LABOUR MARKETS AND HUMAN RESOURCES DEVELOPMENT IN THE CARIBBEAN*

by

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For small developing countries, like those in the Caribbean, the existence of limited natural resources means that emphasis must be placed on human resources development (HRD) in national development strategy formulation. This paper first examines the nature of the labor market in the Caribbean by analyzing changes in the labor force, employment, unemployment and wage/salaries trends over the past two decades. Critical issues such as the effect of remittances on the labor force and the phenomena of the working poor are also discussed. The second section of the paper examines the education and training initiatives undertaken in various countries in order to enhance the supply of labor. There is an emphasis on the “mismatch problem”, or the difference between the distribution of job requirements and the distribution of knowledge and skills of the labor force, as well as a discussion of the emigration of skilled labor (the brain drain). The paper concludes with a discussion of the appropriate policies needed to strengthen the linkage between the operations of the labor market and the HRD initiatives in the Caribbean region. The paper offers both supply and demand side recommendations such as reforming the educational system and creating a production program for the export market.
1. INTRODUCTION

Recent studies of the economic growth and development process have emphasized the critical role of human capital in achieving high rates of output growth, reducing unemployment and poverty and enhancing social development (see, World Bank 2005). For small developing countries, like those in the Caribbean, the existence of limited natural resources means that emphasis must be placed on human resources development (HRD) in national development strategy formulation. Human resources development refers to the enhancement of the skills, knowledge and competencies of the population so that the workforce can contribute meaningfully to the national development process. Through education and training (and health and nutrition), HRD can overcome imbalances in the labour market. Employers would be able to obtain the quality and quantity of labour resources they need, while individuals would be able to supply better quality labour resources and receive higher incomes. HRD initiatives must therefore be related to the dynamics of the labour market.

The main objective of this study is to examine the labour market conditions and HRD initiatives which have been implemented over the past two decades in the Caribbean with a view of identifying the general and specific constraints which have been placed on the growth and development process. Given their small size, Caribbean countries have had to adopt an outward oriented development strategy incorporating export promotion, economic integration and foreign direct investment. Such a strategy requires certain types of human resources (labour demand side) which must be supplied through the education and training system (labour supply side). In many instances, the education and training policies have not been designed to meet the demands of the labour market; hence there has been a charge of a mismatch or a dysfunctional education and training system. In addition, the region has been confronted by the emigration of skilled labour (the brain drain) which has further constrained the growth and development process in the region.

This paper first examines the nature of the labour market in the Caribbean by analyzing changes in the labour force, employment, unemployment and wages/salaries over the past two decades. The critical issue of the emigration of skilled labour is also discussed. The second section of the paper examines the education and training initiatives undertaken in various countries in order to enhance the supply of labour. The paper concludes with a discussion of the appropriate policies need to strengthen the linkage between the operations of the labour market and HRD initiatives in the Caribbean region.
2. LABOUR MARKET DYNAMICS IN THE CARIBBEAN:

2.1 Labour Force

Using the available data, some basic features of the Caribbean labour market can be highlighted. On the supply of the labour market, the Caribbean countries have experienced relatively low rates of population and labour force growth over the period 1999-2004 [see Table 1]. Similar growth rate were also recorded for the decade 1990 to 2000. With the exception of Belize and St Kitts, the population growth rates averaged less than 1 percent per year. The lower rates of population growth and subsequent labour force growth have been due primarily to the implementation of family planning programs in several countries during the 1950s and 1960s. The fertility rate (births per woman) varied between 1.6 (Trinidad and Tobago) and 3.4 (Belize) during the period 2000-5. An analysis of the distribution of the population by age-specific groups provides some evidence of the ageing of the population over the past four decades. There has been a general decline in the youth population, that is, those persons under 25 years of age and a general rise in the older cohorts, especially those over 65 years of age. The conjunction of these two features has resulted in a fall in the dependency ratio, that is, the ratio of those under 15 years of age and those over 65 years of age to those persons aged 15 to 64 years of age in nearly all of the countries over the 1990 to 2000 period [see Table 2].

An analysis of the participation of males and females in the labour market indicates that there has been a significant increase in the female participation rate (that is, the percentage of adult females who are part of the labour force) and a relatively constancy and, in some cases, a decline in the male participation rate in several countries. For example, in Barbados, the female labour force participation rate rose from 60 percent in 1993 to 64 percent in 2003, while the male rate was 74.1 percent in 1993 and 75 percent in 2003. In the case of Trinidad and Tobago, the female rate rose from 44 percent in 1993 to 49 percent in 2003, while the male rate was 75 percent for 1993 and 74 for 1999. Jamaica recorded a decline in both rates over the 1993 to 2003 period: the male rate declined from 75 percent to 74 percent while the female rate fell from 62 to 56 percent. Belize recorded relatively low, but increasing, female participation rates (less than 40 percent) and relatively high but constant, male participation rates during the 1990s. Female participation rates in St Lucia were relatively high and decreasing during the 1990s, while the male rates also declined slightly. Overall participation rates for Guyana, Jamaica and St Lucia declined over the 1993 to 2003 period [see, Table 3]. While the male labour force participation rates have been historically high because of the male-oriented nature of the labour market, the rise of the female rate can be attributed to several factors:

(i.) improved educational and training opportunities;
(ii.) the expansion of activities in selected areas of the economy providing employment for females (e.g., information services, banking and financial services, tourism);
(iii.) the self-actualization of women and the drive for financial independence;
(iv.) the decline in fertility rates and average household size which reduces the need to stay at home for long periods;
the establishment of day-care services and the increase in modern household production technology and services which release females from traditional household production activities.

An examination of the educational attainment of the labour force indicates a general increase in the formal educational base of the labour force. There are however significant skill deficiencies in the Caribbean labour force. For example, 70 percent of the Jamaican labour force reported no formal educational credentials in 2002. In Barbados, with its compulsory education requirement up to 17 years of age, it was estimated that approximately 63 percent of the adult population had no certification in 1990 and only 57 percent in 2000. Caribbean governments have responded to this skill deficiency by establishing various technical and vocational training programs: HEART in Jamaica, SERVOL in Trinidad and Tobago; skills training programs in Barbados, St Lucia, Dominican Republic and Grenada [see Downes, 2000 and Lochan, 2000]. Available survey evidence for Barbados and Jamaica indicates that employers also undertake significant on-the-job training in order to overcome the problems associated with the skill deficiencies of new and incumbent employees.

The improved educational attainment of the labour force has also resulted in the growth of the number of professionals, technical and managerial persons in the region. This group has however remained relatively small and hence there is still a dependence on non-Caribbean persons in a number of skilled occupational categories. The improvement of the human capital has also resulted in the Caribbean countries being classified as medium to high human developed countries according to the UNDP’s Human Development Index (HDI).

2.2 Employment

The creation of job opportunities has been one of the greatest labour market challenges facing governments in the Caribbean over the past four decades. Various development strategies and policies have been implemented to generate employment for the available labour force: infrastructural development and public works, agricultural diversification, import substitution industrialization, nationalization, economic integration and export promotion (especially tourism; financial and information services). These strategies and policies have been only moderately successful as high rates of unemployment still persist in the region. Using time series data for the Bahamas, Barbados, Belize, Jamaica, St Lucia and Trinidad and Tobago (the only countries for which time series data are available), there was a general upward trend in the number of persons employed [see Table 4]. The average annual growth rates over the 1990-2004 period was however relatively low compared with previous decades: the Bahamas (2.4%), Barbados (1.6%), Jamaica (1.2%) and Trinidad and Tobago (2.9%). There was also a high degree of variability in the pattern of employment growth over the study period.

Little empirical work has been undertaken to identify the factors which influence employment growth in the region. Although several ‘possible causes’ of employment growth have been suggested (for example, the effective demand for output in both local and foreign markets, the use of certain types of production and organizational
technologies, relative factor prices, the social and legal framework governing the labour market and the availability of other complementary inputs), there has been little empirical verification of the magnitude or statistical significance of these causes.

The available empirical evidence on the determinants of aggregate employment in the region suggests the following:

1. Output growth is the main factor influencing employment growth (that is, labour demand is a derived demand).
2. The elasticity of employment with respect to output varies between 0.22 and 1.10 (for Barbados, Jamaica, Trinidad and Tobago over the period 1970-2001).
3. Real wages rates have a weak influence on employment expansion. There is some evidence that increases in real wages have some negative impact on employment growth in Barbados and Jamaica.
4. Adjustment costs (hiring and firing costs) as captured in a lagged employment variable are important in employment growth [see Downes, Mamingi and Antoine, 2004 for points 1-4].
5. Recent econometric research which explicitly accounts for changes in minimum wages, severance payment and national insurance contributions in Barbados, Jamaica and Trinidad and Tobago indicates that these measures have not had a statistically significant effect on employment (with the exception of the minimum wage rate changes in Jamaica). One reason for these results is that there were few changes in these regulations over the 1970-2002 period [see Downes, Mamingi and Antoine, 2004].
6. Micro econometric research for Trinidad and Tobago indicates that “for workers who experienced compliance, the introduction of the minimum wage [in 1998] significantly increased the probability of a person becoming involuntarily part-time employed” [Strobl and Walsh, 2003], implying that employers reduced their demand for labour by reducing employees’ work hours.

The structural adjustment policies implemented by Caribbean governments during the 1980s and 1990s had an adverse impact on the labour market and hence on poverty. These policies affected employment both directly and indirectly through the cuts in public sector employment and changes in aggregate demand. The formal private sector has not been able to fully absorb the fall-out from the public sector lay-offs; hence there has been a growth in ‘informal employment’. During the 1990s, Barbados undertook a structural adjustment program in response to a balance of payment crisis. The adjustment measures resulted in a fall in employment from 113,304 in 1990 to 100,400 in 1993, that is, a decline of 12,900. Most of the persons who were laid off during the period were in the public sector as the government sought to reduce its fiscal deficit. Jamaica, which has been in a state of economic volatility since the late 1970s, also recorded a decline in employment during the 1990s. Employment fell from 963,300 in 1995 to 933,500 in 2000, that is, a fall of approximately 30,000 persons.

The available data indicate a significant increase in the number of self-employed and own-account workers. Since the labour force data in the Caribbean come from surveys which target households, employed persons therefore self-report their labour market
attachment. It is therefore likely that a number of the self-employed and own account workers are employed in the ‘informal sector’.

Although the ‘informal sector’ can be difficult to define, recent estimates of the size of the sector indicate the following values for the late 1990s:

i. Jamaica and Guyana – over 45 percent of measured (official) gross domestic product (GDP) [see GRADE, 2002; Faal, 2003]

ii. Barbados and Trinidad and Tobago – 10 to 15 percent of measured GDP [see BSS, 1997/8; Maurin et al, 2003].

Data on ‘informal employment’ defined as self-employed (own-account workers), apprentices and unpaid family workers as a proportion of total employment corroborate the estimates of the size of the ‘informal sector’ in the Caribbean.

Although some ‘formal’ employment may be captured in the data, there seems to be an increase in informal employment in Barbados, St Lucia and Belize and a decrease in Jamaica and Trinidad and Tobago during the 1990s.

The relatively high percentage of employed persons classified as **elementary workers** (from 19 to 35 percent) also point to a significant level of informal sector employment in the region.

The informal labour market tends to be a source of income when the economy is experiencing difficulties as persons engage in various hustling activities – street vending, car washing, petty trading, small scale agriculture, etc. The informal labour market becomes a source of primary income for many and secondary income for some persons.

