aspects of computer and communications systems), the current focus is on the resource needs of the 'new economy'.

It is generally regarded that the human capital (skills, knowledge, talent and competencies of people) needs of the services sector differ from those of the agricultural and industrial sectors.

With the exception of Barbados, the human capital base of the Eastern Caribbean is generally viewed as being relatively weak. A small percentage of the labour force in the Leeward and Windward Islands have received education beyond the primary level. Access to secondary schooling is restricted in the Windward Islands (Dominica, St Lucia and St Vincent and the Grenadines) and limited to the school places available. Coverage at the tertiary level is generally poor in the Windward and Leeward Islands compared with Barbados. The keenness to promote the services sector (i.e., tourism, financial, professional, information and entertainment/sports) can be thwarted because of a lack of an adequate supply of human capital in strategic areas of the sector's development. Sustained development of the services sector requires a sustained expansion of the human capital base of the country.

This paper reviews the human capital base of the Eastern Caribbean countries in an attempt to determine the 'areas of constraint' associated with services development. The structure of the paper is as follows: first, an overview of the performance of the services sector is undertaken, followed by an examination of the plans for the development of the services sector. Thirdly, the human resources requirements of these plans are assessed in the light of current and expected human resource supply. Finally, a plan for developing the human capital base of the countries to meet the demands of the services sector is presented. This plan involves both institutional and on-the-job education and training. Given the 'time to train and educate', it is imperative that these small countries engage in strategic forward planning to meet the challenges of a dynamic international environment.

2 An Overview of the Services Sector in the Eastern Caribbean

At a broad macroeconomic level, the services sector in the Eastern Caribbean has increased significantly over the past two decades. If the sector is defined to include construction and related engineering services, distribution services, tourism and related travel services, transportation and communication services, business and financial services and government services (i.e., health, education, etc), then national accounting data indicate that the share of the sector in total domestic production increased from 79.4 percent to 89.3 percent between 1980 and 1997 in the Eastern Caribbean Central Bank (ECCB) area and from 75.2 percent to 79.3 percent in Barbados [see Table 1]. In the ECCB area, the tourism, construction and transportation/communications sub-sectors recorded increases in their contributions to total output over the period. In Barbados, the main expansion sectors were the business and general services and transport/communications sub-sectors. The tourism sub-sector held steady over the period.

In terms of employment, the services sector was the main employer of workers in the Eastern Caribbean. In Barbados, the government and business and general services sectors absorbed over 45 percent of the employed labour force during the 1990s. In Antigua and Montserrat, these two sub-sectors employed over 30 percent of the total employed labour force. While the agricultural sector was the main single sector employer of labour in the Windward Islands of Dominica, St Lucia and St Vincent and the Grenadines, the services sector, especially the government and the distribution sub-sectors, was an important absorber of labour during the 1990s [see Table 2].

Data from the balance of payments reports of the Eastern Caribbean show that the services sector has contributed significantly to current account balance of the countries. Over the 1990-98 period the nominal value of the net export of services increased from EC \$1010.5 m to EC \$1558.4 m in the ECCB area [EC \$\$2.70 = US \$1], while in Barbados, the increase was from Bds \$807.6m to Bds \$1182.8 m [Bds \$2 = US \$1]. Net exports from travel services were a major contributor to the level of net exports from services [see Table 3]. The region is a net importer of several services (e.g., transportation, insurance).

Although the services sector in a broad sense has played a significant role in the economies of the Eastern Caribbean in terms of output, employment and foreign exchange, the current focus on the services sector has been on selected services targeted at the export market. These services include information, financial, health, professional, tourism and cultural services. These special services have been identified as forming the core of an export services thrust which would generate valuable foreign exchange in the face of a decline in the fortunes of the agricultural and manufacturing sectors. In effect, the services sector would form part of the strategy to diversify the production and export base of Eastern Caribbean economies.

