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# Reforming training governance: The Jamaican experience

David Atchoarena and Tom McArdle

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# Reforming training governance: the Jamaican experience

by

David Atchoarena  
Tom McArdle

March 1999

UNESCO: International Institute for Educational Planning  
HEART Trust/National Training Agency

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The initiative for this work emerged from contacts established between IIEP and the Human Employment and Resource Training (HEART) Trust/National Training Agency (NTA), in 1993, while the Institute was preparing a subregional workshop on *Policy and planning for vocational education and training* that took place the same year, in Barbados. The idea of conducting a joint study on the Jamaican experience in training governance was born at that time. From the beginning, Mr Robert Gregory, Executive Director of the HEART Trust/NTA, understood the importance of such a project for the international community. He deserves credit for encouraging the participation of the agency.

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## List of abbreviations

CARICOM	Caribbean Community
CBO	Community-based Organization
CTO	Central Training Office
CXC	Caribbean Examination Council
GDP	Gross Domestic Product
GOJ	Government of Jamaica
GTZ	German Agency for Technical Co-operation
HEART Trust	Human Employment and Resource Training Trust
IIEP	International Institute for Educational Planning
IMF	International Monetary Fund
INFOTEP	Instituto Nacional de Formacion Tecnico Profesional
IVTB	Industrial and Vocational Training Board
JAGAS	Jamaica – German Automotive School
JAMAL	Jamaican Movement for the Advancement of Adult Literacy
JAMPRO	Jamaica Promotions Limited
JCC	Jamaica Chamber of Commerce
JEA	Jamaica Exporters’ Association
JHTA	Jamaica Hotel and Tourist Association
JICA	Japanese International Co-operation Agency
JMA	Jamaica Manufacturers’ Association
KMA	Kingston Metropolitan Area
MIDA	Micro Investment Development Agency
MOEC	Ministry of Education and Culture
NAFTA	North American Free Trade Agreement

NCTVET	National Council on Technical and Vocational Education and Training
NGO	Non-Governmental Organization
NTA	National Training Agency
NVQ-J	National Vocational Qualification of Jamaica
PMO	Placement Monitoring Officer
PSOJ	Private Sector Organization of Jamaica
ROSE Project	Reform of Secondary Education Project
SAP	Structural Adjustment Programme
SBAJ	Small Business Association of Jamaica
SENAI	National Service for Industrial Learning
SLTOP	School-Leavers Training Opportunities Programme
STATIN	Statistical Institute of Jamaica
STG	Special Target Group
TERC	Training and Employment Referral Centre
TVET	Technical and Vocational Education and Training
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
U-TECH	University of Technology, Jamaica
UWI	University of the West Indies
VITB	Vocational Industrial Training Board (Singapore)
VTC	Vocational Training Centre
VTDI	Vocational Training Development Institute

# Introduction

Throughout the world, technical and vocational education and training (TVET) systems are struggling hard to cope with global change and its dramatic economic and social impact. Invariably, reforming the governance of TVET lies at the heart of coping strategies. Hence, it is increasingly felt that government, and more specifically ministries of education, should not be the sole, or even the main actors, in the decision-making process or in the planning and implementing of TVET policies. Other key stakeholders, first of all employers but more generally speaking social partners, have a legitimate right to make their voice heard and become actively involved in TVET matters. Furthermore, mobilizing collective effort is considered as a major step in improving the efficiency of the system and its contribution to economic and social goals.

For many years, TVET in Jamaica has been subjected to a number of policy and institutional changes. One of the most significant reforms was the establishment, in 1991, of a National Training Agency responsible for financing and operating the training system. Advocates of the National Training Agency concept argue that autonomous institutions, financially secured, free from political interference and close to employers, may be better placed to provide demand-led training. Indeed, in many cases experience has shown that the public sector is naturally more inclined to adopt a supply-centred approach.

The relative success of many Latin-American countries in devoting training responsibilities to specific institutions, enjoying autonomous status and financial independence, was a source of inspiration for many others, even beyond the boundaries of the Latin-American and the Caribbean region. Jamaica provides a recent example of that trend. However, while the so-called 'Latin-American model' was developed in a period of industrialization

and in a context of expansion of modern sector employment, the Jamaican experience takes place in a far less favourable environment. As such it reflects conditions that are now felt by a majority of economies in Latin America and the Caribbean as well as in Africa. The training issue is no longer to build a coherent and strong system that can meet the growing demand of the labour markets, but rather to invent a new system, closely related to the labour market and capable of reconciling economic and social objectives. While there is still a need to produce, on a relatively small scale, a competitive labour force for supporting the dynamic sectors of the economy, often in service activities, training systems increasingly must take stock of the continuous expansion of the informal sector and are asked to further contribute to the alleviation of social tensions.

Unlike its Latin-American predecessors when they were established, the Jamaican National Training Agency must face a dual challenge: building a coherent training system (the supply-side issue) and adapting training institutions to new markets (the demand-side issue). Prior to 1991, training was provided in a fragmented unco-ordinated way. Historical factors had produced a diversity of providers, linked to various ministries and with few connections with each other. As a consequence, each organization had developed its own offerings and strategy, sometimes with high political interference, and the transparency of the system was very poor both for enterprises and individuals. Establishing a National Training Agency was therefore first meant to introduce coherence and transparency. This institutional change also indicated a marked departure from the previous regime, often dominated by a political agenda. A significant expected side-effect of that reform was also to restore the image of training before employers and the public at large. While strengthening linkages between training and the labour market and involving business representatives in the new institution were likely to improve employers' perception of TVET, changing people's opinions might prove to be more complex. Hence, TVET in Jamaica does not enjoy high social value. Although this pattern is shared with many other

countries, in Jamaica negative attitudes towards vocational education may be aggravated by a post-colonial syndrome, legacy of the slave-based plantation economy.

In addition to making training coherent, efficient and attractive, the National Training Agency must learn to cope with a secular decline in the economy, combined with a rise of the informal sector and pervasive poverty. Recognizing the reality of economic vulnerability, labour market segmentation and social fragmentation, the Agency must therefore be able to generate a system both market oriented and socially sensitive. Combining those two objectives requires a new training philosophy where the reform of the existing training institutions goes together with devoting more responsibilities to employers, deregulating the provision of training and imagining innovative ways of delivering training to disadvantaged groups.

This publication explores the Jamaican National Training Agency's experience in making training provisions more coherent and in implementing new directions towards increasing autonomy of training institutions, incentive-based mechanisms and the establishment of an open market for training. These trends were taking place at a time when government was expanding Jamaica's private sector. The year 1991, which saw the birth of the National Training Agency, also marked the second phase of a privatization programme, initiated in 1981. Therefore, the efforts to increase employers' involvement in the regulation of training and in skills development must be seen against a broader policy background in which the overall intention was to reduce the roles of government, while increasing those of the private sector. The implementation of such policy relied very much on market principles.

There is no doubt that the recent Jamaican experience illustrates issues, challenges and options common to many medium-income-level countries, in slow growth contexts. Although coping strategies are necessarily intersectoral, the governance of training represents a significant concern to improve the

competitiveness of the economy and maintain social cohesion within global change.

The analyses of issues which highlight the main features of the Jamaican reform of training governance are presented as follows. In *Chapter I*, a country profile describes the environment in which the National Training Agency operates, with special reference to the institutional, economic and educational background. An attempt is made to express this information into concrete challenges for the training system.

*Chapter II* is devoted to a presentation and discussion of the ‘National Training Agency model’. The review of the experience of other countries in applying the model provides a comparative framework to identify the distinctive features of the Jamaican National Training Agency. Specific developments describe the historical process leading to its establishment. That long-term perspective helps to clarify the factors and rationale which explained the policy and institutional changes that have affected training since the 1980s. The successive reform of TVET can easily be related to a shift on the political agenda from self-reliance and collective ownership of key means of production to export-oriented growth and privatization.

*Chapter III* analyzes training provision and policies. Historical trends in enrolments, resources and expenditures testify to the impressive growth of the training system. Information is also provided on training modes, skills taught as well as on the operating model used to manage the agency and regulate the training system. This description documents the gradual shift from a traditional training organization, mainly involved in operating training centres, into a complex body, increasingly relying on enterprise-based training, supporting the emergence of a market for training and finding innovative ways to deliver specific training programmes to poor rural communities and other disadvantaged groups.

*Chapter IV* is dedicated to an in-depth analysis of two key components of the ongoing policy: reforming training institutions and involving more employers in training delivery through incentive-based mechanisms. Those developments clearly reflect a new training philosophy. In this emerging context, training institutions are gradually seen as agents of local development and as genuine actors of the community in which they are located. Furthermore, innovative incentives are being designed to enrich the partnership with enterprises and contribute to the establishment of a co-operative training formula where responsibilities for imparting skills will be shared between training institutions and employers.

In the concluding remarks, the main features and lessons of the Jamaican experience are summarized. Looking at the National Training Agency confirms some of the elements that produced many success stories in Latin America. Relative autonomy from the Ministry of Education, dissociation from the school system, closeness to industry and financial stability are certainly important ingredients. However, the difficulties encountered also indicate the limits of the National Training Agency model in a context of employment stagnation and social fragmentation. Although it became a necessity, facilitating the transition of young people into the informal sector cannot constitute an alternative to re-deploying the training system. Nor can it offer a satisfactory way to alleviate poverty when there is no evidence that the growth of the informal sector has been helping the poor in an effective way to cope with economic hardship. The most complex challenges facing the National Training Agency in the years to come will probably remain in the balancing of economic and social goals, provided that such reconciliation is possible.





# *Chapter I*

## Jamaica: a country profile

### 1. An overview

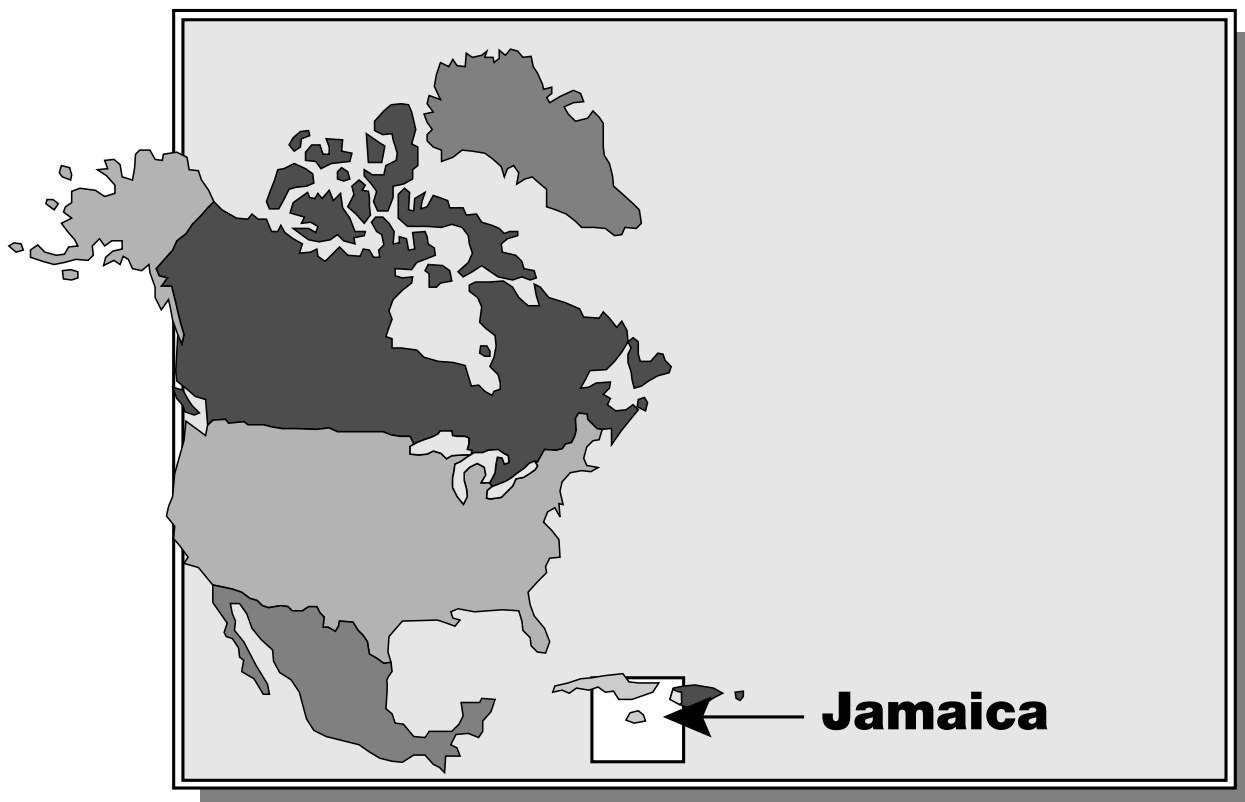
#### *1.1 Introduction*

This chapter examines the setting and context within which the Human Employment and Resource Training (HEART) Trust/National Training Agency operates and discusses the opportunities and challenges the country presents to the training agency. The chapter discusses features of Jamaica's geography, its political, social and institutional structure, its regional and international ties and some of the trends in these relations, its people, the economy, the labour market, and its educational sector. A final section attempts to integrate this information into a summary of the challenges presented by the overall setting.

#### *1.2 Geography*

The country of Jamaica is an island lying entirely in the Caribbean Sea 90 miles south of Cuba at a latitude of 17 ½ and 18 ½ north and a longitude of 76 ½ and 78 ½ west with an area of 10,982 square kilometres (4,240 square miles). The island is a part of the Greater Antilles chain, whose other major islands are Cuba, Hispaniola and Puerto Rico. The country is 146 miles long, has a maximum width of 51 miles and includes about 550 miles of coastline.

**Chart I.1 Location of Jamaica**



Jamaica is divided into three counties and fourteen parishes. The island features a hilly to mountainous interior, a lengthy north coast dotted with tourist resorts, and a major metropolitan region along the south coast at Kingston, with a population of about 750,000.

### ***1.3 Political and social structure***

Politically, Jamaica is a parliamentary democracy structured along the lines of the 'Westminster' model with a bi-cameral legislature including an elected House of Representatives and an appointed Senate. Jamaica is a Commonwealth country with a Governor-General symbolizing the ties to the Commonwealth, but is headed by a Prime Minister selected by the ruling

party. Since independence in 1962 two main political parties have exchanged power.