Over the past four decades, the agricultural sector has been a declining source of employment of the labour force in the Caribbean. For example, in Trinidad and Tobago, the contribution of agriculture and forestry to total employment declined from 23 percent in 1970 to 8 percent in 2000, while in Barbados, the contribution of the agricultural sector declined from 24 percent in 1960 to 4 percent in 2001. The sector is still important in such countries as Jamaica (21 percent in 1998), Belize (28 percent in 1999 Guyana (29 percent in 1992) and, to some extent, the Windward Islands of Dominica, Grenada, St Lucia and St Vincent. The agricultural sector (bananas and sugar) has borne the brunt of changes taking place in the global trading environment. With the advent of trade liberalisation, the preferential arrangements, which the Caribbean countries have had with European countries, are gradually being dismantled. Indeed, both bananas and sugar agreements have been subjected to WTO investigations. Several of the Caribbean countries have therefore sought to develop alternative economic activities primarily in the area of services (tourism, financial services). A rough classification of the countries in the region based on sectoral shares in GDP would be as follows: services-oriented (Antigua, Barbados, Grenada, St Kitts, St Lucia) or mixed (Belize, Guyana, Jamaica, Suriname, Trinidad and Tobago, Dominican Republic, St Vincent, Dominica), where a mixed economy combines either agricultural or mineral production with services.
While the contribution of the manufacturing sector has remained relatively constant for almost all the countries of the region, there has been a significant rise in the contribution of the services sector to the provision of job opportunities. For example, in Jamaica, the sectoral distribution of services to employment was over 60 percent in 2000, while in Barbados it was over 70 percent in 2000. The Leeward Islands of Antigua and St Kitts/Nevis have also recorded a rise in the degree of employment in the services sector. The growth of services sector employment reflects the focus of economic development policies implemented by several Caribbean governments. In order to reduce the dependency on a single economic activity (such as, for example; sugar in Guyana, bananas in St Lucia, bauxite in Jamaica and Guyana, petroleum in Trinidad and Tobago), Caribbean governments have encouraged economic diversification into such areas as tourism, international business services and information services. These ‘new services’ have complemented traditional services such as distribution, transport and commerce. Diversification has also been occasioned by the changing global economic environment which has witnessed the intensification of trade liberalisation and the removal of trade preferences. These measures have undermined the economic viability of traditional economic activities in the region: agricultural production and import-substituting manufacturing production.

In the Caribbean, the State has played a very important role in the economy by providing incentives, establishing social infrastructure, protecting property rights, facilitating the transactions process and engaging in direct production activity. In some ways, the intermediating role of the government has increased the transactions cost of economic activity, but in other ways, it has been the source of employment for several persons who might not have been able to find employment in the private sector. Available data indicate that the Government accounted for between 7 percent (Belize) and 36 percent (Jamaica) of the employed labour force during the period 2001/2002.

Although the government is the single largest employer of persons in the region, the private sector accounts for the largest percentage of employed. For example, in Barbados, the private sector accounted for over 70 percent of the employed in 2001, while in Jamaica, the percentage was over 80.

Additional features of the Caribbean labour market which can be highlighted from the available data are:

(i.) a general rise in female employment in the traditional areas of clerical, sales and services. With the growth in female labour market participation over the years, female employment has however been increasing in the professional, administrative and technical operations, especially in Barbados, Jamaica and Trinidad and Tobago;

(ii.) while there has been a general improvement in the human capital (educational attainment) of the labour force, there is still a relatively small cadre of professional, technical and managerial personnel (between 11 to 24 percent of the employed during the late 1990s). Using data on work permits for immigrants from various Caribbean countries, Downes and Henry (1994) pointed out that this category of worker accounted for the highest level of work permits issued in many
countries. During the period 1996/97 work permits granted for professional, managerial and technical occupations ranged from 61 percent of total permits granted in Jamaica to 83 percent in Barbados. Although these work permits partly reflect the large number of foreign companies and organisations operating in these countries, the high percentages also suggest an inadequate supply of high level skills;

(iii.) the bulk of the employed tend to be between the ages of 20 and 50 years, with the mandatory retirement age varying between 60 and 65 years. There is a low incidence of persons who are employed over the age of 65. Barbados (less than 2 percent), Jamaica (6 percent) and Trinidad and Tobago (2%).

(iv.) there is also a low incidence of reported moonlighting (that is, multiple job holding) in the formal labour market, about one percent of the employed in the countries with available data (Jamaica, ). It is however expected that in economies with significant informal sectors such as Jamaica and Guyana, the degree of moonlighting in the informal sector would be much higher;

(v.) a decline in the degree of unionization amongst the employed although labour unions are still dominant in key economic sectors: hotels, public utilities and the public sector;

(vi.) in an effort to reduce costs and increase efficiency, there has been a steady increase in ‘contract workers’ in Jamaica and Trinidad and Tobago [see Thomas, 2000].

The phenomenon of the ‘working poor’ is also evident in the region, with workers unable to receive enough income from the trade of their labour services (labour income) to meet their basic personal needs. Available data on the extent of the ‘working poor’ (defined as ‘those who work and who belong to poor households’) in the Caribbean indicate rates of 8.5 percent and 3.5 percent for Jamaica in 1986 and 1997, respectively, while for Trinidad and Tobago, the rates were 11.2 and 13.6 percent for some years [see Majid, 2001]. These rates are calculated as the working poor as a percentage of the employed. Downes (2000) in a review of the relationship between poverty and labour market status in the Caribbean (Barbados, Belize, Grenada, Guyana, Jamaica, St Lucia, St Vincent and Trinidad and Tobago) observed the following features of the poverty-labour market nexus:

(i.) the human capital base of the poor (that is, level of education and degree of certification) is low and results in low-skilled, low-paying jobs (elementary occupations, small-scale enterprises and informal sector activities)

(ii.) where poverty is concentrated in identifiable communities, there is some evidence of stigmatization which results in employment discrimination and labour segmentation

(iii.) the seasonal pattern of production and employment (for example, in agriculture, tourism and construction) affects the degree of poverty in households

(iv.) minimum wage legislation has been used to alleviate poverty in some countries, notably Jamaica, Trinidad and Tobago and Guyana. In Guyana, the minimum wage has however been insufficient to overcome individual and household poverty

(v.) individuals in poor households take advantage of migrant worker programs in the USA and Canada organised by the governments. These programs have been
targeted on agricultural farms and the hospitality sector. Remittances from these programs help to bolster household income and smooth out consumption levels.

The correlation between poverty and labour market status raises the issue of the quality of employment. Evidence from Jamaica indicates that employment does not mean an escape from poverty as persons engaged in low wage jobs can easily slip back into poverty. In some cases, for example, during structural adjustment programs, middle-income employed persons have slipped below the poverty line when they are laid off [Handa, 2002]. This tends to occur when there is a single income household.

2.3 Unemployment

Unemployment is regarded as one of the most difficult economic problems to resolve in the Caribbean. Although there are variations in the measurement of unemployment, official estimates of unemployment obtained from labour force surveys indicate that the unemployment rate is relatively high in the region [see Table 5]. During the period 1990-2004, the unemployment rate in Barbados ranged from 9.4 percent in 2000 to 24.3 percent in 1993, while in Jamaica the range was 11.4 percent in 2003 to 16.5 percent in 1997. In Trinidad and Tobago, the unemployment rate declined from 20 percent in 1990 to under 10 percent in 2004. Although the data on unemployment is scant, in the OECS, the available information also indicates double digit unemployment rates in the 1990s; for example, Dominica (15.7 percent in 1999), Grenada (15.5 percent in 1997) and St Lucia (between 18 percent and 22 percent during the period 1990 to 2004). These high levels of unemployment reflect the underdevelopment of the skills, knowledge and talents of the labour force and the under-utilisation of human energies and skills. Several measures to reduce the high levels of unemployment in the region have been implemented by Caribbean governments [see Downes, 2000]. The unemployment rate declined somewhat during the 1990s in the Bahamas, Barbados, Belize, Grenada and Trinidad and Tobago, but was volatile in Jamaica and St Lucia.

Econometric analysis of the factors influencing the aggregate level of unemployment has been very scant. An econometric evaluation of unemployment in Trinidad and Tobago pointed to the dominant role which output growth plays in reducing the unemployment rate, while increases in the average real wages and the real loan rate impact adversely on the unemployment rate [Downes, 1998]. Other empirical research on unemployment in Trinidad and Tobago also indicates that the existence of a ‘wage gap’ (either petroleum-sugar or agricultural-non-agricultural) [Henry, 1990] and the low degree of capital accumulation [IMF, 1997] as factors contributing to the high degree of unemployment in Trinidad and Tobago. There is also evidence to suggest the existence of ‘persistence’ in the unemployment rate whereby past unemployment affects the ‘natural rate of unemployment’ in Trinidad and Tobago.

Many of the features of the unemployed are similar across the region. The most significant aspect is the very high levels of youth unemployment (15-24 years of age), especially among females. In all the countries, the female unemployment rate is higher than the male rate. Youth unemployment rates have been generally over 20 percent, with the female youth employment rate varying between 30 and 45 percent in the 1990s.
Although the measurement of unemployment varies across the world, these features of high female and youth unemployment are quite common in developing countries [see, for example, Turnham, 1993.]

It is generally believed that much of the open unemployment is due to structural factors such as the nature of the educational system and its interface with the labour market, the increasing use of modern labour-saving techniques in the production process, the permanent shift in the demand for goods and services, the skill content of the labour force and, to a lesser extent, cyclical factors such as the insufficiency of aggregate local and foreign demand for goods and services. Structural adjustment programs have also contributed to the unemployment problem in the region. For example, in Barbados, the unemployment rate reached 25 percent during the implementation of a structural adjustment program during the 1990s. In the Windward Islands, the decline in the fortunes of the banana industry has contributed to the high rates of recorded open unemployment in Dominica and St Lucia.

The factors which affect the general unemployment rate also affect youth unemployment in the region. The ILO (1996) has identified the following ‘determinants’ of youth unemployment in the region:

1) inadequate aggregate demand to generate enough jobs to absorb the new entrants to the labour market;
2) inappropriate education and training which do not match the requirements of the workplace;
3) the lack of work experience when entering the labour market;
4) the absence of well-functioning vocational guidance and placement facilities;
5) a poor attitude to work and little work aspirations
6) the avoidance of certain types of jobs which are low-paying and have low status. Reservation wages are high so that the youth prefer to queue for better paying jobs (that is, wait unemployment) and obtain support from family and friends;
7) the impact of new labour market developments – emphasis on flexibility, multi-skilling and outsourcing.

An important feature of the unemployed is their low level of educational and training attainment. In Jamaica, for example, over 80 percent of the unemployed had received no training in 2000, while in St Lucia over 60 percent of the unemployed had no education or had only reached ‘standard 6’ education in 1995. In Barbados, over 75 percent of the unemployed had received secondary level education in 1999 due to the institution of compulsory education for all children up to 16 years of age. However, in 2000, 57 percent of the adult population had no form of formal certification.

Unemployment tends to be low or non-existent among those with tertiary level or university education. Professional, technical and managerial occupations exhibit low or zero levels of unemployment, reflecting the degree of scarcity of such skilled persons. The bulk of the unemployed generally indicate that their usual or standard occupation is sales/clerical, ‘elementary production’ and general production. Available data for some Caribbean countries (Barbados, Trinidad and Tobago and Jamaica) indicate that some of
the unemployed experience long spells of unemployment. The modal range for the duration of unemployment in Barbados is 6 months to one year. The long spells of unemployment can result in the depreciation of the little skills possessed by the unemployed, hence making them unemployable in the formal labour market.

In terms of the geographical features of unemployment, high levels of open ‘urban’ unemployment exist in the larger countries (Jamaica, Guyana and Trinidad and Tobago) while ‘rural’ unemployment and underemployment exist in the OECS.

One of the problems faced by the unemployed tends to be the absence of a social safety net in the form of social insurance. At present, Barbados is the only country with an unemployment insurance scheme. The Scheme covers salaried workers between the ages of 16 and 64 years (excluding the self-employed and government employees) who must make contributions for 52 weeks in order to qualify for the payment of an unemployment benefit. Seven of these contributions must be paid in the quarter preceding the quarter in which the benefit is paid. Qualified persons are paid up to 26 weeks of benefits in a year at a rate of 60 percent of the original salary up to a maximum salary of Bds $715 per week. Persons must be actively looking for work during their period of unemployment before being paid the benefit. The number of claims rose from 9814 in 1985 to 20396 at the height of the economic decline in 1992. There has been a gradual decline since then. Data from the severance payments scheme in Barbados suggest that the main reasons for severing employees over the years have been the re-organisation of business operations (to meet the new competition and technological demands) and the closure of companies (due to a permanent shift in demand and/or a prolonged decline in economic activity). The co-existence of an unemployment insurance scheme and a severance payment scheme can encourage some degree of ‘double dipping’ by the severed/unemployed person.