While some degree of emphasis has been placed on the development of these selected services sub-sectors, little information is available on their contribution to the economic development of the region [see Charles, 1994]. Some research has been undertaken on the tourism sector, but there have been problems associated with delineating the production boundary of the sub-sector and hence its full contribution to the economies of the region. One recent study on the impact of tourism on the economies of Barbados, Dominica and St Vincent and the Grenadines indicates the following:

- In Barbados, the sector accounted for 10.5 percent of the employed labour force in 1994 and contributed 10.3 percent of total domestic output in 1985 and 14.0 percent in 1994. Tourism earnings were equivalent to 59 percent of earnings from goods and services between 1990 and 1994. Approximately 3 percent of government revenue accrued from specific tourism taxes in 1994.
- In Dominica, the contribution of tourism services to total domestic production was under 3 percent during the 1990s while tourism earnings were equivalent to 27 percent of earnings from goods and services between 1990 and 1994. Less than 2 percent of government revenue came from tourism specific taxes during the 1990-94 period. The sector (i.e., hotels and restaurants) employed only 409 persons in 1993.
- In St Vincent and the Grenadines, the tourism sector (i.e., hotels and restaurants) contributed 2.5 percent to total domestic production over the 1990-94 period, while 3.2

percent of government revenue was derived from tourism specific taxes in 1994 [CDB, 1996].

Other data for 1997 suggest that the tourism sector (i.e., hotel and restaurant) contributed significantly to the gross domestic product of Anguilla (34 %), Antigua and Barbuda (15%), St Lucia (14%) and the BVI (13%) [see OECS, 1998].

Data on the non-tourism services sector that are being promoted in the region are less readily available. Recent reviews of the services sector in the region, while giving useful qualitative information on these selected services, lamented the dearth of data on the contribution of these services to the economies of the region [see World Bank, 1996; Gill, 1997]. Nevertheless, the governments of the region have been eager to promote these key services as an alternative path to economic development. In many cases, the economic strategy has been to develop the services sector within an integrated framework incorporating manufacturing and agriculture. The services sector is therefore expected to become an integral component of the economic diversification program of these countries. There is however a need to develop the statistical information framework to complement the economic policy framework so that the decision-makers would be able to monitor the contribution of the sector to overall economic development.

3 Planning Services Sector Development

As indicated in the previous sectors, the governments of the Eastern Caribbean region have actively sought to promote the development of the services sector over the past decade. The Organization of Eastern Caribbean States (OECS) draft Development Strategy paper argues that in the light of changes in the international economy which can adversely affect the agricultural sector, the “growth and development of the OECS countries must revolve around services” [ECCB/OECS, 1999, p 9]. In effect, the services sector must become the ‘central growth-inducing sector’. The Medium Term Macro-economic Strategy 1996-1999 for Barbados also emphasizes the role of tourism and the export of non-tourism services (financial and information) in enhancing economic growth, employment and foreign exchange generation.

All the countries in the Eastern Caribbean have identified tourism services as an important element in their economic development thrust. In some areas, niche markets within the tourism sector have been identified: BVI and Grenada - yachting; Grenada and Dominica - eco-tourism. In the non-tourism services sector, informatics or information services have been targeted by several of the Eastern Caribbean countries (Anguilla, Antigua, Montserrat, St Kitts and Nevis, Grenada, St Lucia and Barbados). Financial services have been incorporated in the economic development plans of Anguilla, BVI, Dominica and Barbados.

The main challenge facing the governments of the Eastern Caribbean (especially in the OECS) is transforming an agricultural-based economy (with some light manufacturing) into a services economy based on tourism, information, financial, professional and health care services. While there are some basic resources and facilities in place to assist with the transition process, there are major constraints facing the development of the export services [Freckleton, 1996]. These constraints include:

- the shortage of funds to upgrade the physical infrastructure (electricity, transport, water, ports) and to invest in the training and development of human resources,
- weak regulatory capacity (i.e., to regulate monopolies and promote efficiency and competitiveness),
- the relatively high cost of telecommunications which is critical to the competitiveness of the information and financial services sectors,
- the vulnerability of the physical environment to a high demand for tourism services,
- a weak human capital base in the OECS - scarcity of skilled workers and professionals, low computer literacy rate, etc,
- limited mobility of persons across countries.