The Jamaica Labour Party held power during most of the 1960s and most of the 1980s, while the People's National Party held power during most of the 1970s and since 1989 until the present, winning an unprecedented third term in late 1997.

Most of the institutional structures are modelled along British lines. The Civil Service has British roots, and the police and military, customs and tax administration are based on British approaches. A National Housing Trust collects payroll taxes to finance government-led housing solutions, and the HEART Trust is organized along similar lines. The electric and water utilities are government owned, but much of the rest of the formerly state-owned entities have been or are being privatized. Already divested are the national airline, the telecommunications company, and the largest sugar company, while a petrochemical processing plant and the railways have been in preparation for divestment for several years. Three power-generation projects with private financing have been implemented.

For National Training Agency purposes, there is significant interaction with its parent ministry, the Ministry of Education and Culture, as well as co-operation with the Ministry of Labour and Social Security, Jampro, the government's investment promotion agency, and its parent, the Ministry of Investment and Commerce. Close relations exist with the Ministry of Finance and Planning concerning the annual budget of the Agency. Links have also been established with the Planning Institute of Jamaica regarding the training portfolio. The NTA relies on labour market and other statistical data from the Statistical Institute (STATIN). A recently launched National Industrial Policy is administered by the Ministry of Investment and through Jampro; these functions provide the government leadership in terms of industrial development which guides, more or less, the directions of the training system.

## Box I.1 Jamaica at a glance

Population	2,527,700	Overseas Jamaicans	2,500,000 (est.)
GDP Constant JA\$	17,548,8 million	Growth Rate '97	-2.4%
GDP per capita	JA\$6,943	'96	-1.7%
Inflation Rate	1997 9%	(=US\$1,262)	
Labour Market	1,133,800	1996	16%
Unemployment Rate '97	16.5%	Males	613,800
Tourism Arrivals	1997 1,903,900	Females	520,000
Infant Mortality	24.5/'000	Male	10.6%
Primary School Enrolment Rate		Female	23.5%
Lower Secondary Enrolment Rate		1996	1,820,600
Upper Secondary Enrolment Rate			
Tertiary Enrolment Rate			

Source: *Economic & Social Survey of Jamaica*, 1997.

As a people, Jamaicans are an enterprising, proud, and resilient group with a strong and rather unique cultural identity. Although the overwhelming majority of the population is of African origin, there are large numbers of racially mixed persons, as well as significant minorities of Chinese, Syrian and Anglo-Saxon origin. The latter are mentioned because their economic (if not political) influence is great. Jamaicans speak both a local *patois* or Jamaican Creole as well as standard English. Much of the rural population speaks almost entirely the patois, and this presents a challenge to the education system.

While emerging out of the British Empire, Jamaica is aligned with the Caribbean Community, or *Caricom*, a loose confederation of Commonwealth Caribbean states that includes other territories such as Barbados, Trinidad and Tobago and numerous small states of the Eastern Caribbean. Efforts at closer integration have made some progress in recent years after failed

attempts to create a West Indian Federation in the early 1960s. There is now, for example, a common external tariff, as well as a fair amount of consensus on various foreign policy issues affecting the region. For Jamaica as for many of these other countries, despite the historical ties to Britain, the major trading partner is the United States of America, and the political influence of that country looms large on almost any issue of importance. During the 1980s Jamaica and the region benefited from the Caribbean Basin Initiative which allowed for duty concessions on locally produced items using American raw materials. This spawned the off-shore processing industries in Free Zones, primarily for apparel manufacturing and data processing. These preferential trading arrangements, as with those of the LOME arrangements pertaining to bananas, are now being eroded by the North American Free Trade Agreement (NAFTA), on the one hand, and by the World Trade Organization, on the other (which threatens the banana regime). In response to this, Jamaica and many of the other *Caricom* countries, seek *NAFTA parity* rather than full accession to NAFTA, as this path is viewed as less onerous than meeting all the requirements involved in NAFTA. This is justified based on the small size and vulnerability of the economies of these small island states. As is said in the region, “if the USA comes down with a cold, we get pneumonia”. However, prospects for any progress towards participation in NAFTA have been blocked by the USA congress, which has so far refused to grant ‘fast track’ authority to the USA president.

Development activity in the country is changing in light of global and bilateral relationships. Bilaterally, assistance from the USA has decreased considerably as its resources have been routed to the eastern block and former Soviet states. The Germans and Japanese have enlarged their roles, on the other hand. Multilaterally, the World Bank remains a major lender and UNDP and the World Food Programme have been important, while the Inter-American Development Bank and the European Union have enlarged their involvement. The thrust of development assistance has also evolved towards poverty

alleviation as the major focus, with the future likely to place more emphasis on trade.

For the National Training Agency a number of internationally assisted projects are of great importance; these include:

- The Development of the Vocational Training System: Germany/GTZ;
- SKILLS 2000: World Food Programme (assistance ended 12/97 but project continues);
- The Technical High School Development Projects: Japan/JICA and HEART Trust/NTA with the Ministry of Education;
- The Jamaica Social Investment Fund: World Bank loan and Jamaican co-financing;
- The Workforce Development Consortium: Inter-American Development Bank, Private Sector Organization of Jamaica and the Trade Union Confederation;
- The Reform of Secondary Education: World Bank and the Ministry of Education.

#### ***1.4 Demographic features***

The total population of 2,527,700 is a stable one with an average annual growth rate of 1.0 per cent for 1996 and growth rates of similar size in recent years. Population size is influenced by three main demographic variables: fertility, mortality and migration. Jamaica's Crude Birth Rate for 1996 was 22.8 per thousand but averaged 24 per thousand over the previous six years. The Crude Death Rate was 5.9 per thousand in 1996 and averaged 5.8 per thousand over the previous six years. About 20,000 Jamaicans migrated in 1996, and this figure has remained at about this (high) level since the 1980s.

The age and gender structure of the Jamaican population is similar to that of many other developing countries. In 1996 the population included

1,259,518 males and 1,268,178 females or 49.8 per cent males and 50.2 per cent females. The main demographic groups can be summarised as follows:

- infants under a year, 2.3 per cent (1.2 per cent male and 1.1 per cent female), about 58,100 persons;
- children under 5 years, 11.5 per cent (5.8 per cent male and 5.7 per cent female), about 290,700 persons;
- children under 15 years, 32.0 per cent (16.1 per cent male and 15.9 per cent female), about 808,900 persons;
- youth (15 to 29 years), 28.3 per cent (14.1 per cent male and 14.2 per cent female), about 715,300 persons;
- the school-age population (3 to 18 years), 32.9 per cent (16.5 per cent male and 16.4 per cent female), about 831,600 persons;
- the working-age population (ages 15 to 59 years), 58 per cent (29.3 per cent male and 28.7 per cent female), about 1,466,100 persons; and
- persons 60 years and over, 9.6 per cent (4.5 per cent males and 5.1 per cent female), about 242,700 persons;
- women of reproductive age (ages 15 to 49) comprised 660,200 or 26.1 per cent of the population. By implication they were responsible for the 57,400 live registered births in 1996 for a General Fertility Rate of 87 births per 1,000 women of reproductive age;
- the vocational training population (ages 15 to 24) consists of 244,805 persons aged 15-19 and 242,813 persons aged 20-24 for a combined total of 487,618 persons comprising 19.3 per cent of the total population. This cohort consists of 243,524 males and 244,094 females, or 49.9 per cent males and 50.1 per cent females.

**Table I.1 Population of Jamaica, by age, sex and percentage distribution – 1996**

Age group	Males	%	Females	%
0 – 4	146,839	5.81	142,821	5.65
5 – 9	130,351	5.16	128,513	5.08
10 – 14	130,934	5.18	131,738	5.21
15 – 19	122,215	4.84	122,590	4.85
20 – 24	121,309	4.80	121,504	4.81
25 – 29	113,282	4.48	114,930	4.55
30 – 34	104,695	4.14	101,765	4.03
35 – 39	85,501	3.38	86,226	3.41
40 – 44	64,630	2.56	64,397	2.55
45 – 49	49,149	1.94	48,787	1.93
50 – 54	42,751	1.69	40,906	1.62
55 – 59	36,577	1.45	33,971	1.34
60+	111,285	4.4	130,030	5.14
TOTAL	1,259,518	100.00	1,268,178	100.00

*Source:* Planning Institute of Jamaica, *Economic and Social Survey*, 1996.

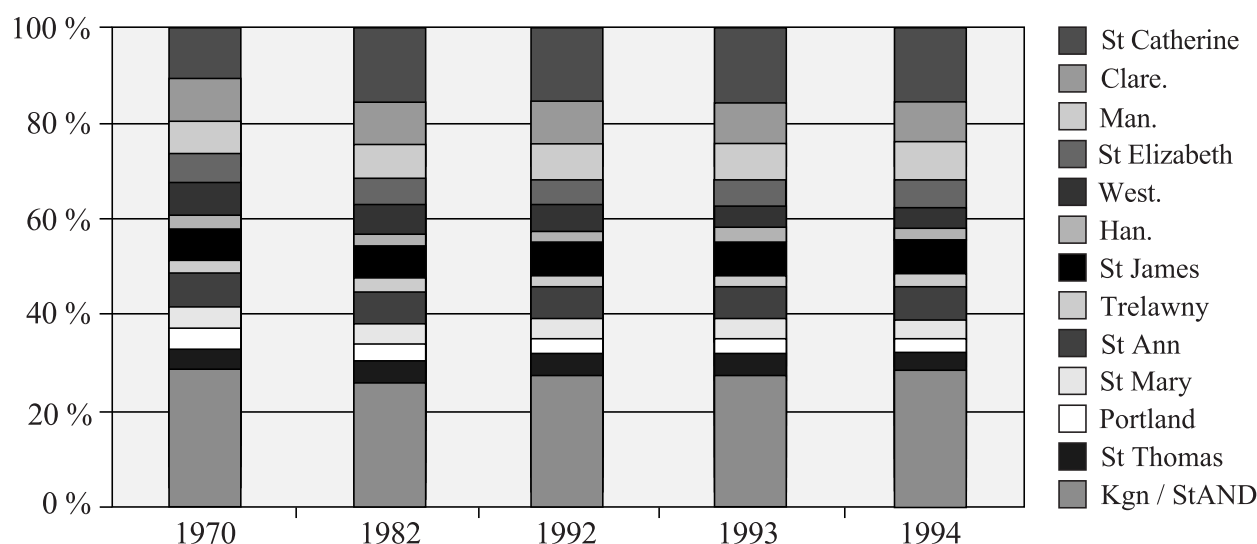
Notable in the age data is that Jamaica is young. The youth population (ages 15-29) at 28 per cent, or about 715,000 persons, is proportionally large. To be noted is the rapid and increasing decline in population share among each of the groups after age 25. This pattern reflects the high migration to the USA, the United Kingdom and Ontario, Canada (for the most part) over the past 30 years or so. This has implications for the amount of skills in the economy as many of the more senior workers have migrated. This flight of human capital was a particular phenomenon of the 1970s. The bulge in the over-60 population reflects the return of retiring Jamaicans to their homeland. Successive governments have recognized the importance of both overseas Jamaicans as well as this returning population, much of which is still well within the employment age. Many Jamaicans emigrate for various periods



of time with a view to returning if and when they accumulate some capital (either intellectual or financial). Overseas Jamaicans are an important source of national income as they send remittances back to the country.

The geographic distribution of the population features over 28 per cent of the population living in the Kingston and St. Andrew metropolitan area, with another nearly 15 per cent living in the parish of St. Catherine that includes the community of Portmore. Thus about 40 per cent of the population lives in these adjoining urban communities. St. Catherine has grown the most due to the expansion of housing in the town of Portmore, while the Kingston area has grown only slightly. The parish of St. James, including the resort town of Montego Bay, has grown from 5.5 per cent of the population to 6.7 per cent. The other parishes have shown declines in population due to the rural-to-urban internal migration that has been characteristic of the population for decades. *Figure I.1* illustrates the geographic distribution of the population.

**Figure I.1 Distribution of the population by selected years and parish (%)**



Source: Figure developed by HEART Trust/NTA from data supplied by the Statistical Institute of Jamaica in *The Labour Force* (selected years).

## 2. The Jamaican economy

The Jamaican economy was built upon an agricultural foundation based on large plantations growing sugar and bananas, using the large pool of unskilled and semi-skilled labour from the colonial period. The 1950s saw the emergence of local manufacturing within a protected market based on an import substitution economic model. During the 1960s the economy expanded at a rapid rate with the development of the bauxite/alumina industry and continued growth in manufacturing. The 1970s was a period of economic decline due to the oil shocks of that decade and capital flight resulting from investor fears about socialism. The 1980s were characterized by the maturing of the tourism industry along with modest growth fuelled by external borrowing. During this period offshore manufacturing was begun using duty-free processing zones as a vehicle to attract investment and generate employment. In the 1990s the economy is still trying to achieve macro-economic stability while relying on four main sectors: tourism services, offshore (light) manufacturing, mining and agriculture.

Jamaica is still emerging from structural adjustment and liberalization of the economy that began in the late 1970s and accelerated greatly in the 1990s due to globalization. Since 1977 Jamaica has signed more than 10 Structural Adjustment Programmes and these agreements have had an overwhelming influence on the development of the economy for the past 20 years. Given the scope of this economic situation, a brief historical overview from the 1960s to the present is informative.

### ◆ *Prior to the 1950s*

Jamaica was a colony of the United Kingdom and a *plantation economy* with the emergence during this time of the beginning of post-colonial political and economic features. The concentration of power and wealth in the hands of a few, of a different colour, influenced the distribution of education for the

mass of the people, who were viewed as agricultural labour. Weak social capital is a legacy of this period. Violent labour/management conflicts of the late 1930s were instrumental in launching the country's future political leadership as both parties come from a labour background. As from the end of slavery, Jamaicans fled the plantations and squatted on plentiful crown lands; labour shortages led to importation of indentured Indians and Chinese; since that time any large enterprise is at risk of being perceived as essentially similar to the plantation. Among workers this plantation psychology features both over-dependence and resentment. So industrial actions have always been common, on the one hand, while some workers look at the employment situation as an all-encompassing social and economic institution.