In terms of job search activity among the unemployed, the available data indicate that job search takes place primarily through applying in person or inquiring from friends (that is, social networks). Little use is made of employment bureaus [see Downes and Gunderson, 2003]. Abt Associates (1998) reached a similar conclusion relating to the development and use of employment services in the Caribbean. Barbados, Trinidad and Tobago and, to a lesser extent, Jamaica have operational public employment agencies (Abt Associates, 1998; Statistical Annex, Table A-4). Employment bureaus are used primarily by those who have to indicate that they are seeking work in order to receive some form of assistance (e.g., unemployment insurance) or who register to go on external labour programs.

2.4 Determinants of Labour Force Participation and Unemployment

It was noted that there has been a general increase in the labour force participation rates in the Caribbean with the female rate increasing over time and the male rate remaining relatively constant. The changes in the labour force have implications for the unemployment rate, defined as the percentage of the labour force which is available for and seeking work during a specified period. Most countries in the Caribbean also include discouraged workers in the measure of unemployment (i.e., there is no job search
requirement). Many factors influence the decision to enter the labour market, including: age, education, household size and characteristics, marital status and other socio-economic elements. Using probit analysis, the factors affecting the decision to enter the labour market (that is, those that increase the probability of being part of the labour force) can be identified and the magnitude of the effect estimated. Such an analysis was undertaken using labour force data for Barbados, Guyana, Jamaica, St Lucia and Trinidad and Tobago. [See Downes 2004, for the complete regression results]

The econometric analysis provided the following results for the male and female labour participation decisions:

- **age** is an important factor in the labour participation decision. The relationship is quadratic, with decision to participate increasing with age, reaching a peak and then subsequently declining. The male participation rate for Barbados seems to be an exception to this general result.

- **education** is a statistically significant variable in the decision to participate. Both male and female workers enhance their human capital (via education and training) in order to trade their labour services in the labour market.

- **marital status** is also a key element in the decision-making process. Widowed, separated or divorced females are more likely to engage in labour market activity than married females. The effect is the reverse for men, whereby married men have a higher likelihood of entering the labour force than those in other marital categories.

- the nature of the ‘headship’ of the household also seems to influence the labour force participation decision. Where households are headed by females, with or without the presence of a male, there is the decision on the part of females to participate in the labour market. Where a male is present in the household, there is an increased probability that he would participate in the labour market.

- **remittances** from abroad tend to dampen the decision to participate in the labour market. Recent econometric research by Kim (2007) and Bussolo and Medvedev (2007) confirm the importance of remittances in reducing the degree of labour force participation in Jamaica by raising the reservation wage of potential job seekers.

These econometric results corroborate the general patterns observed in the aggregate data on labour force participation and unemployment in the region.

Female participation rates are much lower than male rates in all the countries for which data are available. As indicated earlier, female rates are increasing faster than male rates and may reflect the importance of human capital (education) and the female-headed nature of households as observed in the probit analysis of labour force participation.

Available data for labour market participation by age indicates that peak rates are observed in the 30 to 45 years of age categories. Participation rates for both males and females tend to be low for the age group 15-19, and then rise to peaks in the 30 to 45 years of age category and then decline in the higher age groups. This reflects the quadratic relationship observed in the econometric analysis.
Little data are available on the labour force participation rates by educational attainment and urban/rural distribution. Data for Trinidad and Tobago suggest that participation rates increase with educational qualifications/attainment, while data for Dominica indicate high participation rates for persons outside the capital Roseau.

It is expected that some of the factors which affect the participation decision are likely to affect the unemployment status of the individual. A probit analysis of unemployment in Barbados, Guyana, Jamaica, St Lucia and Trinidad and Tobago was conducted to understand the characteristics of the unemployed; from this we can infer what types of worker characteristics are in demand by employers. The following results emerge [see Downes 2004, for the full results]:

- age is a significant element in the probability of being unemployed. The relationship is quadratic with the probability of being unemployed rising with age to a given age and then declining. In effect, younger persons are more likely to be unemployed than older persons;
- education is also a key element in the probability of being unemployed. Males and females with complete or incomplete primary level education have a higher probability of being unemployed, while those with tertiary level education have a lower probability of being unemployed which suggests an excess supply of workers with low skills;
- as expected, in economies with high levels of unemployment, first time job seekers exhibit a high probability of unemployment since they have little or no work experience and are therefore forced to join the job queue;
- the results clearly indicate that workers in rural areas have a higher probability of being unemployed;
- the nature of the household also seems to influence the probability of unemployment. Being the head of a household is associated with the male being unemployed;
- remittances increase the likelihood of being unemployed which could indicate voluntary unemployment (as households are supported by cash support from abroad). But if causality goes the other direction, this result could be explained by the fact that the unemployed are more needy and therefore more likely to receive remittances;
- both male and female youth unemployment (20-24 years) are affected by the same factors as adult unemployment, namely, low educational attainment, living in a rural area and being a first-time job seeker;
- among unemployed youth, age reduces the probability of unemployment, suggesting that new entrants eventually find jobs.

These econometric results corroborate the general patterns observed in the aggregate data on unemployment in the region.

Data on unemployment by age confirms the econometric results relating to the probability of being unemployed. The unemployed are concentrated in the 15-30 years age group and represents a serious youth unemployment problem in the region. As
indicated earlier, the degree of unemployment is highest amongst female labour force participants.

In order to understand the nature of unemployment and its duration, it is important to distinguish between ‘discouraged workers’ who have effectively exited the labour force and actively unemployed who engage in job search. Recent research on the behaviour of unemployed persons in Trinidad and Tobago has provided some interesting conclusions. Valtonen (2001) found that the “chronically unemployed (i.e., discouraged workers) showed a consistent lack of up-to-date knowledge of the labour market, whereas those who were successful in finding employment did have this type of information, through ‘weak ties’ based on family and previously established labour market links” (p. 171). She also found that “while affiliation with the formal economy could strengthen an individual’s position in the labour market, association with the informal sector did not seem to give any better advantages in finding employment” (p.171). These findings are associated with ‘residential discrimination’ and ‘job history discrimination’ in the labour market. There is qualitative information which suggests that these features are common throughout the Caribbean. Where persons who live in ghetto or deprived areas or who have a history of frequent short employment spells find it difficult to find a job. Job seekers therefore ‘embellish’ their resumes to provide signals which would attract the attention of prospective employers.

In a later study, Valtonen (2003) confirmed the importance of ‘belong(ing) to circles’ as being important in shaping employability. This forms part of the individual’s social capital, as employed and unemployed persons can network and share information on job openings with those looking for employment.

Strobl (2002) and Byrne and Strobl (2004) examined the nature of unemployment in Trinidad and Tobago from the point of view of their job search strategies. They note that Trinidad and Tobago has used a broader definition of unemployment than provided in the standard ILO guidelines. They found that:

- including marginally attached males to the labour force raises the degree of labour market slack or unemployment rate. In effect, Trinidad and Tobago’s unemployment rate would be higher than countries that used the ILO definition [see also Downes, 1998];
- for non-employed males, the decision of whether to search for a job is related to cyclical conditions, that is, in bad times (downturn) more men are discouraged from actively seeking employment;
- the incidence of non-search among the non-employed has increased over time;
- men who are marginally attached to the labour market do not behave differently from those unemployed persons who are currently looking for a job, especially in the rural areas;
- the concept of ‘job search’ may not be meaningful or important for ‘rural men’ compared with ‘urban men’ because of ‘the seasonality of work, the higher cost of job search, the higher unemployment rate in the rural areas and the remoteness of the rural areas
The micro-regression results and the aggregate descriptive data indicate the inadequate skills or low educational attainment is a key factor underlying unemployment in the region. There is some degree of voluntary unemployment as persons queue up for jobs in the public and private sectors. Migration and associated remittances tend to raise the reservation wages of workers in some countries. The data also suggest the existence of a significant discouraged worker effect.

2.5 Wages and Earnings Determination

The labour market provides the main source of income for a very large part of the adult population in the Caribbean. Workers seek employment opportunities in their own countries as well as in other countries. High levels of unemployment and low wages have forced Caribbean workers to seek employment outside their home countries. Both intra- and extra-regional migration have been important features of the Caribbean social economy for over a century. Although large scale organised migration to the UK, USA and Canada has largely ceased, there has still been a steady stream of workers to the USA and Canada from the Caribbean, especially Guyana, Jamaica and, to a lesser extent, Trinidad and Tobago.

In addition, Caribbean governments have negotiated special labour schemes with American and Canadian employers whereby workers are contracted to work on farms and in the services sector (e.g., hotels). These contracts provide seasonal employment for a relatively small group of workers who are normally employed in the agricultural, construction and general services sector [See, Downes and Odle-Worrell, 2003]. Remittances from permanent migration and special labour programs have played a critical role in the survival of households in the Caribbean. For example, LeFranc and Downes (2002) found that remittances from Jamaican workers played a critical role in alleviating poverty in Jamaica during the 1990s. Both permanent and temporary migration therefore provides a means whereby foreign exchange is generated by the export of surplus labour.

Migration and its associated remittances are expected to have an impact on the local labour market. Since wages and earnings are generally higher in the receiving countries, the reservation wages of potential migrant workers would be higher in the domestic market. For example, a worker would prefer to remain unemployed than to work on a sugar plantation at home. He would however take a similar job working in Florida. Data for selected countries indicate that wages per hour are generally lower in the Caribbean than in other developing countries [see Table 6]. Wage rates in the manufacturing sector for Jamaica and the Dominican Republic can be regarded as being competitive vis-a-vis Costa Rica, Malta and Trinidad and Tobago. Although several Caribbean countries have minimum wage legislation, in many cases, the average wage is considerably higher than the minimum wage especially where labour unions are strong. In some cases, the average wages for selected sectors are used to set minimum wages.

Earnings functions analysis points to important factors which influence the earnings of workers in the region. Using data from recent labour force surveys in Barbados, Jamaica, St Lucia, Guyana and Trinidad and Tobago, we estimate the determinants of the log
hourly wage (earnings) with Mincer regressions. The regression results (reported in Downes, 2004) indicate that hours worked, educational attainment, training and experience are key variables in determining the earnings of individuals. These factors have a positive impact on earnings.

Other key features suggested by these regression results are:
- individuals from rural areas have lower earnings than those from non-rural areas
- working as a public sector employee has a positive impact on earnings which implies that public sector employment can be distortionary and may lead to queuing
- working full-time rather than part-time increases hourly wage earnings
- working in the agricultural sector and/or in elementary occupations depresses individual earnings

Wage rates in the Caribbean are set largely by the collective bargaining process or via legislation in the form of minimum wages for certain occupational categories or the country as a whole. Two approaches to the setting of minimum wages have been adopted by Caribbean countries. A few countries have implemented a national minimum wage: Antigua and Barbuda, Jamaica and Trinidad and Tobago. Other countries have adopted an occupational minimum wage structure: Barbados, Belize, Dominica, Grenada, Guyana, St Kitts and Nevis and St Vincent and the Grenadines. In the case of occupational minimum wages, most countries have focused on setting rates for such occupational categories as shop assistants, domestic (household) workers and security workers. In addition to a national minimum wage, Jamaica has also introduced minimum wages for these groups of workers. In some countries, some of these workers – shop assistants and security workers – are members of trade unions, so that their average wages are usually higher than the stipulated minimum wage rates. Adjustments in the minimum wage rates usually take into consideration changes in prices in the country rather than an assessment of poverty levels.

Some research was undertaken during the early 1990s on the determinants of nominal wage increases at the aggregate level in Barbados, Jamaica and Trinidad and Tobago. In the case of Barbados, labour productivity changes have been identified as the main determinants of real wage increases over the 1955-1990 period [Downes and Leon, 1994]. They found that a one percent increase in labour productivity results in a 0.27 percent increase in real wages.