The governments have recognized these constraints and have sought to implement policies to address them. For example, legislation has been enacted to facilitate the development of the financial services sector (e.g., international business companies legislation). Special departments of governments have been established to support the establishment of international business services. At the regional level, a Caribbean Financial Task Force has been established and a Caribbean Tourism Competitiveness and Sustainability programme has been set up in the OECS

with the assistance of the OAS. Infrastructural facilities have been improved in the region (i.e., sea and airports, hotel plant) to enhance the supply of tourism services. Free movement of labour has been promoted within the OECS.

One of the key constraints on services sector development in the Eastern Caribbean however is the lack of a highly skilled labour force required to expand the export services market in the selected areas (i.e., financial, information, professional, health, tourism). The governments have recognized this human resource constraint and have sought to address the issue with various education and training programs. For example, an Education Reform program has been established in the OECS, while a major program has been introduced in Barbados to boost computer literacy and the use of information technology in the teaching process.

4 Human Resources Requirements For The Services Sector

The development of the services sector in the Eastern Caribbean requires that greater attention should be paid to the development of the human capital base of the countries. In this context, human resources development (HRD) refers to the process of enhancing the knowledge, skills, talent and competencies of the population primarily through the education and training process. HRD is therefore viewed as a means to an end, that is, the accumulation of human capital and its effective investment in the development of the services sector. HRD is part of the human resource planning process which involves the identification of the magnitude and quality of the human resources needed for the development of the services sector and the development and optimal utilization of these resources in the production process. The human resource planning process would involve:

- the identification of the services sectors to be developed (e.g., financial, information),
- the determination of the human resource needs over the planning period (e.g., skilled technicians, professionals - lawyers, accountants, chefs),
- an assessment of the availability and utilization of human resources,
- the identification of the human resource gap over the planning period (i.e., the difference between human resource needs and availability),

- the formulation of a human resource plan to close the gap over time. This plan would recognize the different time periods required to educate and train the personnel needed for the services sector.

The first step in the human resource planning process has been identified in the region. The main services to be targeted are:

- i informatics or information services
- ii financial services
- iii tourism
- iv professional services
- v cultural services

These services have different human resource requirements. At a general level, service sector jobs require a set of **core** skills and **job-specific** skills. The core skills include

- the ability to communicate effectively
- basic numeracy and literacy
- the ability to solve problems on the spot
- personal and interpersonal skills (especially where customer relations and team work are important)
- computer literacy (i.e., knowledge of the use of information technology)
- modern foreign languages (especially in export services involving several countries)

[Thompson and Mabey, 1994].

These core skills can also be grouped according to

- i physical abilities (eye-hand coordination, dexterity)
- ii cognitive skills (analytical and synthetic reasoning, problem solving, numerical and verbal abilities)
- iii interpersonal skills (supervisory, social, communicative)

[ILO, 1998].

These core skills are critical in the provision of export services identified by the government of the region. In addition to these core skills, workers must have job-specific skills, that is, knowledge and skills associated with the set of tasks in the provision of a service. Several countries have sought to identify the skills (acquired and practiced abilities) and competencies (i.e., attributes or characteristics which employers seek in employees). For example, the US Department of Labour created the Secretary's Commission on Achieving Necessary Skills (SCANS) to identify the human resource needs for the 'new economy'. The SCANS skills included basic skills (reading, writing, etc), thinking skills (decision-making, problem-solving, etc) and personal qualities (sociability, responsibility). The five SCANS competencies are based on how one allocates resources (time, money, staff, etc), interacts with others (teamwork, customer service), utilizes information (communication, organize), understands systems and apply technology. [see Boyett and Boyett, 1995, pp 227-238].