◆ *Prior to 1972*

Market-oriented rhetoric but a *de facto* inward-looking import substitution strategy established Jamaica's modern economic foundation in protectionism. State-led growth and state capitalism (along with small businesses concentrated in distribution and tourism) characterized the economy. The import substitution strategy led to the establishment of state-owned firms and high import barriers. This in turn led to high-cost, low-quality goods, not competitive over the long run. The economy was given a strong boost during this period by the emergence of the bauxite/alumina mining industry, a high-income, low-employment industry developed by Canadian and American interests. A bauxite levy was introduced in the 1970s to correct a perceived unfair advantage in the industry favouring the foreign owners.

◆ *1972-1980*

Consistent with the spirit of the times, the leftward swing of the 1970s propelled Jamaica's Michael Manley and his People's National Party government in the direction of democratic socialism. This ideology was focused on reducing the dependence on foreign capital, income redistribution,

increasing real wages, expanding public sector employment, and nationalized economic capacities. These policies, collectively, resulted in a deterioration of the public-sector debt, inflation, balance-of-payment problems, erosion of the Jamaican dollar, higher unemployment, flight of financial and intellectual capital and overall economic decline. Some observers also believe the ideology of the period contaminated worker attitudes.

◆ *The 1980s*

After the bloody elections of 1980 when over 800 people died, a more conservative government led by Edward Seaga and the Jamaica Labour Party (JLP) was elected. While continuing many of the state-led approaches of the 1960s, the JLP implemented an IMF/World Bank Structural Adjustment Programme (SAP) including market reform, economic and trade liberalization, a competitive (if protected) exchange rate, and a number of ambitious projects. The latter included development of the somewhat successful export processing Free Zones, a failed export agriculture project, the development of the Ocho Rios tourism resort and other projects assisted by the renewal of aid and loans. The HEART Trust was established during this period to provide manpower to some of these new industries (as well as to compensate for less than adequate educational provisions of earlier years). While SAPs were expected to reallocate labour from import substitution sectors to export-oriented and labour-intensive industries, this strategy was not completely successful either. Until 1989 the basic SAP policies were focused on fiscal and monetary issues; the modest growth of the period leading to somewhat lower unemployment.

◆ *The 1990s*

Structural adjustment *per se* was undertaken during this decade with financial-sector deregulation (including deregulation of the foreign exchange market and market-driven exchange rates), privatization, further trade

liberalization, building of foreign reserves, and labour market reform. A policy of high interest rates was introduced in the early 1990s to protect the dollar; that policy has by and large remained in effect until now. The economy was beset by high inflation in 1990 that only abated in 1997. Low economic growth has characterized the 1990s.

### ***2.1 Gross Domestic Product, inflation and sectoral change***

For 1997 GDP declined by 2.4 per cent while for 1996 the GDP declined by 1.7 per cent below the GDP estimate for 1995. On the positive side inflation declined from 25.6 per cent in 1995 to 15.8 per cent in 1996 and to 9.0 per cent in 1997. Inflation has declined annually from a high of 80 per cent in 1991 to 40 per cent in 1992, 30 per cent in 1993, and about 28 per cent in 1994.

GDP per capita has moved from (the equivalent of) US\$1,325 per annum in 1991 to US\$1,293 in 1996, a decline of 2.4 per cent. The following tables and figures summarize information for the past several years on key economic dimensions of GDP and inflation.

**Table I.2 GDP 1990-1996 At constant 1986 prices, in J\$ '000**

1990	17,409,500
1991	17,486,867
1992	17,756,686
1993	18,000,811
1994	18,202,653
1995	18,301,356
1996	17,987,078
1997	17,548,800

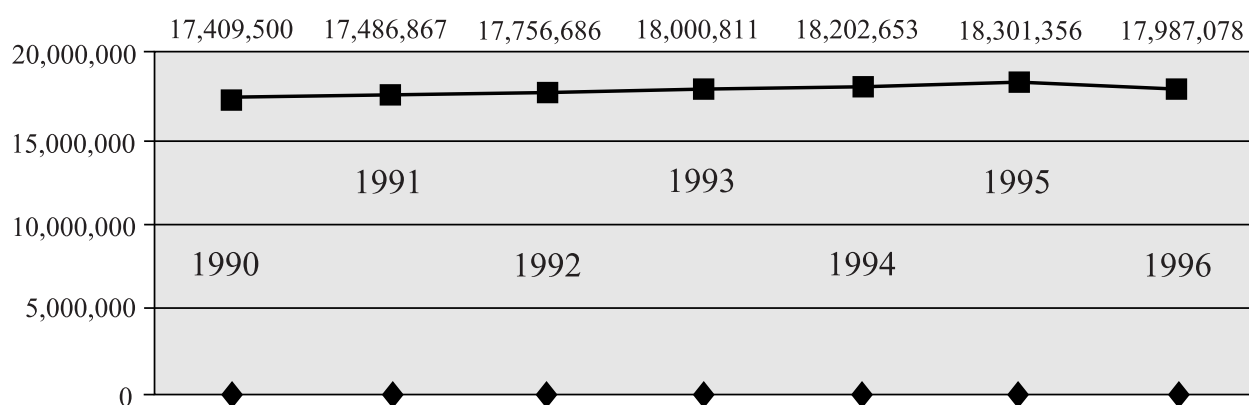
*Source:* Planning Institute of Jamaica, *Economic and Social Survey*, 1996.

**Table I.3 GDP 1990-1996** (at current prices, J\$b)

1990	30.5
1991	44.9
1992	73.2
1993	97.7
1994	129.3
1995	165.3
1996	202.1
1997	220.6

Source: Planning Institute of Jamaica, *Economic and Social Survey*, 1996.

**Figure I.2 GDP 1990-1996** (in constant J\$'000)



Source: Planning Institute of Jamaica, *Economic and Social Survey*, 1996.

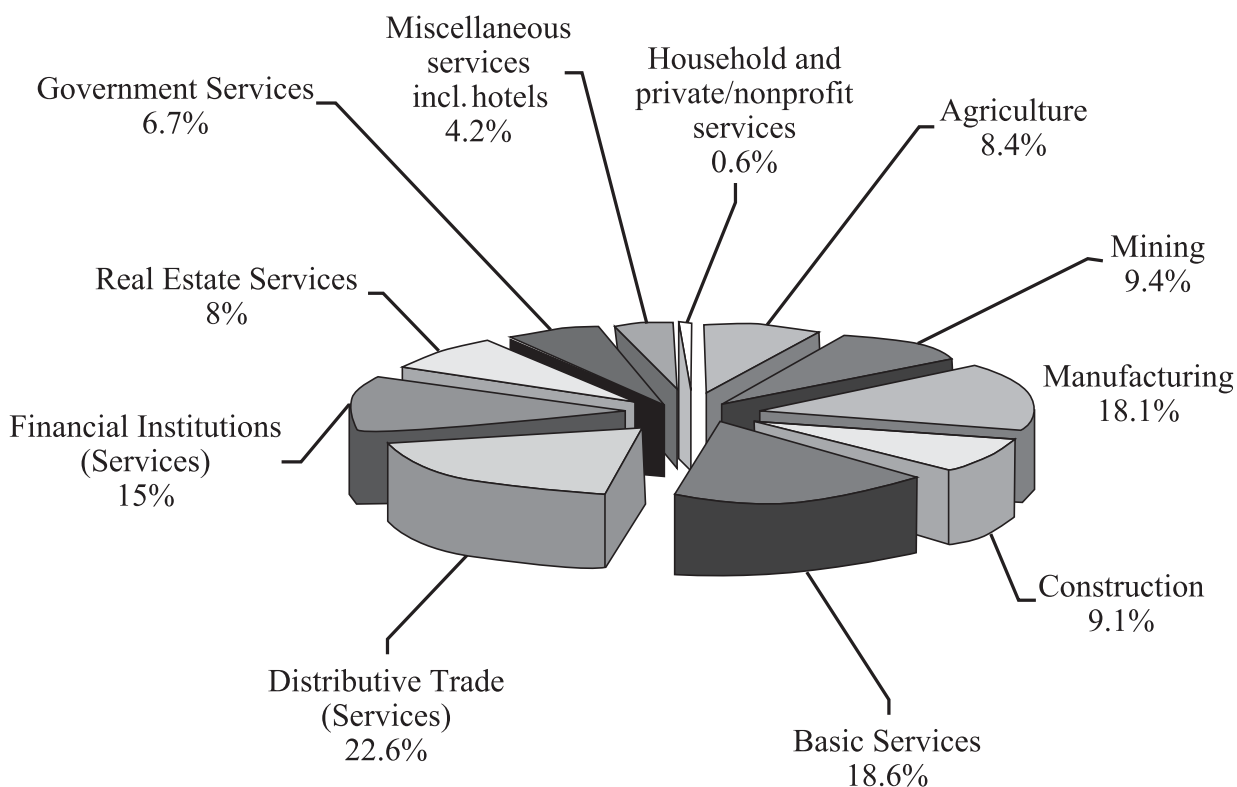
The low growth scenario has resulted from tight macro-economic policies in the pursuit of economic stabilization, especially the efforts to reduce inflation by reining in the money supply and reducing cash 'liquidity' in the system by maintaining a high interest rate regime. This strategy has been in use for six years and did not begin to show positive results until 1996. Interest rates on government paper were about 58 per cent through September of 1996 and

decreased in 1997 to about 25 per cent. Commercial lending rates are now around 40 per cent. The Jamaican dollar has been relatively stable at US\$1=J\$35. 1996 and 1997 also saw a crisis in the financial institutions, probably fuelled to some extent by the high interest rate policies that resulted both in a proliferation of financial institutions and in borrowers being unable to repay loans at such high interest. During this time available investment funds have flowed into financial instruments as opposed to productive investments.

The macroeconomic picture, then, has been one of 'stagflation' or low growth and high inflation. At least three major structural adjustment packages have failed to yield benefits of eventual economic growth.

The sectoral composition of the economy is characterized by the dominance of the services sector. Services account for 76.5 per cent of the GDP with Basic Services accounting for 20.2 per cent of GDP in 1996 and Other Services accounting for 56.3 per cent (including Distributive Trade at 23.4 per cent and Financial Institutions at 12.2 per cent, down from 15 per cent in 1996). Manufacturing's proportion of GDP has declined over the past six years moving from 19.5 per cent in 1992 to 18.1 per cent for the most recent year. Agriculture, mining, and basic services (electricity, water and transport) showed modest increases during the period.

**Figure I.3 GDP contribution by sector, 1996**



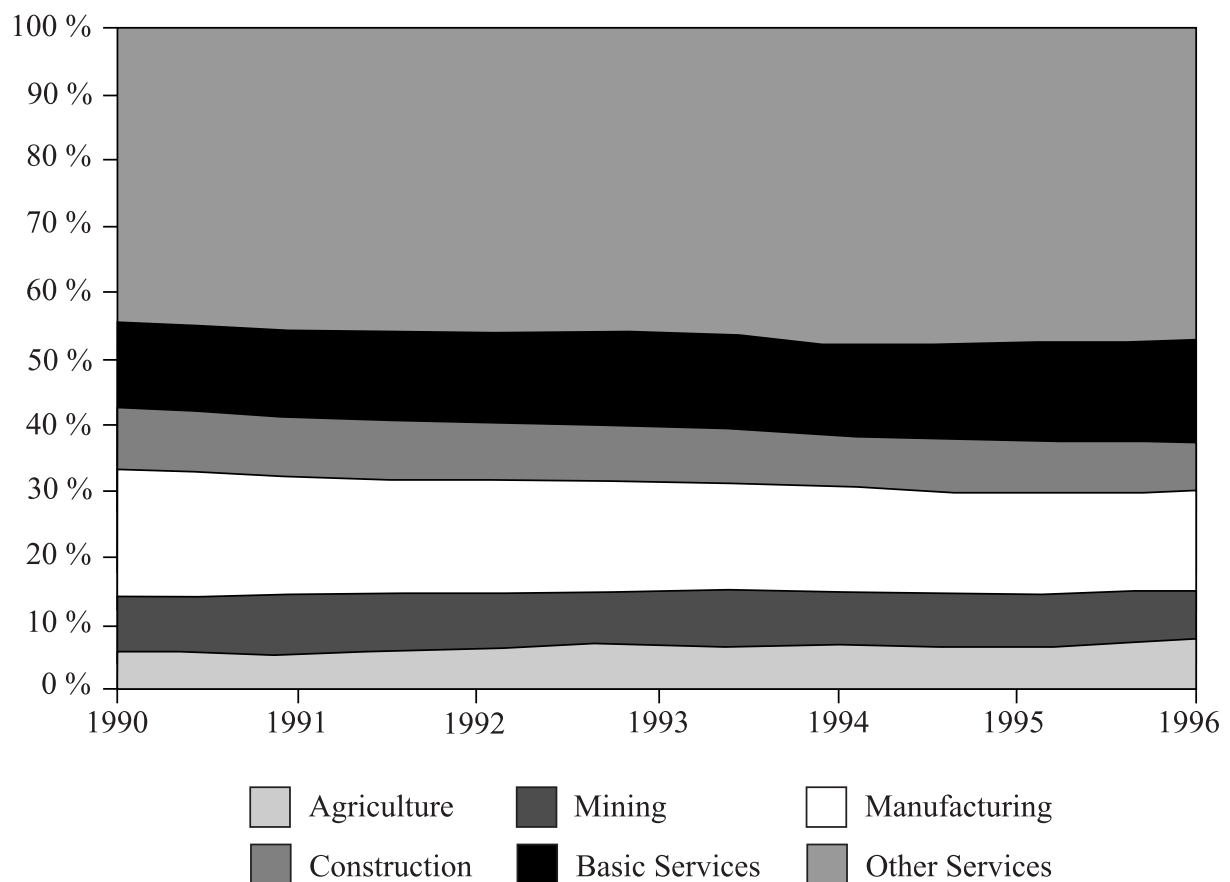
Source: Planning Institute of Jamaica, *Economic and Social Survey*, 1996.

Manufacturing continued to decline due to competitive pressures from imports, the high cost of capital and a contraction in the apparel export segment. A number of apparel factories closed and regional operators were shifting production to Mexico to take advantage of NAFTA. Apparel exports declined by 9.0 per cent to US\$522.0 million. In 1997 the government introduced a package of assistance for the ailing apparel sector.