In Jamaica, real wage growth has been influenced by unemployment (-), price inflation (+) and such ‘social variables’ as ‘real wage stickiness’, ‘real wage share’ and ‘target real wage’ (+) [see Hamilton, 1994]. In the case of Trinidad and Tobago, past price increases, unemployment growth and output growth (a proxy for productivity growth) have been shown as the main factors influencing nominal wage rates. No recent research has been undertaken on these relationships.
2.6 The Role of Labour Legislation

It has been argued that labour market legislation has contributed to increases in wages and earnings in the Caribbean. Caribbean countries started to become members of the International Labour Organisation (ILO) from 1962. Several of the ILO’s conventions have been ratified over the years. Out of 71 conventions, Guyana has ratified 45; Belize 42 and Barbados 39 [see Table 7]. The Caribbean countries have ratified almost all of the eight fundamental conventions: forced labour (1930); freedom of association and the right to organize (1998); right to organize and collective bargaining (1949); equal remuneration (1958); minimum age (1973) and the worst forms of child labour (1999). With the exception of Belize, Guyana and Suriname, there has been less success with the ratification of essential labour administration conventions [see, Table 7].

Many of these conventions have given rise to various forms of labour legislation aimed at enforcing these conventions. These legislative measures give rise to quasi-fixed labour costs which affect the demand for labour although the extent of effective enforcement is relevant. Various attempts have been made to summarize these measures in index form [see Downes, 2002 for a summary]. Using the two indices developed by Rama (1995), the index of labour market rigidity; and Marquez and Pages (1998), the index of employment protection, the Caribbean countries exhibit a lower degree of labour market rigidity and employment protection than Latin American countries. Rama’s index of labour market rigidity combines the following labour market regulations: number of ILO conventions ratified, annual leave with pay (in days), maternity leave (in days), social security contributions (% of wages), government employment (% of the labour force), minimum wage (% of average wage), severance pay (monthly wages paid) and unionisation (% of the labour force). These indices are evaluated on a scale with minimum and maximum values and then aggregated.

Marquez and Pages used a similar ranking of a range of labour market regulations: length of probation periods, advance notice periods, the actual cost of dismissing a worker, whether dismissals related to firms’ difficulties are likely to be deemed a just or unjust cause for dismissal and whether reinstating the worker in his/her job is mandatory once a dismissal is deemed unjust. The summary index of employment protection gives an ordinal rather than a cardinal scale of measurement. In many cases, labour legislation has not been changed for several years other than regular adjustments to the minimum wage. While these legislative measures along with negotiated benefits may have increased the level of wages, the impact on employment has not been significant according to the methodology used in Downes, Mamingi and Antoine [2004]. Downes et al (2004) used time series regression analysis to examine the impact of minimum wages, national insurance payments and severance payments regulation on employment in Barbados, Jamaica and Trinidad and Tobago over the period 1970 to 2000. They found that these measures had little impact on employment. Output expansion was the dominant variable in the regression equations. During the economic crisis in Barbados in the early 1990s, the Government of Barbados changed the Severance Payment Scheme payment arrangements making it easier for firms to lay off workers. On the other hand, the widespread trend of growing informal sector employment provides counter evidence that rising labour costs have indeed reduced labour demand in the formal sector.
While not a legislative measure, several countries in the region have been engaging in social partnerships (government, labour unions and private sector associations) in an effort to control the extent to which labour market arrangements such as collective wage bargaining affect the economy. Probably the most successful of these arrangements is the social partnership in Barbados. At the height of the economic crisis in the early 1990s, the social partners implemented a prices and incomes policy which initially called for a freeze on increases in basic salaries and wages and later a restraint on such increases [see Downes and Nurse (2004) and Fashoyin (2003) for a full discussion]. This arrangement has been extended to subsequent protocols covering a wider range of national, economic and social issues.

### 2.7 Labour Market Segmentation and Labour Mobility

Caribbean labour markets have been described as being segmented or composed of distinct sectors with limited inter-sectoral mobility [see Anderson, 1987; Doeringer, 1988 and Panton, 1993]. Segmented labour markets are generally characterised by some degree of discrimination based on age, sex, race or ethnicity [see Bosworth, Dawkins and Stromback, 1996, chapter 2]. But segmentation can also arise as an unintended or indirect result of other policies. Consider public-private segmentation, which is evidenced through the positive public wage premium as well as the non-wage benefits that public employees receive. Public compensation policies and the relatively large size of the public sector together create divisions in the labour market through labour supply decisions and queuing.

A review of the literature on the operation of labour markets in the Caribbean reveals some evidence of segmentation and discrimination. Anderson (1987) observed that labour market segmentation exists in Jamaica. Using data from a National Mobility Survey in 1984, she argued that the Jamaican labour market can be segmented into three components: primary, secondary and informal. Within these three components, “the presence or absence of worker protection serves to divide the labour market into different segments with varying outcomes” (p. 149). She observed that the primary (formal) sector is small, while the secondary and informal sectors are much larger. There was evidence of occupation sex segregation with women in the teaching and health profession (e.g., nurses) while males dominate in manufacturing, construction and large scale agriculture. Women were dominant in the informal sector.

Anderson (1987) also noted that there are differences in the age structure of the different labour market segments with the formal primary, central government and secondary sectors being dominated by those who are better educated and under 40 years of age, while the informal sector consisted of older, less educated persons. She also observed that the labour market was segmented along average income levels with primary sector workers receiving higher average incomes than those in the secondary and informal segments. She concludes that “there are marked differences in the age, sex and education composition of workers in each sector, which are reflected in income differentials. These differentials cannot be fully explained by differences in human capital as the “structural
effects of labour market location” (that is, within a sector or geographical location) are critical (p. 165).

The results are corroborated by the micro-regression equation results, reported in this study, which indicate the lower levels of educational attainment (low human capital) and hence secondary or informal labour market status are associated with lower earnings.

Panton (1993) has provided an extension of the Anderson framework by indicating that Caribbean labour markets can be divided into:
(i) Formal – primary and secondary
(ii) Informal – urban, rural and non-farm and rural farm
(iii) Central Government

The formal primary labour market consists of large scale capital intensive firms with high wages (bauxite/alumina companies, hotel chains, financial firms). The formal secondary market consists of medium-scale labour intensive firms with low wages and operating in a highly competitive environment (distribution, trading, small and medium size operations). The informal labour market consists of urban self-employed, who hustle in petty trading, small-scale production, traders/haggler who market the produce of small farmers – rural self-employed and rural labourers. He applied this extended framework to the Jamaican situation over the period, 1950-1990.

Doeringer (1988) observed that conditions in Jamaica vary significantly between the labour market segments with arrangements in the informal sector being loose and unstructured while those in the formal sector are characterised by union agreements or established internal labour market rules.

Further evidence of labour market segmentation has been provided for other countries. In the case of Trinidad and Tobago, a study by the World Bank (1994) observed the following:
- workers in unionized firms in the manufacturing sector earned over twice as much per hour for the same work as workers in non-unionized firms;
- average wages in the public sector are higher than in the private and informal sectors;
- compensation at the higher professional levels in the public sector is lower than in the private sector, but at lower levels, wages are higher than in the private sector;
- professional and skilled workers earn more than semi-skilled and unskilled workers;
- wages are generally higher in the urban areas than in the rural areas;
- males are generally paid more than females in the same occupational class (see pp 16-18).

These results which indicate that there is a premium for being male, unionised, educated and located in the urban sector are consistent with the preceding wage regression results for Trinidad and Tobago. There is evidence of discrimination against women in the earnings functions with the male-female gap being 18 percent in 1992. The micro-
regression wage equations for Barbados, Guyana, St Lucia and Trinidad and Tobago indicate that being female is associated with lower wages/earnings [see Downes, 2004]. Early analysis by Deutsch (1994) and Coppin (1996) found similar elements of segmentation and discrimination in Barbados. Using data from the Continuous Household Sample Survey for 1992 and 1993. They also found that:

- years of schooling had a positive and significant impact on earnings, with women benefiting more from post-primary education. Education was a significant variable in the earnings functions for young and older women and those who work in both the private and public sectors;
- experience had a positive and significant effect on earnings especially for women in the public sector and for younger persons;
- hours of work had a positive and significant impact on earnings for males, but not for females;
- on-the-job training was particularly important to older women and men, while institutional training increased the earnings of males;
- skilled occupations contributed positively to female earnings while white collar occupations carried a premium over other occupations;
- both men and women received a premium for employment in the public sector associated with job security and pension rights.

Data for Barbados show that the average earnings of men were greater than for women and are largely associated with occupational segmentation. Women, in general, receive higher returns to vocational training and education than males. With more women obtaining tertiary level education, they have a greater probability of finding a job so that average earnings of women can converge to those of men in the long run. The estimated value of the coefficient for the female variable (female = 1, male = 0) in the earnings/wage equations was statistically significant for all the countries and therefore represents a significant wage premium associated with the sex of the worker.

The estimation of earnings functions for Jamaica showed that schooling has had a significant and positive impact on earnings with the return to education higher for females than for males by at least 8 percentage points [Mackinnon-Scott (1992)]. She also found that wage differentials between males and females in Jamaica were a function of different levels of human capital but due to the pricing mechanism (that is, what the labour market would pay for an employee controlling for human capital features.

Labour market theories in the Caribbean have always emphasised the existence of a ‘wage gap’ between sectors and locations which influences the nature of unemployment. For example, it has been observed in Jamaica that “wage differentials between the manufacturing and service sectors can be over 50 % and between manufacturing and agriculture, 150%” [World Bank, 1994, pp 53].

Recent data on the labour markets in the Caribbean tend to re-confirm the findings of the earlier studies discussed above. There has been a shift from agricultural sector employment to services sector employment in all the countries. The shift has been significant in Barbados and Jamaica which have developed their tourism and financial
services sectors. The shift towards the services sector has resulted in an increase in employment for females. In general, more females than males are employed in the services sector. For example, in Barbados the number of males employed in the agricultural sector in 1991 was 3900, while in 2001, 3100 males were employed. On the other hand, 2200 females were employed in the sector in 1991 compared to 2000 in 2001. The services sector (tourism, financial services, and general services) employed 14,600 males in 1991 and 20,400 males in 2001, while 18,400 females were employed in 1991 compared with 26,600 in 2001.

The micro-regressions for the wage/earnings equations for the selected Caribbean countries provide results which indicate some degree of sectoral and locational segmentation in the labour market. A wage premium exists for working in the public sector (especially in the middle to lower categories) in Barbados, St Lucia and Trinidad and Tobago, but not in Guyana. Wage and salaries in the Guyanese public sector have been lower than in the private sector. During the 1990s, the Guyana government granted wage increases to public employees in order to bring wages and salaries “closer in line with the private sector at the lower skill categories of employment” [see Egoume-Bossogo et al, 2003, p. 32]. Wages tend to be higher in ‘urban areas with the exception of Guyana, where agricultural production –rice, sugar, coconuts, etc- for export results in higher wages and salaries than in non-agricultural activity (except bauxite mining). In other countries, wages are much higher in the tourism, distributive trades and financial services sectors.

Although females have improved their educational attainment over the years, they still dominate traditional occupations: clerical, service and sales, while males are dominant in elementary occupations, professional, craft, construction and assembly. In effect, there is still occupational segmentation in the region.

An examination of average wages in Jamaica over the period 1996-2000 indicates that a ‘wage-gap’ still exists in Jamaica. The lowest average wages are observed in the wholesale, retail, hotel and restaurant sector, while the highest average wages are associated with employment in the transport, storage and communications sector. The ratio of the highest average wage to the lowest average wage increased from 2.7 in 1996 to 3.2 in 2000. In Jamaica, the community, social and personal services sector was the main employer of female labour during the 1990s, but it is one of the lowest paying sector.