In assessing the human resource needs of Jamaica's National Industrial Policy, the Planning Institute of Jamaica (PIOJ), in collaboration with other agencies, has developed a set of worker profiles [PIOJ, 1997]. It emphasizes the need for workers to be generally multi-skilled and for the educational system to be more competency-based and applied-oriented. The 'new worker' would be trained to be more responsive to the rapid change in technology. In developing worker profiles for the services sector (that is, tourism and information technology), the following desired attributes were specified: good communication skills, good problem-solving skills, effective time management skills, good knowledge of the industry and business environment, an ability to work in teams and a sound basic education as the foundation for the on-the-job training. Government must however be mindful of the rapid technological changes taking place in the services sector [see Rifkin, 2000, chap 10].

An assessment of the human resource requirements associated with the development of the services sector in the Eastern Caribbean indicates the following:

- Informatics professionals who can write software, run computer systems, perform data entry and perform a range of technical computing tasks are needed to meet high level human resource requirements. Computer literacy, along with basic skills in mathematics,

typing and literacy would be needed to meet these low-and high-level human resource requirements. In the area of computer-aided design and manufacturing (CAD/CAM), the basic technical needs are a high school certificate and at least one year of training using CAD/CAM software [Schware and Hume, 1996];

- Opportunities also exist for persons with skills in micrographic indexing, heads-up image assisted data entry, legal and medical transcription, GIS data entry and maintenance and other new areas of the information technology area [see Schware and Hume, 1996, p 36]. These requirements call for a 'multi-skilling' of the computer labour force;
- In the financial services sector, the human resource needs would include persons with specialized financial, legal, accounting, banking and insurance knowledge. Since the *offshore financial services* sector is the focus of attention, an up-to-date knowledge of changes in the international business environment would be needed;
- A recent study of the training needs of the tourism industry in the region point to general and technical deficiencies at different levels. There is a need to enhance interpersonal skills, management and marketing skills, computer and foreign language competencies along with such technical areas as culinary, food and beverage service, tour-guiding and maintenance;
- In the professional services sector the key human resource requirements include up-to-date technical skills, personal skills, marketing and information gathering skills along with *good project management skills*. Given the paucity of professionals in the Eastern Caribbean, it would be necessary to engage in strategic alliances with international professional service providers. This approach would require the development of legal and negotiation skills in order to maximize the benefits of such associations. *Refresher training and upgrading courses* would be needed to bid for contracts in several parts of the world;

- ❑ In the cultural services, greater emphasis is needed on marketing, negotiating and technical skills development. As Bourne and Allgrove (1996) indicate the “introduction of training programs in all facets of the [music] industry, but especially in business management, technology, contracting, intellectual property protection and finance” would be critical to the development of the entertainment industry in the region (p 161).

- ❑ In the health sector, there is need for specialized health service personnel to service such areas as cosmetic and eye surgery, addiction treatment, spas, retirement health training and promotion materials and alternative medicine. Ongoing training programs would be needed along with marketing skills. The possibility of linking health to tourism (i.e., *health tourism*) also broadens the range of human resource requirements.

The third aspect of human resource planning involves the assessment of the availability and utilization of the human resources for services sector development. While a significant number of persons are employed in the services sector, there is a significant shortage and underdevelopment of the human resource base of the region to reach the level of services sector development the governments are aspiring to. It has been pointed out that small developing countries in South East Asia and Mauritius have promoted services sector development by emphasizing high quality basic education at the primary and secondary levels [see World Bank, 1996]. Since the knowledge and skills of workers provide the basis for competitiveness in the export services sector, education and training are fundamental.

An examination of the human capital of the Eastern Caribbean countries point to a weak base with the possible exception of Barbados. A recent survey of the education system in the OECS indicates the following:

- ❑ good coverage at the primary level, with universal primary level education (4-11 years),
- ❑ there is a wide variation in the provision of secondary level education, with secondary level education in the Windwards being highly restricted and limited to the school places available
- ❑ coverage at the tertiary level is generally poor, with universal primary education and mass secondary school culminating in minuscule opportunities at the tertiary level

- ❑ there is a high percentage of untrained teachers in the school system
- ❑ there is a high degree of wastage in the secondary school system with a significant percentage of students failing to achieve high grades in regional examinations.