Within the services sector, despite contraction in the financial institutions, moderate growth was evident. Tourism grew based on increased visitor arrivals, particularly cruise ship passengers (up 8.8%). A record high of 1,820,627 total visitors arrived representing an increase of 3.9 per cent. Tourist expenditure amounted to US\$1.128 million during the year, an increase of 5.5 per cent. This would place the tourism share of the economy at about 20 per cent.

**Figure I.4 GDP proportion by sectors, 1990-1996**



Source: Planning Institute of Jamaica, *Economic and Social Survey*, 1996.

The GDP trends over the past five years include the following important sectoral features:

- The Goods-producing sectors have increased very slightly in the past five years (1991-1996) from 44.8 per cent to 45.0 per cent of GDP. The contribution from agriculture has increased from 6.9 per cent in 1992 to 8.4 per cent in 1996 based largely on growth in domestic agriculture. Mining grew from 8.8 per cent to 9.4 per cent during the same time period based on growth in the bauxite industry. Manufacturing declined from 19.5 per cent to 18.1 per cent. Construction declined from 9.7 per cent to 9.1 per cent.
- The Services sectors grew from 66.2 per cent to 76.7 per cent during this time with Basic Services showing an increase from 14.6 per cent to 18.6 per cent, and Other Services increasing from 51.7 per cent to 58.1 per cent for last year. Growth areas include transport, storage and communications, distributive trade, and financial services.

## ***2.2 Problems and prospects in the formal economy***

The state of the economy is a matter of debate. While some observers consider the economy to be stabilizing, others see such a statement as a somewhat risky conclusion. Hence, some of the results of the economic stabilization programme create additional effects that are not yet fully visible. For example, the past two years have featured both downsizing among nearly all the larger firms, and a crisis involving a significant proportion of financial institutions. These institutions are in a crisis due to unrecoverable loans which debtors cannot repay because the interest rates are so high. Government has rescued a number of these institutions, but will now have to more aggressively recover the loan balances, and this carries the potential to push defaulting firms into receivership; indeed, numerous firms were placed into receivership during the latter part of 1997 and the first half of 1998.

The Private Sector Organization of Jamaica criticizes the government for the high interest rate regime that has dampened investment. It also blames government for a host of ills that plague the productive sector: poor infrastructure in terms of roads, transport and water, expensive and somewhat unreliable electricity, excessive bureaucracy, and inflexible labour market laws and regulations. And it would say the government takes labour's side in industrial disputes (which were on the rise in the recent past).

Government has emphasized achieving macroeconomic stability while prioritizing the stability of the Jamaican dollar. Its attempt to achieve a *Social Contract* involving a number of agreements between government, employers and labour unions has not been forthcoming due to resistance within the labour unions to signing the document.

The government recently instituted a National Industrial Policy (NIP) aimed at increasing the standard of living of the nation, specifically targeting a per capita income of US\$4,000 by the year 2010. This policy is still in the early stages of implementation. It focuses on:

1. Achieving macroeconomic stability, predictability and credibility;
2. An industrial growth and diversification strategy involving strategic investment promotion, infrastructure development and the elaboration of the policy-support framework (including policies aimed at labour market reform, competitiveness and small business development);
3. Achieving greater social equity via poverty alleviation initiatives and gender-sensitive policies; and
4. Conserving the environment via additional incentives, regulation, enforcement and public education.

For the HEART Trust/NTA there are significant implications arising from the *Strategic Industry Clusters* selected by the NIP. The policy defines four broad areas for development: manufacturing (apparel, other light manufacturing, minerals, chemicals, caustic soda), agriculture and agro-

processing (fresh produce, natural fibres, horticulture, marine products), services (tourism, entertainment and sports), and services and technology (shipping, telecommunications and information technology). While the agency is well positioned to contribute to these emphases in manufacturing, tourism and services, and information technology, the programmes in agro-processing (and to a lesser extent in agriculture) and in the sports/entertainment areas will need attention should these begin to bear employment fruit.

### ***2.3 The informal economy***

The formal economy has experienced net negative or very low growth and hence growth in the formal segment of the labour market has been weak. The informal segment of the economy has been growing and is estimated to be as large as 35 per cent of GDP over recent years, and the occupational category of self-employment accounts for nearly 40 per cent of employment. The small business sector is officially recorded as comprising 27 per cent of GDP. The growth of the informal sector is directly related to the economic difficulties experienced since the mid-1970s.

As noted below in the section on the labour market, much of the working population is involved in the informal sector. About 48 per cent of the labour force is engaged in work in agriculture or in *community, social and personal services* and much of this employment would really be characterized as informal. Further, STATIN employment status data show 337,800 'own account' workers, about 35 per cent, in the labour market for 1996. STATIN data on employment by occupational group show 15 per cent of workers in the category of Service Workers and Shop and Market Sales Workers and about 19 per cent in Elementary Occupations, a large share of whom are in the informal economy. Simple observation of the working life of the people reveals a large share of subsistence farmers, street vendors, household helpers, informal importers, hairdressers, gardeners, and those involved in other similar informal activities.

The informal economy also includes numerous very small firms that government and multilaterals are referring to as micro-businesses. Government is interested in both the growth of these firms as economic and job-creation engines as well as bringing these kinds of firms into the formal economy.

With respect to poverty alleviation strategies, the role the informal sector has been playing in helping the poor to cope with economic decline is a key concern. Some authors estimate that the informal income amounts to about half of the recorded income (Bennet, 1995). Assuming that a significant share of those revenues is eventually received by the poor, the informal sector would play an important role in fighting against poverty. However, available data on the structure and functioning of the informal sector in Jamaica do not provide clear evidence that informal-sector activities are controlled by those excluded from the mainstream economy. Similarly, it seems that a significant share of goods and services produced by the informal sector is targeted towards middle- and lower-middle income categories. In other words, in the Jamaican context, it seems that the expansion of the informal activities reflects a rejection of state authority and of legal norms, as much as it expresses the emergence of a 'people's economy'.

However, the necessities of creating alternatives to employment in the formal segment led HEART Trust/NTA to develop a new activity in fostering Entrepreneurial Skill Development. This can be via self-employment, enterprise development and, for the very poor, programmes to facilitate basic income-generating activities.

### 3. The Jamaican labour market

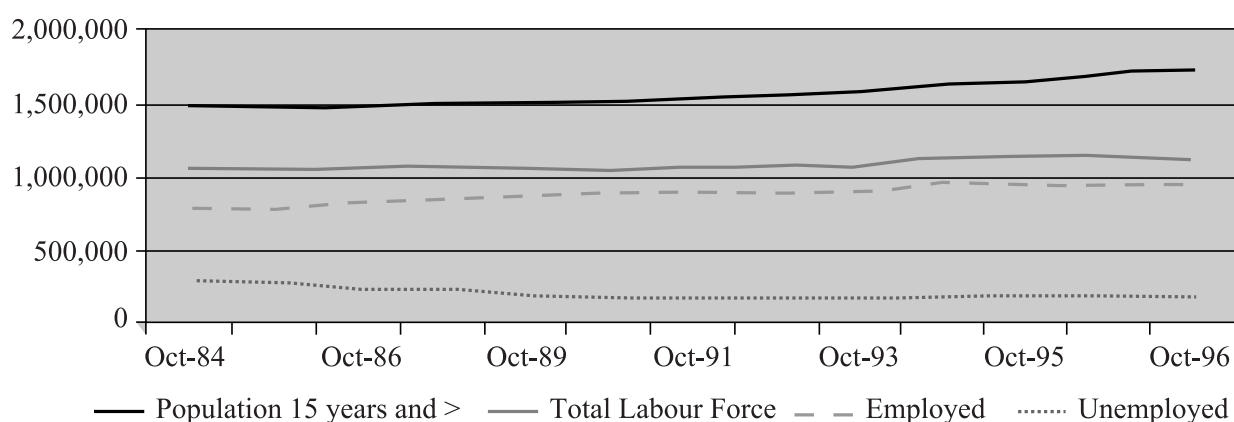
#### *3.1 Main features of the labour market*

The Jamaican labour force in 1997 comprised some 1,133,800 persons including 946,900 employed and 186,900 unemployed. Males comprised 613,800 persons in the labour force, 549,000 of the employed and 64,800 of the unemployed, while females comprised 520,000 members of the labour force with 397,900 employed and 122,100 unemployed. Unemployment for 1997 averaged 16.5 per cent, an increase of 0.5 per cent for the period, with male unemployment at 10.6 per cent and female unemployment at 23.5 per cent. Male unemployment rose 0.6 per cent and female unemployment rose 0.4 per cent since 1996. About 7.3 per cent of labour force participants were seeking work (5.2% of males and 10.1% of females); this rate increased from 6.7 per cent during 1996. Labour force participation stood at 66.6 per cent (males 74.6%, females 59%), a decline of 1.1 per cent. The youth (under 25) component of the labour market accounted for 88 per cent of this decline. There was a net loss of 13,000 jobs for the year, the second consecutive loss after a decline of 3,500 jobs during 1996. For the year, youth unemployment declined by 7.4 per cent with a marked decrease among women; this is believed to reflect a positive response to programmes aimed at reducing unemployment in this age group, but may also reflect reluctance to enter the labour market as a result of adverse economic conditions. Industrial restructuring resulted in a decrease of 3.0 per cent in employment in the private sector, while public-sector employment increased by 11.0 per cent. Employment of professionals rose by over 2.0 per cent to 15.0 per cent of total employment. Part-time employment is increasing, while own-account work is contracting after increasing for 1996.

The long-term trend (1984-1997) in the labour market shows the population over age 15 growing by 17.0 per cent during the period, while the labour force grew by only 8.2 per cent during the period. Thus growth in the

labour force has been considerably slower than the growth of the working-age population. The data also show significant decreases in unemployment (reduced by 30% from 268, 000 in 1984 to 186,900 in 1997) along with a 22 per cent increase in employment from 779,500 jobs in 1984 to 946,900 jobs in 1997.

**Figure I.5 Main Labour Force Variables 1984-1996**



Source: Compiled from Planning Institute of Jamaica, *Economic and Social Survey*, 1984-96.

Of note in the labour market data is weak relationships that pertain between the proportional contribution to employment and the proportional contributions to GDP among the sectors. Analysis of the 1996 data showed the Community, Social and Personal Services with the largest share of employment at 25.5 per cent but only accounting for 9.2 per cent of GDP. Likewise, agricultural employment accounted for 22.6 per cent of all employment, declining from a high of 27.3 per cent in 1992, but accounting for only 8.4 per cent of GDP (rising from 6% earlier in the decade). The converse is true in the mining sector and in financial institutions. The mining sector is comprised mainly of the mining of bauxite and alumina and accounted for 9.4 per cent of GDP, but comprised a mere 0.6 per cent of employment. Financial Institutions accounted for 24 per cent of GDP, but only 5.7 per cent of employment. Only the Construction and Wholesale/Retail sectors show

any close relationship between their share of GDP and their share of employment.

**Table I.4. Employment by industry, 1991-1996, ('000)**

Industry	1991	1992	1993	1994	1995	1996
Agriculture	243.7	247.3	220.8	226.8	223.2	217.3
Mining and quarrying	5.1	5.8	7.8	6.7	7.0	6.3
Manufacturing	99.0	101.9	97.8	97.7	104.7	100.4
Construction	58.2	59.1	62.1	69.7	76.0	81.2
Electricity, gas and water	5.8	4.9	4.5	5.0	6.8	6.9
Transport, storage and communications	35.8	36.3	40.1	40.1	44.5	48.3
Financing, insurance, real estate and business services	40.3	43.6	43.3	47.2	51.6	54.5
Community, social and personal services	243.8	229.1	228.9	236.8	247.1	245.0
Wholesale, retail, hotels and restaurants	170.2	172.1	191.1	195.5	201.4	199.0
Industry not specified	5.8	5.8	9.9	12.4	1.1	0.8
<b>Total employment</b>	<b>907.7</b>	<b>905.9</b>	<b>906.3</b>	<b>937.9</b>	<b>963.4</b>	<b>959.7</b>

Source: Planning Institute of Jamaica, *Economic and Social Survey*, 1991-1996.

*Table I.4* shows changes over time in the industrial composition of employment. This shows the declining employment in the agricultural sector, modest increases in mining and in utilities, considerable fluctuation in community, social and personal services, and significant growth in construction, transport, financial services and in wholesale/retail, hotels and restaurants.

Historical and cultural aspects of how the labour market operates are worthy of some discussion. Jamaica is a post-colonial society that lived



through slavery, and the overwhelming majority of its people carry this heritage. When slavery was abolished, the emancipated slaves left the large plantations in favour of squatting on unoccupied lands throughout the country. Subsequently, East Indians and later Chinese were brought to Jamaica as indentured labour. Since that time Jamaicans have acquired a reputation for resistance to employment in large enterprises, especially if these are seen as remnants of the oppression suffered so obviously in earlier times. Employers have historically been viewed as not particularly progressive in overcoming a legacy of harsh styles and attitudes rooted in deep social class barriers. Jamaica remains a society featuring a strong system of social class boundaries based on colour (as opposed to simply being based on race) and educational background. A significant portion of the industrial and merchant class are of white colour, with a significant proportion of mixed race people at the middle levels, with darker-complexioned people at the lower end of the labour market. This has been changing, of course, and a strong black middle class has emerged within the financial sector, within the civil service, and in the small-business sector.

Agricultural employment is unpopular as well because of the historical legacy of the country; rising 'out of agriculture' is an occupational aspiration of many parents for their children, and thus the agricultural workforce is ageing as young people avoid the sector, especially males.

The male attitude towards employment is often noted. Many Jamaicans would prefer to be their own boss, and the legacy of slavery has had particular effects on males' perception of their masculinity as somehow compromised if a low-level position is the source of employment. Thus a healthy proportion of males opt for a life of 'hustling' to earn a living. This is a phenomenon of great concern to much of the population. Girls out-perform boys from the primary-school level onward, and admissions policies at both the secondary and tertiary levels have to be tilted in favour of males if they are to be represented in anything like the proportion of the population. Recruitment

into the vocational trades like construction also poses a challenge as males are the traditional source of the enrolment. There is a perception that manual work lacks value, is underpaid, is socially stigmatized, and that it is preferable to use one's wits by hustling to make a living as self-employed.