An examination of the ratio of the short term unemployed (less than 3 months) to the long term unemployed (over 3 months) indicates an increase in the ratio for Barbados, Jamaica, St Lucia and Trinidad and Tobago during the 1990s. Belize exhibited a decline in its ratio. A decline in the ratio is associated with some degree of mis-match in the labour market, since the inability to gain a suitable job results in long periods of unemployment. It should be noted that although in Jamaica, the unemployment duration ratio increased over the period, there was a large percent of the unemployed who had never worked (between 30 and 40 percent of the unemployed). This suggests a serious mismatching problem in the Jamaican labour force. The degree of mismatch is higher for
females than for males as the unemployment duration ratios are higher for females than for males for all the countries.

2.8 Stylized Features of the Caribbean Labour Market

The overview of the Caribbean labour market outlined in the previous sections point to certain stylized features covering the period 1990-2005:

1) a slow-down in the growth of the labour force associated with a low rate of population growth and an ageing of the population;
2) a higher male labour force participation rate than female rate, but a gradual increase in the female rate;
3) a general improvement in the educational attainment of the labour force although there are still important educational and skill deficiencies;
4) a general trend of positive employment creation (outpacing labour force growth) which has been influenced primarily by output growth;
5) high level of unemployment especially among the young (15-25 years of age) and female segments of the labour force;
6) significant out-migration (of generally higher-than-average skilled workers) and the return of remittances to the sending countries;
7) the significant in-migration which reflects a reallocation of labour within the Caribbean (that is, from more developed to less developed countries)
8) the disproportionately large size of the public sector;
9) growth of service-oriented employment and a decline in agricultural- and industrial-oriented workers;
10) a growth in informal employment;
11) a decline in the degree of unionisation, but labour unions are still strong in key sectors of the economy: hotels, ports, public utilities and the public sector;
12) a downward rigidity in nominal wages, with some degree of ‘real wage resistance’ in some countries;
13) nominal wage increases are determined primarily by inflation rather than productivity increases;
14) some degree of segmentation in the labour market with respect to sex and sector;
15) the relatively low degree of formal regulation.

3. HUMAN RESOURCES DEVELOPMENT

3.1 Training and Skill Development

Investment in education, training and skills development is regarded as being critical to economic growth and export competitiveness in small developing countries. Caribbean governments and companies have invested in human resources development (HRD) over the past few decades. Several initiatives have been tried: curriculum reform, universal primary and/or secondary level education, the vocationalisation of the secondary school system, skills training programs, incentives for private sector training, special technical and vocational training programs, apprenticeships, entrepreneurial development programs and job placement programs. Many of these programs have been targeted at the youth who have been most severely affected by unemployment [see Downes, 2000].
Early attempts at overcoming the unemployment problem through HRD measures focused on the incorporation of technical and vocational subjects in the secondary school curriculum. It was argued that the traditional curriculum did not prepare students with the knowledge and skills needed for a technologically dynamic economy. Furthermore, several students were leaving the secondary (and primary) school system with little certification that could signal their productive abilities to employers. The inability of the secondary schools to accommodate all the students graduating from the primary level meant that students left the school system at an early age with little meaningful skills. While primary level education is ‘universal’, but secondary level is not universal in the region. Governments have sought to address this problem by expanding the secondary school system and diversifying the primary and secondary school curricula. Comprehensive schools were introduced in the 1950s and 1960s to provide a broader educational base for students who were unable to gain access to the traditional secondary grammar schools. In the Barbados 1960-65 Development Plan, one of the main objectives of the educational program was the development of technical education to contribute to the industrial needs of the country. The secondary school curriculum was expanded to incorporate industrial arts (metal and wood work), home economics and agricultural science. The curriculum of these comprehensive schools was designed to reflect the requirements of an expanding economy, especially in the areas of agricultural and industrial development. The early 1960s saw economic development policy in Barbados focusing on manufacturing development propelled by fiscal incentives, the building of industrial parks and the training of persons in industrial techniques of production.

In Jamaica, technical high schools were established in the 1960s in order to respond to the commercial and industrial sectors’ calls for more trained personnel in the technical and vocational areas. In several traditional and new secondary schools vocational and technical teaching departments were established [see Morris, 1996].

In Trinidad and Tobago, the 1968-1982 Educational Plan provided the major thrust for the development of technical and vocational education. Pre-vocational and even specialized training were offered at the Senior Comprehensive secondary level. These schools were expected to provide students with options from four basic fields of technical education: agriculture, technology, home economics and commercial education.

The main examining body at the secondary level in the Caribbean, the Caribbean Examination Council (CXC), offers examinations in a range of technical and vocational subjects: agriculture science, art and craft, bookkeeping and principles of accounts, clothing and textiles, electrical technology, electronics, food and nutrition, information technology/computer studies, technical drawing, and shorthand and typewriting. The introduction of these subjects at the secondary school level marks a major change in the development of the human resources of the Caribbean. These provide teenage school leavers, who are about to enter the labour market, with the basic knowledge and training to cater to the needs of employers. The introduction of technical and vocational subjects at the secondary school level was therefore considered to be part of the general
educational process, to provide a higher level of skill acquisition and instrumentality (i.e., the ability to design, problem-solve, plan, etc) and to be a means of certifying the competence of students via formal examinations.

While some success has been achieved with the vocationalization of the secondary school system, some countries have reconsidered this element of their HRD strategy. For example, in Trinidad and Tobago, consideration was given to concentrating technical and vocational education and training in the post-secondary system [see Downes and Henry, 1998]. The data on TVET in the secondary school system point to the low registration of students in several subjects (agricultural science, craft, shorthand, electrical technology), the poor performance of students in CXC examinations, the high unit costs of TVET facilities, insufficient qualified TVET teachers, poor standards of literacy and numeracy of graduates, the lack of modern equipment and the unavailability of materials and supplies on a continuous basis. It was found that TVET programs offered at the secondary level did not improve the employment or earning prospects of graduates vis-a-vis conventional school leavers. The new approach to HRD within the context of TVET in Trinidad and Tobago consists of two parts:

1. the development of a universal core curriculum at the secondary school level aimed at improving language arts, mathematics, cognitive and social skills which are all needed for TVET, and
2. the gradual phasing out of TVET specialization in the secondary schools in tandem with the introduction and implementation of a new general curriculum.

Greater effort has therefore been placed at strengthening the post-secondary provision of TVET services. The secondary school system is expected to provide the basic educational background which is vital to the development of technical and vocational training. In Jamaica, the Government introduced a Reform of Secondary Education (ROSE) project in which technical and vocational subjects will be taught in a thematic form [see Morris, 1996].

While Governments in the region have sought to increase the labour marketability of school leavers by introducing TVET in the secondary school system, the most significant HRD initiatives have been at the post-secondary level. The Governments have established formal technical and vocational training institutions and a number of specialized skills training programs. The graduates of these institutions meet labour market needs at different levels of the production process: engineer, technologist, master craftsman/technician, multi-skilled craftsman, skilled craftsman, craftsman and apprentice.

Well-established technical and vocational institutes exist in the more developed countries of the Caribbean - Barbados, Jamaica, and Trinidad and Tobago. In Trinidad and Tobago, the main institutions offering a range of technical and vocational programs have been the San Fernando and John Donaldson Technical Institutes and the Hotel School. These institutions offer a range of craft, technician and service skills and students are certified through national and foreign examinations. In Barbados, the Samuel Jackman Prescod Polytechnic and the Barbados Community College are the primary institutions.
providing technical and vocational training. The Barbados Institute of Management and Productivity (BIMAP) offers a range of short managerial and supervisory courses targeted at mid-level managers. In recent years, emphasis has been placed on the training of persons in computing and related areas. These programs for employed persons complement the Government of Barbados’ thrust to infuse information technology into the school system in order to enhance student learning and provide children with the tools and skills to meet the challenges of the twenty-first century [see Cobbe et al, 1998 for a full economic assessment]. A TVET Council has been established by the Government to oversee that development of TVET in collaboration with the Barbados Vocational Training Board.

In Jamaica, the College of Arts, Science and Technology (CAST) was upgraded to the University of Technology (UTECH) and provides the higher level training in the science and technology areas needed by the Jamaican economy. The University of the West Indies (UWI) and the University of Guyana (UG) also provide degree-level education and training for persons entering higher levels of the occupational ladder. The State Colleges in the Organization of East Caribbean States (OECS) - Antigua, St Lucia - also provide post-secondary level education and training [see CARICOM Secretariat, 2006, for a full discussion]

Given the shortage of skilled and well-trained personnel in the region, graduates from these special technical and vocational institutes are readily employed in the labour market. Indeed, unemployment rates among skilled technicians and associated professionals tend to be relatively low in the region (for example, under 5 percent in Trinidad and Tobago).

The greatest effort at HRD in the region has been in the area of specialized skills training programs targeted primarily at the youth. All the countries of the regions have some form of skills training program. These initiatives were largely started in the 1980s to deal with the chronic youth employment problem in the region. In Jamaica, the best known program in this area is the Human Employment and Resources Training (HEART) - National Training Agency (NTA) which was established by the Government in 1982 and 1991 respectively [see Knight, 1992]. Prior to 1982 when the HEART agency was formed, several initiatives were taken to provide unemployed youth with skills (National Youth Service, Industrial Training Centres, Youth and Community Training Centres, Youth Camps, Agricultural Skill Training Centres). HEART was established to finance, develop and monitor employment training schemes especially for young people and to assist in the placement of those seeking employment. The agency is funded via a 3 percent payroll levy on all employers except ‘small’ firms and the Government along with private donations. The HEART program consists of a school leavers’ on-the-job training opportunities program which allows school leavers with low levels of certification to be trained by private employers. In addition, there is a series of academies which provide a range of short courses especially for young people in the rural areas. A Solidarity Programme has been designed to provide credit and training assistance for those involved in self-development projects.
In Trinidad and Tobago, the main programs geared to unemployed youth are the Youth Training and Employment Partnership Program (YTEPP) and Service Volunteered for All (SERVOL). The YTEPP started in 1988 by focusing on skills training and the attitudes and values of the youth. The program provides basic remedial education, vocational skills training, career enhancement, work experience attachments and post-training support. Training programs make use of community centres and facilities so that the youth can easily get to the places of training delivery. The orientation of the YTEPP is based on the problems faced by youth when they are about to enter the labour market, namely, the lack of marketable and communication skills, proper work attitude and ethic, the lack of work experience and financial and technical supports. These factors make young school leavers largely unemployable for long periods of time.

SERVOL was started in 1970 as a small scale community-based organization (CBO). It has become a highly successful and dynamic organizations with projects in vocational training, small business, agriculture and an integrated educational development program. It focuses on the attitudes and other personality problems of youth which affect their employability. Its adolescent training program has grown from 25 participants in 1971/72 to over 5000 in 1996/97.

The Morvant-Laventille Improvement Organization (MLIO) is also a grassroots organization which was established in 1986. Its focus has been to provide young persons in one of the most depressed areas of Trinidad and Tobago with skills training and attitude re-orientation. It links training with commercial activities in such areas as painting, woodwork and furniture making, shoemaking and leathercraft, welding and electronics.

Other countries of the region have various forms of skills training programs which seek to provide the young employed with the necessary marketable skills. In recent years, with greater attention being paid to poverty alleviation, the development of human capital - skills training and remedial education - has been viewed as a primary way to help with the problem of poverty and unemployment. In Guyana and Barbados, poverty alleviation programs have important skills training components which help to develop the human capital base of the poor (for example, the Social Impact Amelioration Programme (SIAP) in Guyana and the Pineland Creative Workshop in Barbados). Jamaica has also sought to learn from the experience of other countries with similar skills training programs. For example, in 1996, the HEART/NTA and the National Industrial Training Centre of Brazil (SENAI) joined forces to provide training beyond entry level competence. Programs have been designed to increase the efficiency and productivity of the Jamaican workforce through skills upgrading and other technical assistance interventions.

In order to assist with the entrepreneurial aspects of HRD, some Governments have introduced special funding schemes. For example, in Barbados, a Youth Entrepreneurship Scheme (YES) has been established to assist young persons who are interested in setting up a business. YES assists with the provision of financial and technical assistance and training. The Government of Barbados has also established agencies to provide funds to persons desirous of setting up small businesses.
The final HRD initiative has been in the area of on-the-job training (OJT). Surveys of companies in the region indicate that this is the main form of training taking place within companies in the region. Apprenticeship programs by various skills training agencies also constitute a form of OJT. The HEART/NTA’s School leaving program in Jamaica provides on-the-job training for its participants. The program was in existence for the whole life of the HEART/NTA.