[see OECS, 1991, p 32].

The state of secondary level education in the region is reflected in the results of the Caribbean Examination Council (CXC) examinations in English and Mathematics (which provide the basic skills needed for the services sector). With the exception of Barbados, Montserrat and, to a lesser extent, St Kitts, the grades I and II passes in CXC English were poor in 1990 and 1997, while the Mathematics results were well below acceptable standards [see Table 4]. Although the adult literacy rate in the region is considered to be generally high by international standards, that is, over 80 percent, the examination results suggest a low level of achievement and high wastage. To the extent that certification provides a useful signal of ability and skill level, then the region has a basic problem meeting the human resource needs of the services sector.

An examination of the unemployed labour force by highest level of education attained points to the high percentage of persons, especially in the Windward Islands who have only attained primary level education [see Table 5]. These figures reflect the shortage of secondary school places in these countries. The data also indicate that a significant percentage of the employed labour force attaining in the Windward Islands have attained only primary level education. To the extent that the skill requirement of an agriculture-based economy is not as high as a services sector economy, it is clear that the Eastern Caribbean countries (especially the OECS) would need to greatly enhance their human capital base if they are going to compete effectively in the export services sector. The availability of the quantity and quality of human resources in the region can therefore constrain the extent to which the services sector can form the basis of an alternative development strategy in the Eastern Caribbean.

5 Meeting the Human Resources Requirements

The final stage of the human resources planning process involves the development of a plan to close the human resources gap associated with services sector development in the region. As indicated in the previous sector meeting the human resources requirements of the services sector

is a major undertaking in the Eastern Caribbean, especially in the OECS. In order to meet the needs of the sector, it is important that educational and training institutions and companies design courses and programs to reflect the skills and competencies needed to make the sector competitive in the export market.

The human resources needs of the services sector can be met via:

- i education and training in formal institutions
- ii on-the-job training
- iii split education and training schemes
- iv immigration via the issue of work permits or free mobility of labour
- v the promotion of entrepreneurship

Several of the HRD initiatives have been undertaken by the governments and private sector agencies in the region. These range from curriculum reform, the vocationalization of the secondary school system, skills training programs, incentives for private sector training, special technical and vocational training programs, apprenticeship schemes, entrepreneurial development programs and job placement programs [see Downes, 2000]. One of the objectives of the OECS Education Reform Strategy is to “make the transition from development strategies based on the exploitation of natural resources to strategies based on the development of human resources and the mastery and production of knowledge and technology” [Forde, 1999, p 263]. In the case of Barbados, the main objectives of the education sector enhancement program (EduTech 2000) are twofold:

- i to increase the efficiency of the teaching and learning process by encouraging teachers to utilize the available technologies in their classrooms and
- ii to prepare students for life in a technologically advanced society by ensuring that all students who leave school in the 21st century have good knowledge of the modern technology, adequate skills and favourable attitudes towards the use of technology.

The main examining body at the secondary level in the Caribbean, the Caribbean Examinations Council (CXC) offers examinations in a range of technical and vocational subjects which are important to the services sector (book-keeping and principles of accounts, electrical technology,

electronics, typewriting, information technology and computer studies). The introduction of these subjects at the secondary level marks a major change in the development of the human resources of the region.

Well-established technical and vocational institutes have been established to provide a range of courses and programs which would be useful to the services sector. For example, in Barbados, the Samuel Jackman Prescod Polytechnic (SJPP) and the Barbados Community College (BCC) are the primary institutions providing technical and vocational training. The Barbados Institute of Management and Productivity (BIMAP) offers a range of short managerial, supervisory and computer courses for supervisors and mid-level managers. A Technical and Vocational Education and Training (TVET) council has been established to oversee the development of TVET in Barbados along with the Barbados Vocational Training Board which offers short skills training and apprentice programs and courses. Several private training institutions also exist to provide skills training in the use of computer and in related business areas.