### **3.2 Unemployment**

Although the rate of unemployment has moderated noticeably over the past 10 years, the level of unemployment has continued to rise through the 1990s. For males under 25 there were 32.3 thousand unemployed in 1991 and for 1996 there were 37.4 thousand, while for males over 25 there were 21.4 thousand in 1991 and for 1996 23.9 thousand. For females under 25 the 1991 figure was 60.2 thousand and for 1996 it was 65.2 thousand. The largest increase is for females over 25; they moved from 50.9 thousand unemployed in 1991 to 56.4 thousand unemployed for 1996. Women's unemployment rates have been about twice that of men's for a lengthy period; women under age 25 have a rate of 31.8 per cent, and women 25 and over a rate of 33.5 per cent for 1997.

Official statistics as to total unemployment rates are shown below including 1992-96 and the earlier years, 1980, 1988, and 1986.

**Table I.5 Official unemployment rates, 1980-1996, (%)**

	1980	1986	1988	1992	1993	1994	1995	1996
Total	27.4	23.7	18.7	15.7	16.3	15.4	16.2	16.0
Males	16.0	18.6	15.7	9.5	10.9	9.6	10.8	10.0
Females	38.9	41.3	33.3	22.8	22.4	21.8	22.5	23.1

*Source: Economic and Social Survey, Jamaica, 1980, 1986, 1988 and 1996.*

Unemployment by parish between 1995 and 1996 shows increases for six parishes and decreases for seven parishes, with Portland, St. Elisabeth and St. Thomas registering rather large increases and St. Andrew, Clarendon and St. Catherine registering significant decreases.

### **3.3 Labour relations**

The emergence of an independent Jamaica would not have occurred in the manner it did without the activities of strong trade unions. Political change in Jamaica has historically been rooted in the labour relations upheavals that occurred in the slavery period and the post-emancipation period in the 1800s, as well as in the 1930s.

The table below captures the data for a number of labour relations measures over the past five years. The number of industrial disputes has declined somewhat from the early 1990s, but the number of strikes remains high. About 75-80 per cent of these disputes are resolved during each year, a consistent pattern, while referrals to the Industrial Disputes Tribunal have varied over the time period. The number of man-days lost due to strikes shows a striking decline during 1996 after a five-year high in 1995.

**Table I.6 Industrial relations indicators**

Labour relations event	1992	1993	1994	1995	1996
Industrial disputes	337	329	312	242	257
Work stoppages	68	69	95	69	59
Disposal of disputes	256	244	251	180	208
Industrial Disputes Tribunal	25	47	68	29	36
Man-days lost	154,172	83,269	155,491	181,020	39,624

*Source:* Planning Institute of Jamaica, *Economic and Social Survey, Jamaica, 1996.*

Two to three years ago, industrial disputes were occurring due to the effect of price inflation on the cost of living. In the past two years a number

of unionized firms were downsizing, and some disputes have arisen from this fact. Government has looked to the instrument of a Social Contract between government, employers and unions as a device to maintain industrial peace, but has yet to conclude an agreement, reportedly due to union resistance based on distrust of employers. The fact is, unions in Jamaica are declining in power as they are elsewhere in the world. The number of small firms as a source of employment, the rise in own-account worker status, and the emergence of information technology and financial services have all dampened union membership in recent years. Also, Jamaica's Free Zone manufacturing entities are not unionized.

In Jamaica the private sector has initially developed following an oligopolistic pattern, the main private companies being controlled by a few families. The privatization process has gradually modified that original ownership pattern. Employers are today organized in a number of bodies. The main ones include: the Jamaica Employers' Federation (JEF), the Jamaica Chamber of Commerce (JCC), the Jamaica Hotel and Tourist Association (JHTA), the Jamaica Exporters' Association (JEA), the Jamaica Manufacturers' Association (JMA) and the Small Business Association of Jamaica (SBAJ). Today, employers' organizations form the Private Sector Organization of Jamaica (PSOJ). PSOJ is deeply involved in policy matters and in dialogue with government on economic and social issues, including training.

### **3.4      *The labour market and training***

**Table I.7    Training output 1993-1997, ('000)**

	1993	1994	1995	1996	1997
Technical, managerial and related manpower	4.6	5.4	5.7	5.8	6.2
Skilled and semi-skilled manpower	9.7	14.5	17	20.6	30.6
Total	14.3	19.9	22.7	26.4	36.2

*Source: Economic and Social Survey, Jamaica, 1997.*

*Table I.7* shows the significant increase in the output of trained personnel from Jamaica's education and training institutions, showing a 315.5 per cent increase in skilled and semi-skilled manpower, a 135 per cent increase in technical, managerial and related manpower, and a 253 per cent increase in total output. *Table I.8* shows the uneven absorption of vocational trainees by the labour market. Note the increase in the percentages of both employed and unemployed during 1996 and 1997 of those classified as 'Vocational with Certificate'.

**Table I.8 Employed and unemployed by training received (%)**

Qualification	1992		1994		1996		1997	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
Vocational without Certificate	2.1	3.7	1.4	2.2	1.2	3.1	1.7	3.8
Vocational with Certificate	4.4	4.4	3.9	4.0	4.1	5.6	5.1	7.4
Professional w/o Degree or Dip.	0.4	0.3	0.6	0.4	0.5	0.3	0.6	0.4
Professional w/o Degree or Dip.	5.0	2.8	5.9	2.7	6.0	1.5	7.5	2.0
Apprenticeship	2.0	0.8	1.5	1.1	0.9	0.6	1.1	0.8
On-the-job training	9.1	6.3	8.1	6.0	6.5	3.7	6.7	5.4
None	76	80.7	78.2	80.2	80.2	84.7	76.3	79.8
Not stated	1.0	1.0	0.6	3.0	0.5	0.2	0.1	1.1
Vocational training	6.5	8.1	5.3	6.2	5.3	8.7	6.8	11.2
Apprenticeship and on-the-job	11.1	7.1	9.6	7.1	7.4	4.3	7.8	6.2
Total vocational training	17.6	15.2	14.9	13.3	12.7	13.0	14.6	17.4

*Source:* Compiled by the Planning Division from the data contained in *The Labour Force*, STATIN, 1992, 1994, 1996, 1997.

When the data for 'vocational' and 'on-the-job' training are combined (above), we note that 17.4 per cent of the unemployed have received training, also a clear increase from earlier years.

### **3.5 Labour market signals**

Data analyzed for the Labour Market Information Systems Working Group over the past few years as to advertised job openings suggest that higher skill areas are more in demand than lower skilled and unskilled areas. Within the white-collar fields professional and technician openings are most in evidence, followed by clerical openings and the cluster of service/shop/market sales openings. Within the blue-collar areas the largest number of vacancies exist for craft and related trades workers (including dressmakers, cabinet makers and mechanics), elementary occupation workers, and plant and machine operators. These data probably underestimate the relative number of unskilled and lower skilled openings, however, as the willingness to advertise increases with the skill required. The data also suggest that the demand for skilled workers has increased over the three years such advertising was studied, especially for professionals (such as teachers and accountants) and for the service/shop/market sales cluster and the blue-collar occupations. On the whole, the training system appears to be meeting the level of demand at the semi-skilled level, but needs greater capacity for more highly skilled workers. There remains a shortfall at the level of technicians and professionals, and it is at this level that additional capacity should be stressed, keeping in mind the need for more students in the education system to qualify for admission to higher education. The training system may also look more closely at the continually strong demand for household helpers and gardeners at the elementary level. Training is not provided for these occupations. Training for artists, dancers, and musicians and singers could be an additional area for consideration.

Emerging occupations for which training needs are increasing include information technology specialists such as computer programmers and computer maintenance technicians, occupations in the printing industry including graphic artists and desktop publishing specialists, mechanics to maintain production equipment and the increasing number of motor vehicles,

engineering technicians, and sales representatives. The industrial maintenance and capital goods skill areas are experiencing new demands, and new automotive technologies require the preparation of automotive technicians rather than a concentration on mechanics, with similar trends emerging for the maintenance of apparel manufacturing equipment. The shipping industry is undergoing expansion and increasing its level of technology for crane operators and several other jobs. More training programmes need to incorporate the computing skills increasingly required in a broad spectrum of occupations. Design, including computer-assisted design, needs to be incorporated into additional programmes. Given the delicate nature of environmental balances in Jamaica, training aimed at improving the capability of firms to prevent environmental problems would also be beneficial.

The training system should also focus more on the existing workforce and firms in operation to enhance international competitiveness. The 1994 USAID study of the labour force in four key industries (agro-processing, light manufacturing, small-scale/eco-tourism and information processing) revealed that:

- the planning functions of firms to address medium-term needs are inadequate and hence planning in the area of human resource development is particularly weak;
- the labour force's fundamental weakness in basic literacy, English language and quantitative skills is a constraint to absorbing new training and acquiring higher technology to stay competitive.

These findings suggest needs for training beyond the preparation of entry-level workers and identify the need for direct training and technical assistance services to the firms themselves. The findings also highlight weaknesses in the basic education system and within existing training programmes.

## 4. Poverty, social exclusion and social disruption

### 4.1 Poverty

With a per-capita GDP of US\$1,293 per year for 1996, Jamaica is characterized internationally as a middle-income country. But this categorization fails to convey the level of real poverty that exists in the country in both urban and rural settings due to the wide income disparities that exist in the society. According to official figures from the Ministry of Labour, Welfare, and Sport from 1994, approximately 320,000 persons are classified as poor or vulnerable, and have been targeted for assistance via the Food Stamp Programme. Yet this figure also fails to convey the extent of poverty.

Total expenditure among the poorest quintile (1994) amounts to J\$10,510 per annum (about US\$315) (J\$33.35=US\$1.00), and in the second poorest quintile J\$17,480 (US\$522). Even third quintile expenditure is only US\$737, while the median income is about the figure shown for the fourth quintile.

**Table I.9 Income and consumption levels**

Quintile	Consumption (J\$)	Non-consumption (J\$)	Total expenditure (J\$)
Poorest	10,297	214	10,510
2	17,125	306	17,480
3	23,924	641	24,565
4	34,975	1,234	36,209
5	73,572	4,119	77,691

*Source: Survey of Living Conditions, STATIN, 1994.*

The most recent Survey of Living Conditions (1994, published 1996) reports:



*“the wealthiest one-fifth of the population sharing 46.0 per cent of total consumption with the poorest one-fifth accounting for a shared 6.0 per cent of total consumption. The mean per capita annual consumption of the poorest 10 per cent of the population amounted to J\$8,137 while that of the wealthiest 10 per cent was \$97,309. This means that in 1994 the wealthiest 10 per cent of the population consumed, on average, 11.9 times that of the poorest. Further, this pattern of total consumption by the top and bottom consumption deciles has remained virtually unchanged since 1990.”*

Female heads of households is a typical poverty indicator in Jamaica. During 1994 in Kingston 38.8 per cent of households were headed by females with no man and with children, while in other towns the figure is 46.4 per cent and in rural areas it is 48.2 per cent. Throughout the country 48.4 per cent of households are serviced by a pit latrine and 51 per cent by a toilet (26% linked to a sewer; 25% not linked). In rural areas 71.7 per cent use a pit latrine. Access to electricity is 83 per cent for the Kingston Metropolitan Area (KMA), 71 per cent for ‘other towns’ and 60 per cent for rural areas. Indoor plumbing is accessible to 66 per cent in the KMA, to 42 per cent in ‘other towns’ and to 20 per cent in rural areas (all data: STATIN, 1994, Survey of Living Conditions).

Poverty is most prevalent among rural dwellers. Seventy percent of the poor live in rural areas, according to a 1994 World Bank report, while only 7 per cent of the poor live in the Corporate area and 23 per cent live in other urban areas. Of these total populations 10 per cent of Corporate area inhabitants are considered poor, whilst 36 per cent of those living in other urban areas and 41 per cent of those in the rural areas are poor.

A number of labour market observers consider that human capital investment, through developing education and training, is a major component of any strategy for growth and poverty reduction. Although not all Jamaicans

with low educational background are poor, the wide majority of the adult population suffering from poverty have received very little education and training. Furthermore, most children with low levels of education come from poor families. It is therefore clear that human capital investment, including basic education and skill development, is closely related to poverty.

#### ***4.2 Social disruption and civil disturbances***

Social disruption in Jamaica is characterized by a high level of crime and violence, industrial relations disputes, and civil disturbances. In terms of crime, Jamaica has suffered a crime rate since the 1970s, with especially high rates of murder, household robbery, export of illegal drugs and contamination of export shipments, harassment of tourist visitors by hustlers, drug peddlers and prostitutes, and high rates of theft in the agricultural and manufacturing sectors. In the 1990s there has been an increase in white-collar crime in financial institutions and in relation to customs regulations (evasion of customs duties). In economic terms the high crime rate is a deterrent to investment in general, and crime has been posing specific threats to the tourism industry (due to both harassment and fear of violence or riots) and to the apparel export sector due to the contamination of export shipments. These are major sources of foreign exchange to the economy so the threat is quite serious. Furthermore, the alarming rise in criminal violence, often drug-related, undermines social cohesion and legitimizes anti-social behaviour. Recently, the international implications of drug trafficking have generated external pressure to erode the sovereignty of the country and its control over sea and air space.

From time to time, Jamaicans experience spontaneous outbursts among the population about a number of particular issues. Poor water supplies, inadequate roads, disputes over squatter settlements, and police brutality are the main reasons for these disturbances. These disturbances occur in rural areas (over water and roads) and in ghetto communities within the larger

metropolitan areas of Kingston (police brutality) and Montego Bay (over squatter settlements). Such events create a negative perception of the country and are viewed as an additional deterrent to investment. The past years have seen an increase in these kinds of disturbances.

Elections have often also been a source of civil conflict and disturbance. In the elections of 1980 over 800 Jamaicans were killed in conflicts between the two main political parties, sometimes involving the security forces. Elections since then have been less violent, but the threat of violence remains.

## 5. Education sector profile

### *5.1 An overview*

Jamaica inherited a British educational model featuring a variety of types of schools aimed at different segments of the population. In colonial days, formal education was provided for the children of planters and plantation management, and no provisions were made for the children of the slaves. From this a number of private preparatory and high schools were established, many of which continue into the present.