Various reports and papers have been prepared on technical and vocational education training programs in the region [see Downes, 2000; Parris, 1998; Lochan, 2000]. These studies have focused on such programs as HEART/NTA in Jamaica, SERVOL and YTEPP in Trinidad and Tobago and the Skills Training Program in Barbados. These programs have been partly successful in providing the labour force with skills which they can offer to employers. There are still problems on the demand side of the labour market as several Caribbean economies have experienced problems over the past decade.

While national training programs are well-known, little information exists on the extent to which firms are engaged in training. A few surveys do exist which provide some idea of the extent to which private firms promote the training of employees. A small scale survey of training and development needs in Barbados in 2001 indicated that 74 percent of the respondents have training budgets and allocated about 5 percent of their overall budget to training [see BEC, 2002]. Lower level employees in the clerical, technical and vocational categories tend to receive the bulk of the training, which combines on-the-job training and classroom instructions. In terms of future training needs, the study identified supervisory management, job skills, health and safety, performance appraisals and implementing a productivity management system. An earlier study by Ashton et (2001) also highlighted the relatively high percentage of companies with training budgets and the high use of on-the-job training. People management was perceived as an important area of future skills training.

In Jamaica, the Jamaica Employers’ Federation (JEF) undertook a study of training in private companies [JEF, 2000]. It found that 44 percent of the responding companies had a training budget but many of them were unable to indicate the percentage of the overall budget attributable to training. As in Barbados, most of the training was on-the-job. Senior management received the largest share of the training budget, with many of them attending overseas courses. The Ministry of Labour and Social Security has been collecting information on the most frequently advertised jobs in the Jamaican labour market. The top five areas fall into managerial, teaching, marketing, customer service and accounting occupations. The vacancies reflect the range of occupational skill areas (highly skilled to semi-skilled). It is generally recognised that jobs requiring little or no skill are hardly advertised since the supply of such persons tend to outweigh the demand for such workers (labourers, agricultural workers). With the expansion in the services sector in the region, there has been a corresponding increase in demand for workers in this sector.
In the case of Trinidad and Tobago, Grover et al (1998) identified several firms which provided training for their employees, especially technical and management training. Most of this training was undertaken in order to upgrade the skills of existing workers. They however found that there were basic skill deficiencies among workers, namely work ethic and attitude and desired technical skills. The National Training Agency (NTA) in Trinidad and Tobago has been undertaking surveys of the training needs of employees in various sectors of the economy. A May-September 2001 survey indicated that job opportunities were available for graphic artists, book binders, sales personnel, nurses, hairdressers, administrative assistants, data entry clerks and sewing machine operators. These are basically mid- to low-level jobs. The recent expansion of the economy of Trinidad and Tobago has resulted in a shortage of workers in the construction industry (plumbers, masons, electricians).

In the OECS, the lack of critical skills has been a constraint on economic expansion and international competitiveness [World Bank, 2005]. For example, in St Vincent and the Grenadines and Grenada, skill shortages have been identified in the technical/engineering and managerial areas. Chottepanda (2004) has also pointed to skill labour shortages in Guyana which has experienced a high level of emigration of skilled labour over the past decade. Data on work permits granted by Caribbean governments during the 1990s reinforce the nature of skilled labour shortages [see Table 8]. The main categories for which work permits were granted were in the managerial, technical and professional occupations. The CRSC has now replaced a work permit for several categories of workers in the CARICOM region.

In a comprehensive analysis of training needs in the tourism sector of 25 Caribbean Tourism Organisation member states, it was found that the majority of the workers were skilled/semi-skilled and unskilled with the ratio of managers to non-managers being 1:10. While tourism operators experienced moderate to extreme difficulty in filling managerial and professional posts, there was no great difficulty filling posts for unskilled workers. The main general training needs in the sector were in the areas of customer relations, marketing and communications and computer literacy, while technical training needs were in the areas of culinary skills, tour guiding and maintenance. Most of the training in the sector is on-the-job and the majority of the training expenditure is spent on skilled/semi-skilled employees. Data on the percent of the budget spent on training was unavailable, but it was observed that two-thirds of the respondents spent less than US $5000 on training of staff in 1997. This relatively low expenditure may reflect the high degree of turnover of staff which occurs in the sector. Respondents identified the main human resource challenges as quality of staff, staff motivation, work ethic and attitude.

The results of the earnings equations can be used to derive the rates of return to different levels of education and training. Using the extended Mincerian earnings equation discussed by Psacharopoulos and Ng (1992), the results for Barbados, Guyana, St Lucia and Trinidad and Tobago, indicate that:

(i.) the rates of return for tertiary and university education are higher than secondary level education;
(ii.) professional and post-university education and training;
(iii.) the rates of return for females are generally higher than those for males especially at the tertiary/university levels;
(iv.) rates of return for vocational education/training are relatively high
(v.) Trinidad and Tobago and St Lucia are relatively high compared to Guyana;
(vi.) The rates of return are comparable to those for other countries (see Psacharopoulos and Ng, 1992).

This overview of training and skill development in the Caribbean indicates that a lot more needs to be done to enhance the human capital base in the region. There are serious skill deficits in key sectors. Furthermore, information on training in organisations is difficult to obtain.

3.2 The Mismatch Problem and the Transition from School to Work

One of the main reasons for youth unemployment, in particular, and unemployment, in general, relates to the “mismatch problem”, that is, the difference between the distribution of job requirements or needs of employers and the distribution of knowledge and skills of the labour force. The high levels of youth unemployment, coupled with the high incidence of un-certificated workers, suggest a “mismatch problem” associated with a dysfunctional educational education system. Employers indicate that they find it difficult to recruit workers with appropriate work ethic, attitude, job/work experience and technical skills. Establishment surveys in Barbados and Jamaica, for example, indicate that a poor attitude to work and poor work ethic have been major concerns for employers. They indicate that these attitudes, along with basic education/knowledge/skills (reading, writing and mathematics) are critical to job hiring and trainability of employees.

Attempts have been made in recent years to study and resolve the ‘mismatch problem’ by examining the transition from school to work. In their study of Jamaica, Kerr et al (2006) found that 26 percent of the youth (15-24 years had gained work experience as part of their education and training and that 78 percent planned to further their education in the future. Approximately 60 percent of the out-of-school youth had not passes an academic examination, with the vast majority being males. It was however recognized that post secondary certification was important to finding a decent job. The main obstacles to in finding a suitable job were unsuitable general education and training opportunities, no certification, and unsuitable vocational education. Regression analysis pointed to the importance of certification and work experience in determining the employability of the youth. HEART Trust/NTA has implemented a school leavers training opportunities program called the National Service for Industrial Learning to bridge the gap between school and the world of work. The trainee is placed in a firm to gain on the job training and receives a small stipend during the training period. The trainee can earn National Vocational Qualification of Jamaica (NVQ-J) on completion of the program.

In a survey of youth in St Vincent and the Grenadines, Vermeersch (2006) found that students lacked knowledge on the skills required by the labour market and had little interaction with employers on the skills needed by firms. On the job training was very low in the country. Correlation analysis indicated that there was little correlation
between the level of academic achievement (secondary school leaving performance) and labour market outcomes.

These results point to the need to re-examine the education system as it relates to the needs of the labour market in the Caribbean. As suggested earlier several proposals have been made regarding the new education and training arrangement in the Caribbean: separating the job training from secondary education, creating TVET tracks in schools, enhance the academic content of the TVET programs in schools and colleges or make TVET a post secondary exercise with a strengthened academic program in schools.

3.3 The Brain Drain Problem

The Caribbean has historically been an area of migration – both immigration and emigration. Organised emigration has occurred to such countries as UK, USA, Canada and Panama over the past century. Early emigration to these countries was a means of easing the high unemployment (surplus labour) problem in the region. Persons emigrated to more developed countries to work as domestics, nurses, teachers, construction workers, transport workers and other low and middle skill level workers. Emigration can therefore be viewed as being beneficial to a country if the emigrants would otherwise be unemployed or working in low skill jobs. If the emigrants are members of the professional and skilled labour force, then a ‘brain drain’ occurs which then results in lower overall productivity and reduced economic growth. There are several costs and benefits associated with the movement of persons from one country to another (that is, emigration from the country of origin, immigration from the country of destination) [see Mishra, 2005]. In relation to the costs of emigration to the country of origin, there are:

(i.) the ‘emigration loss’, that is, the net welfare reduction associated with movement of infra-marginal workers who are paid less than their marginal product;

(ii.) the public expenditure on the education and social welfare of the emigrants;

The benefits include:

(i.) the inflow of remittances or other transfers from emigrants

(ii.) the possible network effects which can be a source of FDI and export marketing;

(iii.) the enhancement of human capital.

The Caribbean has been an important source of migrant workers to more developed countries. It is estimated that between 1970 and 2003, 745,289 persons emigrated from Jamaica to the USA, UK and Canada, that is an average annual flow of 21,920 persons [PIOJ, 2005]. The annual outflow however declined over the 1980 to 2003 period.

While emigrants from the Caribbean may constitute a small percent of the work force of the destination countries, they represent a significant proportion of the domestic labour market. Using population census data for 1990 and 2000, Docquier and Marfong (2004) have estimated that about 12 percent of the Caribbean labour force has migrated to OECD countries. Given the relatively small labour market, with heterogeneous skills, such a migration rate can have a serious impact on the labour markets in the region.
An analysis of migration by education levels indicate that those persons with tertiary level education constitute the highest percentage of migrants to OECD countries. The rates are similar to those in the USA [see Table 15]. The high rates of migration for tertiary level educated persons (ranging from 36 percent in the Bahamas and St Lucia to 90 percent in Suriname) represents a significant ‘brain drain’ problem in the region [see Mishra, 2005].

Guyana, Jamaica, Suriname and Trinidad and Tobago have been the main countries affected by the high rates of migration of skilled labour to the OECD countries. Data for Jamaica indicate that the main groups which migrated to North America during the 2000-2003 period included professional/technical/administrative/managerial (30.8 percent of all emigrant workers) and some workers including private household workers (47.6 percent) [PIOJ, 2005].

The Caribbean region has however received an income flow from the emigrants in the form of remittances and other transfers. These income flows represent non-wage income which can affect the supply of labour. Econometric research on the participation decision and unemployment for selected countries suggests that remittances to a household can lead to the decision not to participate in the labour market and to persons remaining unemployed [Downes, 2004].

In recent years, Caribbean teachers and nurses have sought to benefit from the shortage of such workers in more developed countries. This has resulted in a short fall in these workers (especially nurses) in the region. Some countries have sought to recruit nurses from outside the region (Asia and Africa) to meet the short fall.

Intra-regional migration especially from Guyana has been a prominent feature in recent years. Workers from Guyana have moved, as temporary workers in the construction and agricultural sectors, to other Caribbean countries. These workers have been largely semi-skilled and do not fall within the categories of workers who are allowed to ‘move freely’ within the CARICOM region. This free movement of labour is currently limited to university graduates, media workers, cultural workers and workers associated with the rights of establishment of businesses in other CARICOM countries. The region, however, still depends on non-CARICOM countries for workers in the professional, technical and managerial areas.

4. LABOUR MARKET AND HRD POLICIES

The main challenges facing the Caribbean labour markets have been targets of government policies and programs for several decades. More data have been collected and research undertaken to fine-tune policy measures aimed at overcoming these challenges. The changes in the national, regional and international economies with respect to the implementation of structural adjustment programs, the forging of greater regional integration, the liberalisation of international trade, the erosions of preferences and the various facets of the globalisation process have exacerbated the challenges facing the Caribbean region. Although policy measures and programs would be needed to
address the problems facing the labour markets directly, action would also be needed in other markets and in the general environment within which business activity takes place (for example, the commodity and money market, the institutions of economic governance, etc).