In the OECS, the governments have strengthened the community, state and national colleges by developing strategic links with the University of the West Indies. At the tertiary level, these colleges offer a range of courses and programs which are important for services sector development [see Peter 1993]. For example, the Antiguan State College incorporates a hotel school and technical institute, while the Sir Arthur Lewis College offers a range of courses which feed into the services sector development of St Lucia. A wide variety of projects in the area of non-formal adult education has been implemented in the OECS [see OECS, 1991]. For example, adult education programs have been mounted in the areas of literacy enhancement, skills and craft training and computer use. A number of private institutions also offer training courses. The educational reform program in the OECS seeks to gradually introduce universal secondary level education with the curriculum incorporating information technology, technical and vocational subjects, inculcating basic numeracy, literacy and communications skills and exposing students to the needs of the workplace. In the case of Barbados, a new curriculum is being introduced into the school system with emphasis on mathematics, english, art and science. The focus will be on problem-solving, critical and creative thinking with students being given the opportunity to apply the knowledge and skills developed in the school system.

Survey data from businesses in the region however indicate that most of the training is offered on the job. Training budgets tend to be small. This means that the private sector has to take a more systematic approach to institutional and on-the-job training if it is going to compete successfully in the export services market. At present, the skills gap in the region, especially at the professional, administrative and managerial levels, is filled by immigration (i.e., the issue of work permits). If the region is going to bridge this gap in a sustainable manner, then greater investment is needed in education and training at the tertiary level. The University of the West Indies is assisting in this area by the establishment of Centres of Management Development and International Services. Labour market information systems are however not well developed in the region so that there is a high degree of uncertainty associated with future skill needs.

National initiatives have been complemented by the adoption of a regional strategy for TVET and by the establishment of a Working Group on Human Resources Development by the Heads of Government. Occupational preparation is a key aspect of the new thrust in HRD in the region. Emphasis should not only be placed on numeracy and literacy throughout the education system but also in proper work ethic, career choice, entrepreneurial skills and self development. As part of the development of a single market and economy within the Caribbean region, the free movement of labour is being encouraged. Some countries have passed legislation to harmonize social security systems and to allow selected persons to work without work permits. Although these efforts are commendable, it is important that a greater thrust be taken to enhance the educational and training facilities in the region in order to meet the demand of the 'new economy'.

6 Conclusion

The governments of the Eastern Caribbean have been actively promoting the services sector as part of an economic development strategy to generate employment and foreign exchange earnings. An overview of the performance of the sector indicates that at a broad level, services provision has contributed significantly to the economy of several Eastern Caribbean countries (e.g., Barbados, Antigua, St Kitts and Nevis, Anguilla). A significant part of this contribution has been due to the promotion of the tourism sector. In the area of non-tourism services, activity is still embryonic in the OECS. The Eastern Caribbean governments have focused on information and financial services as the main areas for export promotion over the next decade. In Barbados,

professional and cultural services have also been considered for export. It is imperative that services sector development be undertaken within an integrated sectoral framework in order to prevent the economies from moving from one area of dependency (i.e., agriculture) to another area (services).

The plan to develop the services sector in the Eastern Caribbean however faces major constraints. *One of these constraints is the human resource requirements to meet the production levels and quality for the export market.* On the whole, the region lacks the skilled or knowledge workers needed to export services in the selected areas. The human resources base is weak and reflects the underdevelopment of the education and training systems. In order to meet the requirements of a highly competitive export services market, workers must possess both core skills (numeracy, literacy, computer skills, interpersonal and cognitive skills) along with job-specific or technical skills. Current programs do not provide these skills and competencies at the level needed for international services production.