In the post-emancipation period (1838-1962) the formal education system developed to gradually include the lower classes, but in educational institutions far beneath the standards of the prep schools and high schools. A basic educational provision included the All Age school. These schools provided for children up to age 15 in a somewhat loosely structured arrangement of grades going from grade 1 to grade 9. As recently as 1991/92, 42 per cent of all primary enrolment was in this kind of school; this proportion has now declined to 21 per cent. These schools were succeeded by Primary schools operated by government which now accommodate 54.6 per cent of the primary enrolment. Private Preparatory schools now account for only 4.0 per cent of

primary enrolments. There are also a large number of Preparatory schools that are owned by churches, but in which the salaries of teachers are paid by government, so these are not considered truly private.

At the secondary level, originally there were the High schools and the grades 7 to 9 sections of the All Age schools. These school types were succeeded and diversified by the development of Junior Secondary schools (grades 7-9) in the 1960s which evolved into New Secondary schools beginning in the 1970s to establish upper-secondary-level opportunities for the mass of the population (with assistance from the World Bank). These schools featured a programme of largely remedial academic and pre-vocational work. Comprehensive High schools operated directly by government were also established, beginning mostly in the 1980s. In addition, Technical High schools and several Agricultural and Vocational High schools were established at various points in time over the course of this century. Now government is developing the New Secondary schools into Secondary High schools, while increasing both the number of Comprehensive High and Technical High schools. Secondary education has been undergoing a lengthy reform effort that began with technical input from UNESCO in 1983 and resulted in the Reform of Secondary Education (ROSE) project (IBRD, 1988-1992 and 1993-present).

At the tertiary level Jamaica has the University of the West Indies, a regional institution with four campuses, the largest of which is at Mona, near Kingston. Total enrolment at UWI for Jamaicans is 7,123 undergraduates and 1,352 graduates. The University of Technology enrolled 6,770 during 1995/96 in programmes including engineering, computer studies and commerce. There is a network of six Community Colleges offering a wide range of both transitional and tertiary-level programming to 6,987 enrollees during 1995/96. Finally, there is the College of Agriculture, Science and Education, and the Edna Manley School for the Visual and Performing Arts enrolling about 1,000 tertiary-level students.

One major issue in the Jamaican education system is the use of the *Common Entrance Examination*. This examination is administered to all grade 6 students in order to determine who will be awarded a place in the High schools, as there is only space for about 28 per cent of the age cohort moving from grade 6 to grade 7 in the High schools. The remainder of the students go on to the New Secondary schools or remain in the All Age and Junior High sections of upgraded Primary schools. Because of these structural features of the system, one might say that Jamaica practises a kind of *streaming by school type*.

**Table I.10 Enrolment and capacity in secondary institutions by school and type, 1994/95 and 1995/96**

School type	1994/95			1995/96		
	Number	Capacity <sup>1</sup>	Enrolment	Number	Capacity <sup>1</sup>	Enrolment
All Age 7-9 <sup>2</sup>	430	34365	48132		n.a.	47313
Primary and Junior High	28	3942	6239	40	n.a.	7229
New Secondary	37	27035	30797	27	20225	21680
Secondary High	56	40524	70613	56	40525	73918
Comprehensive High	33	27825	45332	44	35160	55719
Technical High	12	8626	14199	13	9030	14670
Agri/Voc	6	1647	1699	5	1650	862
Subtotal	602	143964	217011	599		221831
Private	n.a. <sup>3</sup>	n.a.	5922 <sup>4</sup>	n.a.		10380
TOTAL		143964 <sup>5</sup>	222933			232211

<sup>1</sup> Additional capacity gained from schools on shift system or on extended day not included.

<sup>2</sup> Two schools continue to grade 11.

<sup>3</sup> n.a. = not available.

<sup>4</sup> Estimated using SLC rate of enrolment for 1994.

<sup>5</sup> Private schools not included.

*Source:* Data supplied by Statistics Section, MOEC to Planning Institute of Jamaica to appear in the *Economic and Social Survey*, 1996; printed as supplied.

The above chart illustrates some of the changes taking place in the provision of secondary education. Under the ROSE programme, a common curriculum has been established for grades 7 to 9. Forty schools that were formerly All Age schools have been converted to Primary and Junior High schools, while New Secondary schools are being converted to either Secondary High or Comprehensive High schools. At the same time, enrolments in All Age schools declined only slightly, and that enrolment remains at about 21 per cent of all (public) secondary level enrolment. Enrolment in New Secondary schools dropped from 14.2 per cent to 9.8 per cent of total (public) enrolment. The figures also show a 75 per cent increase in enrolments in private secondary institutions, based on estimates drawn, curiously, from Survey of Living Conditions data. This represents a change in enrolment proportion moving from 2.6 per cent to 4.5 per cent of the (inclusive) total enrolment in secondary education.

One must also note the differences between the rated capacities of the schools and their actual enrolments. These are explained as coming from schools on a shift system or on an extended day, but in fact these approaches amount to compromises to deal with over-enrolment. This amounts to over-enrolment (based on the possible calculations that can be done for either year) of 40 per cent for All Age schools, 58 per cent for the Primary/Junior High category, 82 per cent for the Secondary High, 58 per cent for the Comprehensives and 62 per cent for the Technical High schools.

The total enrolment rate for the 353,820 persons in the 12 to 18 years age group was 65.6 per cent during 1996 with slightly more girls than boys enrolled. For the 12 to 14 age group, enrolment is nearly universal at 83 per cent in grades 7 to 9 with another 15 per cent enrolled at other levels. Enrolment among 15 to 16 year olds is estimated by the Survey of Living Conditions to be approximately 78 per cent.

Overall expenditure on education as a percentage of GDP has ranged from 4 to 6 per cent over the past 10 years with a peak of 6.8 per cent in 1997/98 and a low of about 4.2 per cent in 1994/95. As a percentage of the GOJ budget, educational expenditure has ranged between about 9.2 per cent (1994/95) and 15.1 per cent (1997/98). The large amount of government's external debt dampens the amount of funding available to education.

The teaching complement in the public schools included approximately 9.1 per cent 'trained (Bachelor's degree) graduates', 3 per cent 'pre-trained graduates', 70 per cent 'trained teachers', and 18 per cent 'pre-trained teachers' in 1995/96. The number of 'pre-trained teachers' declined from 19.5 per cent in 1994/95. In the primary schools 22.5 per cent are pre-trained, while at the secondary level 14 per cent are pre-trained. Teachers with degrees (with and without specific teacher training) increased from 8.7 per cent during 1994/95 to 12 per cent in 1995/96 under policies aimed at increasing these qualifications within the teacher workforce.

The idea of 'cost sharing' was introduced at the public secondary level during 1994/95. The amounts charged range from J\$3,641 in Secondary High schools on average, to J\$1,217 in New Secondary schools. This modest amount of cost resulted in full payments from about 60 per cent of students, part-payment from 16 per cent and no payment from about 18 per cent. No similar policy has been introduced within HEART Trust/NTA, which continues to operate entry-level vocational training programmes at no cost to participants; in fact a modest stipend of no less than J\$250 per week is paid to the trainees.

Performance of Jamaican students in the examinations conducted by the Caribbean Examination Council (CXC) remains a source of concern for educators and employers alike. For 1996, of the 21,231 students sitting the examinations at the General/Technical Proficiency level, 31.1 per cent failed to attain a Grade 1 or 2 in one subject, while 17.5 per cent attained these

grades in four or more subjects. These low levels of performance were reflected at the subject level, especially in core subjects. Mathematics passes at Grade 1 or 2 were 24.2 per cent.

## ***5.2 Issues in secondary technical education***

The 14 Technical High schools and the vocational programmes offered in Secondary High, Comprehensive High and New Secondary schools are of particular interest to HEART Trust/NTA. The Trust supports a project aimed at both rationalizing and upgrading the vocational offerings at the Technical High schools. This project has emphasized school-based planning, policy studies and grants for upgrading based on the school-based plans. The Japan International Co-operation Agency (JICA) implemented a pilot project in 1997 aimed at the Jose Marti Technical High School. The policy studies have raised serious concerns about the focus of the Technical High schools given their weak performance in mathematics and science on the CXC examinations. They have also questioned the structure of a number of these schools since the older schools feature a design inclusive of grades 7 to 9. At present, technical schools have difficulties in preparing students for higher education as well as the world of work. This would imply more focus on science and mathematics than is the case in these schools. Students do prepare to sit the technical subjects in CXC with more success. From the outcome data available it could be argued that the Technical High schools are really functioning as vocational high schools. These schools, on the other hand, are having trouble following the NCTVET curricula because they lack much of the equipment needed to acquire the hands-on skills demanded by NCTVET, so they receive a more theoretically oriented programme in the technical areas<sup>6</sup>. The Trust has expressed strong concerns as well about the sustainability of vocational programmes in the other schools. To quote from the Trust's Corporate Plan (1996):

<sup>6</sup> Roland Allbrook and Mark Van Dusen, *Policy options for Technical High Schools in Jamaica* (unpublished paper), The HEART Trust/NTA Technical High Schools Development Project, 1996.



*“HEART/NTA facilitates the development of TVET programmes in the formal system via several vehicles. First, the secondary schools are implementing the modularised curricula and pursuing NCTVET certification. In so doing, the schools are coming in contact with the TVET Resource Centre including the curriculum, programme standards and accreditation, and assessment functions of that system component. We expect similar contacts with community colleges (and an increasing number of private institutions).*

*Second, HEART/NTA has offered an Institutional Strengthening subvention to the secondary formal system through the Technical-Vocational Unit of the MOEYC. Third, we helped launch a specific programme called the Technical High Schools Development Project set up to rationalise the offerings of those schools and to establish or re-establish their capability to deliver standard quality programmes at least to Level 1 and this is viewed as a long-term commitment.*

*The vocational programmes of the formal system at the secondary level are controversial as there are competing proposals within the ROSE project (Reform of Secondary Education) for the content of secondary education and the way the Technical High Schools are utilised. Although skills training remains in demand at most secondary-level institutions, the resource base of the preponderance of secondary schools is insufficient to support effective delivery, with the exception of commercial skills courses and many of the offerings in the Technical High Schools. There is significant sentiment, especially for those involved with ROSE, that most of the secondary schools should focus on academic basics with the goal of increasing the number of CXC passes in English, mathematics and science. This would include focusing on the Technical Schools as the locus of technical skills training in the*

*formal system, while retaining vocational programmes in other secondary institutions in areas that are not resource intensive. There is also the proposal that the Technical Schools could expand their output by changing their structure from full high schools (grades 7-11) and collapsing the design down to two or three years. This would have the effect of increasing their output capacities as capacity in earlier grades is converted to capacity in higher grades.*

*The issue for the National Training Agency is that of setting priorities and ensuring the sustainability of programmes. It does not appear to us that given the resources being made available to the MOEYC, that skills training should be a priority for most of the formal system at the secondary level; most of these schools will not be able to sustain quality vocational programmes. In fact, our own success at delivering what really should be post-secondary training would be significantly enhanced by having larger numbers of individuals properly prepared by a sound general education. The labour market would also prefer new workers stronger on basics, even at the expense of (inadequate) vocational preparation available to secondary school students. And given a training system now able to accommodate over 20,000 persons in HEART/NTA programmes and seven thousand possible places in the Technical Schools (per annum), when the population of school leavers is now 40,000 and on the decline, it appears that the training system so configured can function to meet the manpower needs and demand in terms of capacity.”*

In 1997/98 HEART Trust/NTA initiated funding of a project aimed at the rationalization of TVET programmes in the wider secondary school system to further develop an appropriate and sustainable approach.

The overall condition within the education sector is one of transition from a strategy of increasing access to educational opportunities in the 1960s to 1980s to a strategy to increase quality now. It is apparent that both primary and secondary education traded quality for greater accessibility during the earlier period. This situation poses an additional challenge for the training system. First, too many of the applicants, the majority of whom are grade 11 completers, cannot qualify for admission to the training system (between 35 and 50%). The system uses an admissions test pegged at about a grade 9 achievement level. Second, there are potential applicants who never benefited from secondary education, or who dropped out before completing the cycle. These trainees require some form of compensatory educational experience. HEART/NTA estimates that its own remedial provisions can only address the needs of about one quarter of this group (2,000 remedial spaces for 8,000 needy applicants). Other programmes are operated by the Social Development Commission and the Jamaica Movement for the Advancement of Literacy (JAMAL) to assist out-of-school youth in increasing their basic educational levels. The training agency is naturally cautious to prevent the volume of remedial work from detracting from the real vocational training portfolio, but is committed to having provisions that aid the social and occupational mobility of the entire youth population.

At the tertiary level, the main institutions are the University of the West Indies (UWI) and the University of Technology (U-Tech). Of particular concern to vocational training are the number of engineers and technical and vocational teachers in training. The UWI enrolls only 160 Jamaican students in engineering, about 2.2 per cent of its total Jamaican enrolment of 7,123. U-Tech's engineering programme enrolled 1,132 in 1995/96, about 16 per cent of its enrolment. U-Tech also provides programmes in building construction, computer studies, and architecture, also relevant to the TVET system, with a combined enrolment of an additional 1,879 during 1995/96.

A total of 587 students are enrolled in the Technical Education programme at U-Tech; there is no comparable programme at UWI. The preparation of teachers for technical and vocational programmes should also refer to the Vocational Training Development Institute (VTDI) which enrolled 450 persons during the same period (with an additional 500 being upgraded); this brings the total for the period to 1,037 persons preparing to teach in the TVET system. The formal system employs approximately 1,616 teachers in the TVET area while HEART Trust/NTA employs an additional 312 instructional staff and another 200 are employed in its assisted programmes via subvention. The total number of persons providing TVET instruction, then, is 2,128. A crude ratio of persons in preparation to total employed is about 1:2.

In July 1997, HEART Trust/NTA and U-Tech entered into a *Memorandum of Understanding for Institutional Co-operation*. This is an important undertaking for the TVET system with several major implications for the tertiary system. The Agreement calls for co-operation in a number of areas, but most importantly in the areas of teacher/instructor training and in programme development and implementation. The idea is for:

1. The Vocational Training Development Institute (VTDI) and HEART Trust/NTA's instructor development institution to become more or less merged as a centre within U-Tech, both geared to preparing the same kinds of TVET instructors/teachers;
2. U-Tech will adopt the NCTVET's system of competency-based, standards-driven curricula aimed at certification of competences for the world of work, allowing the vocational training system to *articulate* with U-Tech at the higher level;
3. Actions aimed at item 2 above will encourage the Community Colleges to likewise follow the model as these institutions *collaborate* with U-Tech.