The main objective of labour market policy reform in the region is to create a dynamic labour market which can foster productivity and promote flexibility while providing effective social safety nets and increasing real incomes. Since labour is an integral input into the production process, then for small developing countries like those in the Caribbean, the development of the human resources of the countries becomes a vital element in enhancing overall productivity and international competitiveness. Improving the quality of the human resources of the region would require investment in education, training, health and nutrition. Changes in the nature of the demand for goods and services in the domestic and export markets would require changes in the quantity and quality of the human resources which make labour market flexibility an important policy objective. Since it takes time to educate and train persons, then human resource planning is a critical exercise in various enterprises.

For a significant majority of the persons in the Caribbean, the labour market provides the only source of income, that is, labour/wage income is a significant percent of total income. The inability to sell labour services creates a problem of poverty and deprivation unless social safety nets exist. The labour market therefore becomes an important source of funds for these safety nets (for example, unemployment insurance, severance/redundancy pay, national insurance payments, remittances from workers abroad, income from other family members). As the empirical evidence suggests, increased earnings are associated with increased productivity, better education and training and greater competitiveness.

Labour market flexibility in the Caribbean tends to be higher than in Latin American countries, but lower than in non-Caribbean micro states. It has been argued that some degree of labour market flexibility is needed in the region in order to attract more foreign investment and increase employment [see Archibald et al, 2005]. The nature of such changes would include reducing the difficulty of firing and the rigidity of working hours (that is, reducing severance payment and national insurance payments, introducing a more flexible work week). While these changes would lower the adjustment costs of employment for the employer, they should be balanced by social schemes which assist workers short term unemployment (unemployment insurance) and retooling for new jobs (training grants). Greater labour market flexibility should therefore be combined with some degree of social protection in order to smooth the transition processes on both sides of the labour market when shocks occur.

Labour market policies to address the six main challenges identified in this study require measures on both the demand and supply sides of the market, and also in the areas of remuneration and labour market institutions. These policy measures should be developed in an integrated and holistic manner since the main challenges facing the region are inter-
related. As indicated earlier, Caribbean governments and other labour market stakeholders have been implementing labour market policies to address various challenges over the years. Since these challenges still remain, it means that they have been difficult to surmount, the policies have been implemented in a piecemeal manner, the measures have been too costly, the nature of the challenges has changed or the measures have been inadequate or inappropriate.

The range of policy measures presented in this study has been developed from previous studies of Caribbean labour markets and interviews with key informants of labour market behaviour. They attempt to address the challenges both directly and indirectly since these challenges are seen as inter-related.

The first of the policy measures aimed at meeting the challenges of the labour market in the region is the restructuring and refocusing the system of education and training. A dysfunctional educational system and inadequate training facilities lay at the heart of the youth unemployment, ‘mismatch’, ‘brain drain’ and low productivity problems. The issue of educational reform has been prominent in the region over the past decade. For example, Barbados has introduced an educational improvement program (Edutech), while the OECS has recently completed the early phases of an education reform project. The Jamaican government has begun to implement the recommendation of a national task force on education.

The restructuring of the educational system – from primary to tertiary – must ensure that graduates have the competencies to operate effectively in the labour market both as employees as well as self-employed. Universal secondary level education should form the basic minimum level requirement for the Caribbean region. Recent research by Lee and Temesgen (2005) indicates that access to education to at least (or even better than) secondary level is an important determinant for the growth of firms and hence long term employment. Whilst universal secondary level education is a primary goal, a co-primary goal is enhancing the quality of the output of the educational system (better certification, appropriate competencies and psychological skills). Improving the quality of the graduates of the school system, so that they can properly interface with the labour market would require improving the inputs of the educational system (teacher training, stronger parent-teacher associations, supplies and equipment, etc). Graduates must leave the secondary school system with a high degree of literacy (writing, reading, and computer) and numeracy in order to meet the demands of a dynamic labour market.

The training system should reinforce knowledge and competencies of the educational system. A much greater interface would be needed with employers who can support apprenticeship programs, work experience-study programs and related programs. HEART/NTA in Jamaica, the TVETT Council in Barbados and COSTAAT in Trinidad and Tobago are examples which can be emulated. These institutions however need to be strengthened and properly funded in order to cater to the technical and vocational training needs of the region. The certification of the work force in various technical and vocational areas (for example, NVQs) at an international level would be critical to the
enhancement of the international competitiveness of Caribbean human resources and also goods and services.

The restructuring of the educational system should be accompanied by greater counselling and career guidance for students; more extra- or co-curriculum activities to build the ‘soft skills’ of interpersonal relationship, conflict management, work ethic and time management, mentoring and entrepreneurship. Such measures would allow for better job fitting – output of the education and training system and the needs of the workplace. Educational planning and labour market planning should be more integrated so that the transition process from ‘school to work’ would be efficient and effective.

A **second** policy area relates to measures to boost productivity in the workplace. The establishment of well-functioning productivity centres involving the stakeholders in the labour market should be a high priority for the Caribbean. Barbados has a Productivity Council which has been operational since 1993 and Jamaica has recently established a Productivity Centre. Such an institution would develop systems and programs to promote productivity in the workplace - that is, re-organisation or retro-fitting of plant layout, gainsharing schemes, human resource (including management) training, and operations management systems, among other measures. As a tripartite national body, the council would recommend policies to deal with the external barriers to productivity growth – investment incentives, infrastructural problems and bureaucratic systems. The results of the PROMALCO project organised by the ILO (Caribbean Office) would be useful in improving labour-management relations in the workplace [see Imoisili and Henry, 2004]. National and sectoral memoranda of understanding (MOUs), as implemented in Barbados and Jamaica, would further the productivity drive once they are well known to workers and managers in various enterprises. One of the problems with such MOUs is that their contents are not well known to workers and managers who have to work with them.

The **third** policy is related to the development of an employment creation program based on a national production program. On the demand side, the labour market needs to be enhanced through a comprehensive production program geared for the export market. As small developing countries which have historically depended on agricultural products for their survival, Caribbean countries have to develop alternative areas of production as these traditional products are now ‘sunset industries’. Some Caribbean countries have sought to promote the development of new, sunrise industries in the services and technologically-based sectors. These industries would require new human resource needs supplied by a restructured and refocused educational and training system. Caribbean countries need to take maximum advantage of the international trade negotiations in order to develop niches for the sunrise industries. In addition, Pan-Caribbean region companies can form the platform for a greater push in the international market. National development plans and strategies now being formulated in the region (Vision 2020 in Trinidad and Tobago, Barbados Strategic Development Plan 2005-2025, OECS Development Charter and Strategy) must ensure that production and human resource plans are integrated at the operational level of implementation so that educated and trained persons are readily absorbed into the labour market. An emphasis should be
placed on high value added jobs which would use the expertise of the supply side of the market and partly stem the brain drain.

Innovative ways must be developed to generate productive and decent work in the region. Small and medium sized enterprises provide some potential for job creation provided the environment within which they operate is enhanced. Attention needs to be paid to the financing and technical needs of such enterprises. Laws relating to the bankruptcy of firms and loan collateral arrangements would have to be revised in order to give these enterprises an opportunity to expand or recover from losses. Several countries have been examining the needs of these enterprises but in a piecemeal fashion. There is also potential for entrepreneurial growth in enterprises which interface between the services sector and the agricultural and manufacturing sectors. While a lot of emphasis has been placed on the services sector in the region (e.g., tourism, financial and business, data processing), there is need for greater linkages with the agricultural and manufacturing sectors. The discussion on ‘special and differential treatment’ for small economies in various trade negotiations should provide for such economies to restructure their sunset industries. For example, Barbados is considering a focus on developing a sugar cane industry rather than the traditional focus on the sugar industry.

The formation of pan-Caribbean enterprises within the context of the CARICOM Single Market and Economy should allow such enterprises to explore markets in the Caribbean Diaspora in North America and Europe and also non-traditional markets in Latin America and Africa. Given the relatively small size of the regional economy, a ‘small’ increase in exports in the international market can result in a significant increase in employment. Some attention would also have to be paid to creating the environment for greater foreign direct investment to supplement regional financial resources and also to effectively penetrate international markets. Caribbean countries would need to address their physical infrastructure (public utilities, roads, and ports), regulatory systems and macroeconomic policies in order to attract greater investment to the region [Kolstad and Villanger, 2004].

A fourth policy area relates to the strengthening of the dialogue among the Social Partners (Government, labour unions and employers). Such dialogue would provide the overall macroeconomic framework to achieve the objective of labour market policy reform. Several attempts have been made to establish well-functioning social partnerships in the region. The arrangement in Barbados has been the only one functioning at a satisfactory level. Such arrangements have been beset by distrust which must be overcome in order to enhance the operations of the labour market. Such partnerships must be accompanied by well-functioning agencies such as Ministries of Labour and Economic Affairs which need to be staffed by persons with specialist skills. It has been argued that such agencies – government, employer and union – should be more strategic, proactive and global in outlook. The dialogue and agreement amongst the social partners would hopefully result in a less adversarial industrial relations climate, a focus on productivity growth, productive, remunerative and decent work and greater opportunities for human resource development.
The fifth policy area relates to the revision of labour laws and work practices to reflect the changes in the commodity and labour market. Very few changes have been made in the labour laws over the past decade. Most of the amendments have been undertaken to accommodate administrative requirements. In many cases, labour practices, as determined by the collective bargaining process or internal labour market rules and regulations, have guided the operations of the labour market. With the advent of labour mobility within the context of the CARICOM Single Market and Economy (CSME), there will be a need to modernize and harmonize labour laws in the region. Changes should be made to reduce the non-wage labour costs associated with the employment of persons while protecting the rights and social welfare of workers.

One area of concern in the region is the costs of adjustment with respect to employment. Several countries have severance payment or redundancy laws which compensate the employee when he/she is severed or made redundant. Employers are usually required to contribute to a fund so that enough financial resources are available to compensate the severed employees. These payments are contingent upon employment separation and therefore represent a pool of funds which can be used to finance the operations of an enterprise. Employers have been seeking to reduce their contributions, especially where these contributions are significant. Any reduction in the contribution would mean that either the sum paid to the employee or the period for payment would have to be reduced. A decision on this matter would depend on the rapidity with which an individual can find employment. In Barbados, a severance payment scheme coexists with an unemployment insurance scheme and hence a severed worker can ‘double dip’. This arrangement would need to be rationalised in order to reduce the non-wage labour costs to employers [see Downes, 2004].

Another area of topical discussion is the institution of either a national or sectoral minimum wage system. Several countries in the region have either a national minimum wage (Jamaica, Trinidad and Tobago) or sectoral/occupational minimum wages (Barbados, Guyana, and Antigua). With the formation of the CSME and the institution of ‘free labour mobility’ within the region, labour unions have argued for (sectoral) minimum wages in order to prevent the exploitation of labour.