The governments of the region have recognized the problem associated with the human resources challenges of services sector development and have taken steps to address the problem. Educational reform programs have been introduced in the primary and secondary school system, while technical and vocational education and training (TVET) has received a new thrust. Private sector companies are however still relying on on-the-job training and the public provision of education and training. A very small percentage of the budgets of private sector companies is spent on training in the region. The University of the West Indies has been assisting with management training and plans to launch an initiative in the area of information technology training with the establishment of a Centre for International Services.

A human resources development strategy for the services sector must therefore incorporate a greater focus on the provision of high quality and relevant education in the school system, partnership between the tertiary level institutions and the private sector, the provision of training grants and tax incentives, the establishment of strategic alliances with international services providers in order to break into the international market and the promotion of entrepreneurship. Greater mobility of labour within the region would also assist in meeting the human resource

needs of the region. With the increasing globalization of commodity and financial markets, the formation of trading blocs, trade liberalization and rapid changes in technology, the competitive advantage of the Caribbean in export services lies in the development its human resources. There is dire need to strengthen the human resource base of the region by coordinating projects and programs at a regional level. Governments and the private sector must place greater emphasis on human resource planning and the development of human resource information systems since it takes time to educate and train persons to meet the demands of a dynamic international economic environment.

Endnote

1 Countries of the Windward and Leeward islands have formed an integration movement called the Organisation of Eastern Caribbean States (OECS). These countries include Antigua and Barbuda, Dominica, Grenada, Montserrat, St Kitts-Nevis, St Lucia and St Vincent and the Grenadines. Barbados is a member of a wider integration movement called the Caribbean Community (CARICOM).

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Table 1
Distribution of Output for ECCB area and Barbados, Selected Years
 (%)

Sector	1980		1985		1990		1995		1997 ^P	
	ECCB	Barbados	ECCB	Barbados	ECCB	Barbados	ECCB	Barbados	ECCB	Barbados
Agriculture	15.12	10.29	13.49	9.59	12.19	7.39	9.34	6.22	7.99	6.76
Mining/Quarrying	0.53	0.53	0.57	0.93	0.82	0.74	0.84	0.86	0.82	0.81
Manufacturing	7.27	11.81	7.34	10.39	6.74	9.98	6.28	9.87	6.06	9.68
Electricity/Gas/Water	2.68	2.09	2.86	2.72	3.14	2.99	3.69	3.54	3.95	3.32
Construction	8.63	7.03	7.57	6.34	10.51	6.82	9.78	6.69	10.13	7.03
Wholesale/Retail Trade	12.94	19.52	11.15	19.58	12.31	19.53	12.49	19.22	12.40	19.84
Tourism (Hotel/Restaurant)	7.21	13.84	9.53	11.51	8.88	14.44	9.96	15.19	10.46	14.73
Transport/Communications	12.46	6.19	14.22	7.46	17.56	7.14	20.05	8.17	20.85	8.17
Government Services	18.85	12.71	19.61	13.58	16.24	13.67	15.88	13.18	15.85	12.50
Business/Other Services	19.28	15.94	18.69	17.89	17.82	17.19	19.32	17.16	19.56	16.99

Notes:

^P - provisional

Sources:

Central Bank of Barbados: Economic and Social Report 1998

ECCB: Annual Account Statistics, 1999

Table 2
Sectoral Distribution of Employment 1991, 1997, Both Sexes
(%)