### ***5.3 The flow of school-leavers into the training system***

The main source of people wanting training is the successive cohorts of school-leavers from the formal school system. The Ministry of Education provides projections by grade and year that help to inform training policy as to the number of potential entrants into the training system from the formal school system. Simply put, between 1995 and 2000 they expect a trend of decrease in enrolments at grades 9 and 11 and a slight increase for grade 10 enrolments (the primary exit points from the formal system are at grades 9 and 11). These projections are shown in *Table I.11*.

The enrolment decreases shown for grades 9 and 11 outweigh the enrolment increases projected for grade 10. This should have an overall effect of reducing pressure for training spaces from the cohorts of school-leavers, and this effect should allow for an increased emphasis on provisions for higher-level skills and development of the workforce.

These data would indicate that approximately 40,000 school-leavers enter the labour force or continue in the education and training system at present, but these figures omit reference to those who do not benefit from secondary education or who drop out before the end of grade 9. There are between 1,300 and 3,000 individuals each year who do not access secondary education and another 3,200 to 5,500 per year who leave school between grades 7 and 9. By averaging these ranges we derive 6,500 out-of-school youth to be added to the cohorts of school-leavers, bringing the total number of school-leavers to about 46,500 per annum. By the end of the period this number should be reduced to approximately 44,000 school-leavers. This is a significant decline from the levels of output from terminal grades during the period from 1986 through 1991 when these levels were close to 50,000 school-leavers per year.

**Table I.11 Enrolment projections for grades 9-11**

GRADE	1995/96	1996/97	1997/98	1998/99	1999/2000	NET CHANGE (2000/1996)
GRADE 9	46,921	46,292	45,663	45,034	44,405	- 2,516
GRADE 10	36,308	36,375	36,442	36,509	36,576	+ 268
GRADE 11	30,882	30,534	30,187	29,839	29,492	- 1,390
GRADES 9 and 11 LEAVERS	41,497	40,451	39,408	38,364	37,321	- 4,176

Source: Ministry of Education, Youth and Culture, Planning Division.

These projections, however, assume that the performance of the school system will remain the same over the period. If the Reform of Secondary Education (ROSE) programme has the intended effects, then the number of grade 10 and 11 students will be higher than this projection, because more students will remain to complete those grades. The number of spaces in the upper-secondary cycle is expected to expand to accommodate capable students. Improved curriculum and implementation of the programme should improve the performance of students over time. This should benefit the training system by increasing the supply of academically more highly qualified applicants.

## 6. Implications of the country profile

### *1.1 Low employers' demand*

Like any other country, the situation of Jamaica presents significant challenges and opportunities for those responsible to establish policies for vocational training. Today, the challenges and problems outnumber the opportunities because of the fundamental dilemma presented to the agency

by a prolonged economic slump in the country. The lack of economic growth, and, in the past two years, the contraction of economic activity means that (1) employment opportunities are scarce, thus limiting the effective placement of trainees, and (2) that employers trying to survive pay less attention to training than they would in economically more vibrant times. The responses to this challenge include more emphasis on programming that facilitates self-employment and entrepreneurship. An orientation to entrepreneurship module was introduced into most training programmes in 1994. In 1997/98 a major initiative to acquire additional content in this area was launched by the Planning Division with assistance from the GTZ (Germany) who assisted the agency to acquire the competency-based economies through the Formation of Entrepreneurs programme (CEFE) to implement in the training centres.

An additional response to the current situation is to devote more resources to occupational areas experiencing growth. This would include expanding training opportunities in information technology (applications software, computer systems maintenance, networking, programming), and in hospitality. Several areas for investment and eventual employment generation are defined in the National Industrial Policy including chemicals, light manufacturing and new agricultural and agro-processing products, but these investments would need to materialize for training projects to be indicated.

## ***6.2 High social demand***

A second fundamental challenge, related to the first, but with even longer-term implications is the idea that, in Jamaica, *the social demand for training exceeds by far the economic demand for training*. This is an issue that has been evident to the system since its earliest years. The population in general sees vocational training, to a great extent, more as a social and political benefit than as a means to an end. Communities want vocational training programmes as much to provide activity and income to out-of-school and out-of-work young people as they do to provide a real transition to the world

of work. There is a long-standing mythology in the country that training somehow leads to employment independent of the economic conditions of the country, when we know that the only employment generated by training is for the trainers. The political directorate inadvertently feeds this mythology to the extent that it takes credit for setting up programmes within a political constituency as if this were a true solution to the problems of youth unemployment.

### ***6.3 Low educational profile***

The weak academic background of the youth population is an additional problem. The admissions screening device used by the agency to select trainees is pegged at approximately the grade 9 academic achievement level. This device rejects anywhere between one third and one half of applicants who do not demonstrate that level of academic achievement. To compensate for this problem and to ensure both a measure of social equity and the ability to fill capacities, remedial education provisions for 1997/98 were in place for some 3,670 participants, this was about 12 per cent of the total enrolment for that year. In addition, the SKILLS 2000 programme admits applicants without the necessity of passing the grade 9 test and that programme had a total enrolment of 1,500 persons. Several programmes aimed at special target groups had a total enrolment of 1,600 persons. A recent calculation of the 1997/98 enrolment figures concluded that about 27 per cent of the agency's capacity was devoted to non-certification-track programmes for the period. This amount is viewed as excessive, however, and the target for 1998/99 is in the 20 per cent range.

Within the programmes themselves, the weak academic background is also a source of concern. The programming attempts to provide instruction in communication and mathematics sufficient to meet the academic requirements of the relevant skill, with the idea that this instruction results in the attainment of approximately grade 10 achievement levels when a trainee



completes Level 1. But the validity of this target and this claim is open to dispute as it is (1) not entirely clear as to what the standard should be and (2) not properly tested and verified in the certification system.

#### ***6.4 Competition over resources***

All of these challenges are magnified to an extent by the fact that the HEART Trust Fund has managed to accumulate both a significant pool of resources for its annual expenditure while accumulating a significant surplus as well. This resource accumulation is vigorously defended by the agency. It has, first of all, allowed the system to grow in terms of both the amount of training opportunities available and the implementation of an infrastructure to direct the training more effectively. This has reduced the burden to several ministries that were involved in training, and has reduced the cost burden of training to employers to some extent. The surplus is defended on the grounds that an established Trust should have what one might call an *endowment*. This pool of funds enhances sustainability of the efforts to establish a training system, provides a buffer against the reduced intake from the levy that may result from a serious economic downturn, and allows the agency some flexibility to respond to the training aspects of a particular industry crisis. For example, additional and unanticipated demands arose during 1997 and 1998 in relation to the offshore apparel manufacturing sector. This sector has to adapt to the post-NAFTA world that has impacted its competitiveness in the USA apparel market. The firms must move away from a reliance upon preferential trading arrangements with the USA involving the sewing of cloth originating in the USA, that is no longer sufficient to offset the competition from Mexico. In order to do this the firms must make a transition to a more comprehensive type of manufacturing. In order to effect such a transformation there needs to be a great deal of re-training of the existing workforce as well as the recruitment and training of thousands of new workers. Thus the agency has been able to participate in the reform of the sector in a timely and responsive fashion.

However, the financial resources of the Trust are also, to some extent, the object of envy by certain segments of the government, the private sector, and are criticized by various policy experts. The Trust is viewed as an organization with 'deep pockets'. This opens the agency to its share of inappropriate demands and requests for assistance. On the government side this has resulted, from time to time, in demands from certain quarters for the Trust to assume responsibilities beyond its real mandate for vocational training. This could include more funds for compensatory and remedial education programmes targeting youth, more assistance aimed at the formal education segment, and more assistance for capital projects. There is also a call, from time to time, for the agency to use the provisions of the Act that allow it to set up employment projects and to loan money to trainees to establish own-account businesses. These initiatives were halted in 1991 when the agency was reformed. The overall policy direction taken by government was to privatize employment generation, so government employment projects were in disfavour. The agency also divested the Solidarity Programme that provided loans to would-be entrepreneurs to the Micro Investment Development Agency (MIDA). The government's view in the early 1990s was that financial institutions should handle this kind of assistance and not an agency whose primary mandate is vocational training.

Private firms sometimes take the stance that the 3 per cent levy is 'their money', as if this cost is not passed along to consumers in the prices paid by them. After all, any tax is a burden and is ultimately shared by all. The Trust appreciates that the employers hold this view – it helps to keep the Trust responsive to their needs. But sometimes employers make demands that the funds be returned to them without the *quid pro quo* of monitoring, of the Trust's demand for accountability, and of the Trust's interest in providing certification for the trainees that benefit from the Trust.

The 3 per cent levy itself is, however, surprisingly non-controversial. There is a widespread consensus, as evidenced by a survey, of acceptance of the Trust and its mission along with a recognition that the education and training supplied compensate for an education system that precludes too much of the population from participation in the modern part of the economy. This support, however, also recognizes the limitations of the efforts to date, i.e. that the training is too much focused on the entry level and aimed, probably too much, at the weaker segments of the population. This is why it has been so important for the agency to set up higher levels of training, and to implement new programmes in areas like information technology that attract more highly qualified applicants.

### ***6.5 A key issue: increasing employers' participation***

A further challenge has to do with increasing the involvement of employers. This is especially difficult during hard economic times. But the system the agency is trying to establish includes the employers as not only stakeholders, but as direct providers involved with the institutions in co-operative fashion. As noted above, employers will welcome incentives that reduce the cost of training while assisting them to move workers to higher levels of training, but they will likely resist the standardization and monitoring that will need to come with the training. One approach to this potential resistance is the idea of a method that ties large portions of any reimbursement by the agency to certification milestones of the trainees. This may reduce the monitoring costs while ensuring that employers aim at the certification of the workers.



## *Chapter II*

# The National Training Agency concept

### 1. A comparative perspective

#### *1.1 Searching for co-ordination, flexibility and market relevance*

In many countries, vocational education and training is provided by a great diversity of institutions. Frequently, such diversity not only makes the training delivery complex but also leads to the duplication of efforts, especially when training providers operate with little or no co-ordination. Commonly, training provision is shared between various ministerial bodies, parastatal organizations, private training providers and firms. In many cases this multiplicity of institutions does not permit mutual recognition of the credentials and, therefore, generates a segmentation of the training market.

A number of options can be identified to co-ordinate the various stakeholders. They range between reliance on bureaucratic command, on one extreme, and the call to market forces, on the other. In the planned bureaucratic approach, as it has been implemented in various countries, the government allocates resources to vocational education and training according to public-sector objectives and priorities, with no or little involvement of the other partners. In recent years, many countries have promoted market-oriented education reforms. The emphasis on increasing the scope for individual's choice is now also felt in training. Deregulating the training market usually involves introducing competition between private and public institutions. Reliance on market forces is not only expected to expand training provision

but also to diversify sources of delivery and make them more responsive to the needs of employers and individuals.

Between a state-led regulation and an almost full reliance on market forces, a number of countries have tried to establish some sort of partnership between the government and the private sector to govern training provision. Partnership here refers to an institutionalized, reciprocal commitment to achieve mutually agreed objectives. Applying this concept to training would suggest that key stakeholders, employers and also trade unions, are involved with the state in policy making, in view of fostering a consensus. But although partnership is used to describe a mode of co-ordination, in reality, it covers a great variety of arrangements. In the traditional tripartite model, partnership takes place at the central level, involving, besides the state, employers and trade unions in policy issues as well as in setting standards and monitoring training quality. On the contrary, decentralized corporatist systems tend to rely on the free negotiation between employers and trade unions, at the sector or regional level, with state intervention being kept to a minimum. National training authorities can be a form of tripartism but they can also reflect corporatism or a type of state-led partnership. Indeed, a scale can be identified in co-ordination mechanisms as well as between training agencies.

The first degree of co-ordination consists in establishing committees or councils with an advisory capacity only. In spite of their value, such bodies would not radically change the situation unless they were given clear responsibilities in decision-making, and control over resource allocation.

The establishment of a specific institution entrusted with legal authority over resources and policy formulation constitutes a more advanced form of co-ordination. The autonomy of those co-ordinating bodies is an important element to preserve their pluralistic nature.

Hence, the establishment of a national training agency, or authority, is seen in an increasing number of countries as a promising institutional formula to improve training co-ordination, escape some of the limitations faced by ministerial bureaucracies and forge an alliance between stakeholders.

In Latin America, most countries have established a national authority to govern training, often under the overall umbrella of the Ministry of Labour. In most cases those co-ordinating bodies are financed by a payroll tax but they can also receive subsidies from government. Originated in Brazil with SENAI, the *Latin-American model* has been replicated and adapted in the region for about half a century. It still constitutes a major reference for establishing national training agencies in developing countries. A more recent example is provided by Singapore, where a Vocational and Industrial Training Board was set up in 1979. In 1992, the Singaporean VITB became the Institute for Technical Education, reflecting a concern to upgrade training provision by increasing entry requirements, developing courses at the technician level and offering consultancy services to industry. The Vocational Training Council in Hong Kong and the Taiwanese Vocational Training Administration provide two additional examples of training authorities for the Asian region. This pattern of organization and management also emerged in Africa, as reflected in the Tanzanian experience. The 1994 reform of the Tanzanian vocational education and training system introduced a new institutional framework including a Vocational Training Board, responsible for policy formulation and overall supervision, and a Vocational Training Authority assuming the operational responsibility of the training provision.

In most cases, national training agencies/authorities are financed, fully or partly, through a training payroll levy imposed on firms. This funding formula is also directly derived from the Brazilian experience. The payroll tax contributes to the autonomy of the training authority; and decisions on the allocation of resources, taken in accordance with approved funding criteria, express the principle of partnership.

Besides co-ordination, which was often the prime motive, the search for labour market relevance and flexibility also strongly contributed to the expansion of the national training agency model. In reality there is no model as such, but rather an institutional framework that inspired national responses. The sharing of responsibilities between the various stakeholders, the funding arrangements, the degree of centralization and the functions operated by the agency are the main variables differentiating national *models*.