The sixth labour market policy area relates to the development of measures to stem or take advantage of the ‘brain drain’. Jamaica has proposed the establishment of a Diasporic Institute to examine ways in which persons in the Diaspora can assist with the development of Jamaica. In the same way that some Caribbean governments have established special arrangements to help with the return to migrants to the region, similar arrangements should be developed to take advantage of the human capital services outside of the region. Some of the policy issues would involve maximising the benefits of remittances to the country; training persons as part of the export of services (for example, Mode V trade in services), investment and marketing prospects of the Diaspora, joint services provision – in the destination country and the Caribbean and creating externalities and networks in the destination countries.
A final area of policy is the development of labour market information systems (LMIS) in order to supply information on labour market needs, outcomes and behaviours. All the countries in the Caribbean are lacking in this area and there is a need for urgent action to redress this problem. The recent work on the Caribbean LMIS can form the basis of the development of national and regional labour market data bases.
### Table 1
#### Annual Average

<table>
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<th>Percent</th>
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</thead>
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<tr>
<td></td>
<td></td>
<td>Population Growth</td>
<td>Labour Force Growth</td>
</tr>
<tr>
<td>Antigua and Barbuda</td>
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</tr>
<tr>
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<td>1.8</td>
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</tr>
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<td>0.9</td>
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</tr>
<tr>
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<td>4.6</td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
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<td>n.a.</td>
<td></td>
</tr>
<tr>
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<td>0.2</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
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<td>0.0</td>
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<tr>
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</tr>
<tr>
<td>St. Lucia</td>
<td>1.2</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>St. Vincent and the Grenadines</td>
<td>0.5</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>0.3</td>
<td>1.4</td>
<td></td>
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Notes: n.a.- not available

### Table 2
Dependency Ratios for Caribbean Countries 1990-2000

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<th>Countries</th>
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<th></th>
<th></th>
<th>2000</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Overall</td>
<td>Male</td>
<td>Female</td>
<td>Overall</td>
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<td>0.58</td>
<td>n.a.</td>
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<td>n.a.</td>
</tr>
<tr>
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<td>0.56</td>
<td>0.48</td>
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<tr>
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<td>0.78*</td>
<td>0.75*</td>
</tr>
<tr>
<td>Grenada</td>
<td>0.85</td>
<td>0.88</td>
<td>0.87</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Guyana</td>
<td>0.64</td>
<td>0.64</td>
<td>0.64</td>
<td>0.53*</td>
<td>0.52*</td>
<td>0.52*</td>
</tr>
<tr>
<td>Jamaica</td>
<td>0.78</td>
<td>0.78</td>
<td>0.78</td>
<td>0.61*</td>
<td>0.64*</td>
<td>0.62*</td>
</tr>
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<td>St. Kitts/Nevis</td>
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</tr>
<tr>
<td>St. Lucia</td>
<td>0.73</td>
<td>0.72</td>
<td>0.72</td>
<td>0.65*</td>
<td>0.64*</td>
<td>0.65*</td>
</tr>
<tr>
<td>St. Vincent and the Grenadines</td>
<td>0.76</td>
<td>0.79</td>
<td>0.78</td>
<td>0.76*</td>
<td>0.79*</td>
<td>0.78*</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>0.66</td>
<td>0.66</td>
<td>0.66</td>
<td>0.48*</td>
<td>0.50*</td>
<td>0.49*</td>
</tr>
</tbody>
</table>

Notes: n.a. – not available; * indicates 1998 data
### Table 3
Labour Force Participation Rates in the Caribbean by Sex Distribution
1993 and 2003 (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>1993</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Bahamas</td>
<td>79.9</td>
<td>69.9</td>
</tr>
<tr>
<td>Barbados</td>
<td>74.1</td>
<td>59.7</td>
</tr>
<tr>
<td>Belize</td>
<td>78.8</td>
<td>35.0</td>
</tr>
<tr>
<td>Grenada</td>
<td>62.5</td>
<td>50.8</td>
</tr>
<tr>
<td>Guyana</td>
<td>81.0</td>
<td>39.3</td>
</tr>
<tr>
<td>Jamaica</td>
<td>74.6</td>
<td>62.4</td>
</tr>
<tr>
<td>St Lucia</td>
<td>78.9</td>
<td>61.2</td>
</tr>
<tr>
<td>Trin/Tob</td>
<td>75.5</td>
<td>43.7</td>
</tr>
</tbody>
</table>

Sources: ILO, Digest of Caribbean Labour Statistics and CDB, Annual Report 2005
Notes: 
\(^a\) applies to 1999
\(^b\) applies to 2002

### Table 4
Employment in the Caribbean 1990-2004
(‘000 persons employed)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahamas</td>
<td>114.2</td>
<td>114.7</td>
<td>124.6</td>
<td>129.8</td>
<td>144.4</td>
<td>153.3</td>
<td>152.7</td>
<td>158.3</td>
</tr>
<tr>
<td>Barbados</td>
<td>105.3</td>
<td>101.7</td>
<td>105.5</td>
<td>114.3</td>
<td>119.8</td>
<td>125.5</td>
<td>128.6</td>
<td>132.0</td>
</tr>
<tr>
<td>Belize</td>
<td></td>
<td>62.4</td>
<td>65.0</td>
<td>73.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grenada</td>
<td>30.4</td>
<td>35.0</td>
<td>34.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guyana</td>
<td>245.5</td>
<td>239.8(^1)</td>
<td></td>
<td></td>
<td></td>
<td>232.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jamaica</td>
<td>896.3</td>
<td>905.7</td>
<td>923.1</td>
<td>959.8</td>
<td>953.6</td>
<td>933.5</td>
<td>1036.8</td>
<td>1055.2</td>
</tr>
<tr>
<td>St Lucia</td>
<td>52.3</td>
<td>56.7</td>
<td>56.4</td>
<td>63.5</td>
<td>62.8</td>
<td>62.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trin/Tob</td>
<td>374.1</td>
<td>405.9</td>
<td>415.6</td>
<td>444.2</td>
<td>479.3</td>
<td>503.4</td>
<td>525.1</td>
<td>556.3</td>
</tr>
</tbody>
</table>

Notes:
\(^1\) refers to 1997, 2. Trinidad and Tobago.
The empty cells indicate that the data are not available.
Source: ILO, Digest of Caribbean Labour Statistics and various national reports
http://www.ilocarib.org.tt/digest
### Table 5
Unemployment Rates in the Caribbean 1990-2004 (%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahamas</td>
<td>12.3</td>
<td>14.8</td>
<td>13.3</td>
<td>11.5</td>
<td>7.8</td>
<td>6.9</td>
<td>9.1</td>
<td>10.2</td>
</tr>
<tr>
<td>Barbados</td>
<td>15.0</td>
<td>23.0</td>
<td>21.9</td>
<td>15.8</td>
<td>12.2</td>
<td>9.4</td>
<td>10.3</td>
<td>9.8</td>
</tr>
<tr>
<td>Belize</td>
<td>n.a</td>
<td>n.a</td>
<td>11.1</td>
<td>13.8</td>
<td>14.3</td>
<td>11.5</td>
<td>10.0</td>
<td>11.6</td>
</tr>
<tr>
<td>Grenada</td>
<td>n.a</td>
<td>n.a</td>
<td>29.1</td>
<td>17.5</td>
<td>n.a</td>
<td>11.5</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Guyana</td>
<td>n.a</td>
<td>11.7</td>
<td>n.a</td>
<td>9.1</td>
<td>n.a</td>
<td>n.a</td>
<td>11.7</td>
<td>n.a</td>
</tr>
<tr>
<td>Jamaica</td>
<td>15.3</td>
<td>15.7</td>
<td>15.3</td>
<td>16.0</td>
<td>15.5</td>
<td>15.6</td>
<td>14.2</td>
<td>11.7</td>
</tr>
<tr>
<td>St Lucia</td>
<td>n.a</td>
<td>16.7</td>
<td>19.2</td>
<td>16.7</td>
<td>21.6</td>
<td>16.5</td>
<td>20.4</td>
<td>21.0</td>
</tr>
<tr>
<td>Trin/Tob*</td>
<td>20.0</td>
<td>19.6</td>
<td>18.4</td>
<td>16.2</td>
<td>14.2</td>
<td>12.1</td>
<td>10.4</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Notes: * indicates Trinidad and Tobago;  
Sources: ILO: Digest of Caribbean Labour Statistics (various years)  
National Labour Force Surveys

### Table 6
Wages and GDP in Selected Countries (1997)  
(US$)

<table>
<thead>
<tr>
<th>Country</th>
<th>Wages per hour*</th>
<th>GDP per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>0.19</td>
<td>374</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.31</td>
<td>816</td>
</tr>
<tr>
<td>Philippines</td>
<td>1.34</td>
<td>1,119</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1.23</td>
<td>1,584</td>
</tr>
<tr>
<td>Jamaica</td>
<td>0.73</td>
<td>1,609</td>
</tr>
<tr>
<td>Dom. Republic</td>
<td>1.51</td>
<td>1,855</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.99</td>
<td>2,542</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1.69</td>
<td>2,714</td>
</tr>
<tr>
<td>Panama</td>
<td>3.39</td>
<td>3,034</td>
</tr>
<tr>
<td>Mauritius</td>
<td>0.90</td>
<td>3,841</td>
</tr>
<tr>
<td>Mexico</td>
<td>1.02</td>
<td>4,250</td>
</tr>
<tr>
<td>Trin/Tob</td>
<td>3.40</td>
<td>4,510</td>
</tr>
<tr>
<td>Malta</td>
<td>3.62</td>
<td>8,838</td>
</tr>
<tr>
<td>Canada</td>
<td>12.13</td>
<td>20,145</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>13.97</td>
<td>21,864</td>
</tr>
<tr>
<td>United States</td>
<td>13.17</td>
<td>29,278</td>
</tr>
<tr>
<td>Singapore</td>
<td>8.72</td>
<td>31,161</td>
</tr>
</tbody>
</table>

Notes: These are based on wage rates in the manufacturing sector provided by the ILO  
Source: http://www.ia.ita.doc.gov/wages
Table 7
Ratification of ILO Conventions by Caribbean Countries*

<table>
<thead>
<tr>
<th>Country</th>
<th>Fundamental Conventions (8)</th>
<th>Essential Labour Administration Conventions (16)</th>
<th>Other Conventions (57)</th>
<th>Total (71)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigua and Barbuda</td>
<td>8</td>
<td>11</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Bahamas</td>
<td>8</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barbados</td>
<td>8</td>
<td>5</td>
<td>26</td>
<td>39</td>
</tr>
<tr>
<td>Belize</td>
<td>8</td>
<td>9</td>
<td>25</td>
<td>42</td>
</tr>
<tr>
<td>Dominica</td>
<td>8</td>
<td>5</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>Grenada</td>
<td>8</td>
<td>3</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Guyana</td>
<td>8</td>
<td>8</td>
<td>28</td>
<td>45</td>
</tr>
<tr>
<td>Jamaica</td>
<td>8</td>
<td>4</td>
<td>16</td>
<td>26</td>
</tr>
<tr>
<td>St.Kitts and Nevis</td>
<td>8</td>
<td>1</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>St. Lucia</td>
<td>7</td>
<td>3</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>St. Vincent and the Grenadines</td>
<td>7</td>
<td>2</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>8</td>
<td>1</td>
<td>9</td>
<td>16</td>
</tr>
</tbody>
</table>


Notes: *(as at November 30, 2005)*

Table 8
Work Permits for the 1990s by Occupation in Rank Order of Importance

<table>
<thead>
<tr>
<th>Country</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anguilla</td>
<td>Production/Construction/Transport; Service; Professional/Technical</td>
</tr>
<tr>
<td>Antigua/Barbuda</td>
<td>Maid/Housekeeper/Related Workers; Construction/mechanic/electrician; Clerk/assistant</td>
</tr>
<tr>
<td>Barbados</td>
<td>Legislative/Senior officials/Managers; professionals; technicians and associate professionals</td>
</tr>
<tr>
<td>Grenada</td>
<td>Technicians and associate professionals; legislators, senior officials and managers; service workers</td>
</tr>
<tr>
<td>Jamaica</td>
<td>Legislators/senior officials/managers; professionals, crafts and related trade workers</td>
</tr>
<tr>
<td>St Kitts/Nevis (1996)</td>
<td>Technicians/assistant professionals; legislative/senior officials; production/construction/transport</td>
</tr>
<tr>
<td>St Lucia (1994)</td>
<td>Teachers, managers, nurses</td>
</tr>
<tr>
<td>St Vincent</td>
<td>Technicians/associate [professionals, professionals, legislative, senior officials, managers]</td>
</tr>
<tr>
<td>Trinidad/Tobago</td>
<td>Professionals, technicians and associate professionals, legislative, senior officials and managers</td>
</tr>
</tbody>
</table>

Source: ILO, Digest of Caribbean Labour Statistics
References


Lochan S. (2000). *Education and Work: Case Studies of Trinidad and Tobago, Jamaica and Barbados* (Port-of-Spain, ILO (Caribbean Office) February.


Maurin A., Sookram S. and Watson P.K. (2003): “Measuring the Size of the Hidden Economy in Trinidad and Tobago” (Economic Measurement Unit, Dept of Economics, University of the West Indies, St Augustine, Trinidad and Tobago, January).