Country	Year	1	2	3	4	5	6	7	8	9	10	11
Barbados	1991	5.69	n a	10.08	1.59	8.59 ^a	15.49	8.87	4.76	22.96	22.03	-
	1997 ^p	5.25	n a	9.22	1.21	8.78	13.69	10.59	3.96	21.70	25.17	0.43
Antigua	1991	3.98	0.25	5.38	1.58	11.38	14.39	17.05	8.69	22.37	11.45	-
Dominica	1991	30.80	0.29	8.19	1.26	11.84	11.88	3.48	5.04	16.46	7.81	2.94
	1997	31.38	n a	8.58	1.92	13.80	12.16	1.65	7.55	10.99	7.69	4.32
Grenada	1991	14.67	0.50	7.67	1.47	12.66	17.77	3.52	6.71	20.99	9.85	4.23
	1996	15.51	0.06	8.27	1.54	13.23	14.91	4.27	6.73	19.53	11.54	4.42
St Kitts/Nevis	1991	13.80	0.18	13.98	1.66	11.61	13.51	10.31	5.69	16.82	10.07	2.37
St Lucia	1993	23.34	n a	12.17	0.89	8.82	15.28	8.72	6.15	14.82	7.28	2.55
	1997	20.46	n a	11.08	1.47	7.68	16.18	9.34	8.14	15.68	9.72	0.25
St Vincent	1991	24.70	0.29	8.37	1.76	10.83	15.52	4.04	6.88	18.66	8.85	-
Montserrat	1991	6.64	0.22	5.31	2.43	21.90	14.15	5.09	9.29	22.34	11.94	0.88

Notes:

1= Agriculture; 2=Mining/Quarrying; 3=Manufacture; 4=Electricity/Gas/Water; 5=Construction; 6=Wholesale/Retail; 7=Tourism (Hotels/Restaurants);
8=Transport/Communications; 9=Government Services; 10=Business/Other Services; 11=Not Stated

^a construction/quarrying

^p provisional

Source:

ILO, *Digest of Caribbean Labour Statistics* 1998

Table 3
The Net Export of Services from the ECCB Area and Barbados
1990-98

Year	ECCB Area (EC \$m)		Barbados (Bds \$m)	
	Total	Travel	Total	Travel
1990	1010.5	1308.0	807.7	917.8
1991	1137.6	14418.1	797.6	843.9
1992	1260.0	1578.2	819.4	857.1
1993	1412.5	1778.3	833.9	962.3
1994	1547.7	1973.3	989.4	1087.8
1995	1357.7	1863.0	1100.0	1195.7
1996	1415.0	1918.1	1146.1	1237.0
1997	1530.5	2032.4	1099.5	1169.2
1998	1558.4 ^P	2049.9 ^P	1182.8 ^P	1259.5 ^P

Notes:
^P Provisional

Sources:
 ECCB: Annual Statistical Digest 1998
 Report and Statement of Accounts 1999
 CBB: Balance of Payments for Barbados 1999

Table 4
CXC Ranking by Performance Grades I and II
1990, 1997

Country	English A				Mathematics			
	1990		1997		1990		1997	
	no	%	no	%	no	%	no	%
Barbados	1122	67.04	1518	59.03	581	42.65	711	40.04
Dominica	149	38.79	344	60.03	98	32.34	144	36.18
Montserrat	35	62.49	42	79.24	30	60.00	20	38.46
Antigua	145	39.07	304	50.84	96	36.08	115	30.11
St Kitts/Nevis	126	52.93	214	47.55	57	45.23	87	31.52
St Lucia	313	36.94	724	43.72	234	40.47	382	28.31
Grenada	136	17.57	399	35.25	99	31.02	157	20.96
St Vincent	156	32.83	297	47.60	190	42.24	125	22.81

Source:

CXC, Summary Statistics for Subject Entry, 1990, 1997

Table 5
Unemployed by Highest level of Education Attained
Both Sexes, Selected Years
(%)

Level of Education	Barbados		Dominica	St Lucia		St Vincent
	1991	1997	1997	1991	1997	1991
None	0	0	3.63	3.17	2.50	0.12
Nursery/Pre-School	-	-	0.52	-	-	-
Primary	24.67	18.36	73.57	63.34	59.87	74.76
Secondary	72.36	72.96	17.87	30.50	30.32	23.91
Post-Secondary*	0.66	5.10	3.24	1.86	2.15	0.61
University	2.63	3.57	0.65	0.19	1.18	0.24
Other	0.66	0	-	0.28	2.85	0.36
Not Stated	0	0	0.65	0.47	1.04	0.12

Notes:

* includes technical/vocational and Community College

Source:

ILO, Digest of Caribbean Labour Statistics, 1998