The literature on national training boards identifies their major functions as follows:

- achieving consensus on the broad aims of training;
- managing a payroll tax-based training fund;
- developing agreed standards and certification procedures;
- accrediting training institutions;
- analyzing labour market and occupational trends;
- undertaking and disseminating research on training issues;
- delivering training; and
- providing training-related services.

Structuring the relationship between the training system, employers and unions, constitutes a major feature of national training authorities. For each institution, the specific institutional arrangements reflect a different balance of power among the stakeholders. At present, most countries try to expand the role of employers in training provision and financing. Advocates of an employer-led system have argued that enterprises are best placed not only to identify and even anticipate skill needs, but also to ensure that training content is up to date in a fast-changing technological environment. The performance of the German dual system also supported the idea that employers' involvement in training is essential for a smooth insertion of young people into the labour market. Finally, tightening budgetary constraints have pushed further towards passing more responsibilities to the private sector.



## ***1.2 Training delivery in post-plantation economies: pointers from the Dominican Republic and Mauritius***

The Dominican Republic and Mauritius share with Jamaica some important features and challenges. Geography, history, sociology and the economy are some of the areas where the three island states (or quasi island) have commonalities. They were first developed as plantation economies, relying on a few agricultural commodities for export. The multicultural society resulting from that historical experience shaped the social dynamics as well as people's attitudes and values.

In the post-colonial era, the three countries have managed to diversify their economies through tourism development and the establishment of export-processing zones. In this context, offshore manufacturing has been seen as a way to employ an underutilized comparative advantage – low labour cost – for internationally competitive production of goods.

A basic requirement for the success of offshore manufacturing is the availability of a suitable workforce. In that respect, educational levels in the Dominican Republic, Mauritius and Jamaica are superior to those achieved in many other developing countries. Some will argue that basic literacy and numeracy significantly contribute to the adaptation to the factory environment. In addition, vocational skills are important to increase the competency of the labour force.

In the Dominican Republic, the national training agency called INFOTEP (*Instituto Nacional de Formación Técnico Profesional*) was set up in 1980 in a effort to better prepare the workforce to labour market requirements. As such, INFOTEP complemented the training provided by the Ministry of Education through the technical and vocational education sub-sector. To sustain this new system, a tax was established making contributions to the financing of training compulsory for enterprises. With a view to ensuring

maximum participation from social partners and to establish a market-driven system, INFOTEPA relies on a close partnership between employers, workers and government. These three actors are involved in the management and allocation of resources, which is the key to decision-making.

In the early 1980s, the increasingly competitive international environment, the diversification of training providers and the pressing demands from new sections of the labour force, such as out-of-school and out-of-work youth and displaced workers, required the transformation of the institution. In an effort to adjust to the emerging socio-economic and training context, INFOTEPA embarked on a wide reform whereby mission statement, role and strategy, operational modalities as well as the management culture were reviewed. This restructuring process started in 1994.

A preliminary step towards modernization was to adjust the training concept. As a traditional training agency, INFOTEPA was set up to better equip workers for specific, pre-identified and often narrowly defined occupations. In this context, the current challenge is to create a flexible system, able to quickly adapt training content and delivery to changing needs and to provide continuing vocational education.

**Table II.1 Comparative development indicators**

Countries	Population in million (1995)	GDP Per capita in US\$ (1995)	Average GDP Growth rate (1990-1995)	Illiteracy rate (1995)	Net enrolment rate			Total Educational expenditure as % of GNP
					1st degree	2nd degree	3rd degree	
Jamaica	2.5	1,510	2.9%	15%	100% (1992)	64% (1992)	6.0%* (1992)	8.2% (1995)
Dominican Republic	7.8	1,460	3.9%	18%	81% (1994)	22% (1994)	n.a.	1.9% (1995)
Mauritius	1.1	3,380	4.9%	17%	96% (1995)	62%* (1995)	6.3%* (1995)	4.3% (1994)

n.a. non available.  
\* Gross rate.

Sources: World Bank, *World Development Report*, 1997.  
UNESCO, *Statistical Yearbook*, 1997.

**Table II.2 Towards a new training concept (Dominican Republic)**

Traditional model	Emerging model
<p>Emphasis is put on the development of the necessary skills and proficiency to perform a specific job.</p>	<p>Emphasis is put on the development of knowledge, skills, proficiency and proper attitude to manage all aspects of an occupational area.</p>
<p>The curriculum is determined according to an occupational profile which itself is built through occupational analysis.</p>	<p>The curriculum is determined by a Technical Commission composed of instructors, designers and businessmen knowledgeable in the specific branch or area of training.</p>
<p>The study plan is not organized according to a logically structured ‘formative itinerary’.</p>	<p>The study plan is organized according to a ‘formative itinerary’ based on modules, each having its respective, partial or full outlet facilitating internal mobility towards and from the different modes of training as well as towards and from the labour market.</p>
<p>Workshop tasks are the core around which scientific and technological knowledge is articulated and organized.</p>	<p>Combining workshop tasks (for dual training the enterprise is the workshop) with theoretical activities in class offers the proper setting for the process of teaching/learning to develop.</p>
<p>A teacher is a ‘qualified worker’ using the productive and technological processes acquired with his professional experience. His academic background and professional qualifications are not the most important.</p>	<p>Teachers with a university education trained as technical instructors or technologists with teaching and practical experience.</p>
<p>The evaluation criteria are determined and applied by the instructor. The evaluations are both theoretical and practical.</p>	<p>The evaluation criteria are determined and applied by the relevant occupation group of an Evaluation Commission. The final evaluation is theoretical, practical and also formative.</p>

*Source:* INFOTEP (adapted from).

As far as the overall strategy is concerned, the agency is gradually moving from training delivery to the regulation of the training market. This process was documented in 1995, in a strategic plan called INFOTEPA 2000. According to this document, training provision is meant to be diverted to accredited training centres, in both the public and private sectors. In the meantime, INFOTEPA centres are increasingly dedicated to the training of trainers and the dissemination of new technologies. Their new role also includes developing and testing new training programmes before they can be transferred to accredited institutions. Implementing this shift can, however, only be a gradual process. In the meantime, the agency is expected to contribute to broader social policies and to play a role in active labour market measures. Hence, in 1996 INFOTEPA trained 7,000 individuals, including 68 per cent workers and 32 per cent unemployed workers or school-leavers.

Reforming INFOTEPA also affects the funding mechanisms. In an effort to promote training plans in enterprises, and particularly in groups of firms, special training funds are established to finance training activities aimed at increasing labour productivity. Training is part of a broader package related to investment in new technology and requires a commitment to join forces until the objectives are met. Those earmarked funds are established by diverting 35 per cent of the compulsory contribution of participating firms.

Implementing those strategic and operational changes requires a deep transformation of the institutional culture and of the management style. Established in a more stable environment to achieve less complex goals, INFOTEPA grew over the years as a relatively rigid, hierarchical and bureaucratic organization. In the present context, the organizational challenge is to steer the transition towards a flexible, teamwork-oriented and labour market-responsive institution.

Finally, the co-ordinating role of the agency has progressively emerged as a key element to ensure the coherence of the overall training system and

to build a consensus among all the stakeholders. This process does not only refer to the traditional tripartite dimension or to the relationship with the Ministry of Education, but it also includes dialogue with the unemployed, the NGOs and other training providers. In this perspective, INFOTECH defined a national plan of development and co-ordination of the national training system. One of the major challenges is probably to maintain a balance between addressing the demands of its initial constituency, the enterprises, and contributing to the implementation of broader national policies.

The case of Mauritius illustrates a somewhat different approach to training provision and co-ordination. Prior to the establishment of a national training authority, training delivery in the country was dispersed between different ministries and institutions, each operating its own policy and programmes without any genuine co-ordination. In this context, large firms relied mainly on the informal, on-the-job training approach to impart skills to the workforce.

The need to introduce some sort of regulation in the training provision started to be felt in the mid-1970s. This seemed to be triggered by the inability of the education system to address the growing skill requirements of the emerging non-traditional industrial sector. As the economy moved towards full employment and the skilled-manpower shortages rose, increasing attention was given to training issues by both government and employers.

A first attempt to introduce some sort of regulation was undertaken in 1981 with the establishment of the Central Training Office (CTO). The CTO was created to plan, co-ordinate and monitor training. In an effort to bring together the key actors, its managing board relied on a tripartite representation from the government, the employers and trade unions. A major issue in the operation of the co-ordinating body was the sharing of responsibilities between the Ministry of Education and the Ministry for Employment. Following four years of inconclusive experience to achieve a satisfactory balance of power and distribution of responsibilities, this body

was abolished in 1984 and no alternative was found until 1986. From that date to 1988 the responsibility for the planning and co-ordination of training was taken over by the Ministry of Economic Planning and Development. In 1988, responding to private-sector pressures, the government decided to establish a training agency, in the form of a parastatal body: the Industrial and Vocational Training Board. The IVTB, governed by a bipartite council including representatives from government and the private sector, was placed under the responsibility of the Minister in charge of vocational and technical training.

By law, the functions of the IVTB include: policy advice, needs analysis, training provision, and regulation of training delivery. Over the years, the institution has developed a comprehensive organizational structure covering complementary functions: monitoring, planning, financing, training delivery, curriculum development, certification and accreditation of training providers (institutions or individuals) and programmes. The training delivery is performed in the IVTB centres and aimed at school-leavers. This training system is financed through a training levy paid by all employers into a Fund administered by the IVTB. In addition, the Board operates a grant system providing an incentive for employers to train their workforce. Subject to the approval of the course by the IVTB, this incentive combines a reimbursement covering part of the training cost and a rebate on the company tax. Therefore, the IVTB was conceived as an instrument to: provide pre-employment training to school-leavers, promote in-service training for workers and foster the establishment of a training market. Benefiting from a very favourable labour market situation, the Board did not have to cater for displaced workers.

In spite of the performance of the IVTB, ongoing changes in the economic environment require an adjustment of the Mauritian model. As a relatively small island-economy, the country relies mainly on knowledge and skills to maintain its comparative advantage. Today, emerging difficulties in the labour market, due to a crisis of export-processing zones, will call for a

revision of the training policy. Vocational education and training must be able to play a greater role: to further support technological change, to contribute to progress and to the emergence of a knowledge-based economy. Improving training quality, transforming employers' attitudes concerning human resources development, and tightening the overall coherence of the education and training system are some of the challenges facing the IVTB.

As was the case for INFOTEP, the capacity of the IVTB to adjust not only training provision but also the concept of training itself, as well as to reform operational modalities and management practices, will constitute an interesting test to assess the sustainability of the national training agency model.

## 2. From HEART to the NTA

### *2.1 The early days*

Until the mid-1980s, the Jamaican training system was made up of a diversity of training providers operating with no co-ordination. Most of the training institutions were related to a ministerial department. Hence, the Ministry of Education controlled 130 high schools, all offering various pre-vocational programmes, seven technical high schools and the College of Arts, Science and Technology. The Ministry of Youth and Community Development operated 24 industrial training centres, two sector-specific vocational schools (automotive and garment), 67 community training centres, 5 youth community training centres, and 8 agricultural camps. This Ministry also administered a small-scale apprenticeship scheme. In addition, the Jamaica Industrial Development Corporation offered training in several industrial and commercial firms.



This diversity in training provision produced a significant flow of skilled labourforce. However, in such a fragmented system, the coherence of the overall structure was weak. Furthermore, the government being the main operator and driving force, training was not responsive enough to the needs of business and industry. Over the years, the system grew beyond the funding capacity of the public sector. The resulting lack of support generated a gradual deterioration of the training capacity reflected in the insufficient maintenance of buildings and equipment, shortage of instructional materials and unsatisfactory qualification of instructors.

In 1982, following the election of a conservative Prime Minister, the government and the private sector joined efforts to rehabilitate the economy within the framework of the market-oriented policy resulting from an IMF-World Bank structural adjustment programme. In this context, the need was recognized to improve training provision and management and to build partnership between the state and employers.

This situation led to reflect on a new model for training provision, regulation and financing. The centrepiece of the new architecture was conceived as a co-ordinating agency also responsible for defining the national training policy. In view of ensuring the financial sustainability of the project, a payroll tax mechanism was designed. This institutional setting was also considered to ensure greater employers' participation.

This policy and institutional debate led, in 1982, to the establishment of the Human Employment and Resource Training (HEART) Trust. The setting included a Fund financed by a 3 per cent payroll tax. The HEART Trust was intended to address the issues of revitalization, co-ordination and responsiveness of the training system. Under the 1982 law, the mandate of the organization is to develop, encourage, monitor and provide finance for training.

Although the concept of a national training agency was adopted and materialized through HEART, the institutional setting prevented the new body from playing fully its role. Indeed, since HEART was administered from the Prime Minister's Office, it served the political agenda of the government rather than the private sector. The presence of 10 employers' representatives on the board was not sufficient to counterbalance this political shift and the concept gradually lost business support.

In a socio-economic context made difficult by the depressed state of the labour market and the need to implement structural adjustment measures, the government chose to use HEART as a tool to address high unemployment among the youth. Therefore the objectives of revitalization, co-ordination and responsiveness were overlooked.

In line with such strategy, the HEART Trust established 10 institutions: the academies. Some were converted from pre-existing centres; others benefited from the support of USAID funds. The academies were conceived as residential training facilities for school drop-outs and unemployed youth. Moving students away from their place of residence, often located in remote areas, served a strategy to facilitate labour mobility and bring skilled human resources closer to economic investments. Such rationale was considered consistent with an industrial development plan relying on the expansion of export-processing zones. Training policy was then conceived as part of a global effort to attract foreign investment. Therefore, the academies reflected a shift from the previous approach relying on day-training centres, managed by the Ministry of Youth, spread over many communities, and meant to serve local needs. A major side-effect of establishing boarding facilities was a significant increase of training costs.

In this process, the HEART Trust activities focused on the management of the academies, and neglected the co-ordination function. In fact, HEART gradually entered in competition with other institutions and tensions grew

with the two other major providers of technical and vocational education and training: the Ministry of Education and the Ministry of Youth.

Much of this difficulty had to do with resistance to a new agency on the scene and to civil service organizational approaches. Ministries were organized with lean staffing who were paid less than staff working for the statutory HEART. Civil servants also resented an encroachment of the new agency on their traditional turf, and this was a potent source of resistance. It was also problematic to attract into and retain quality staff in the public sector where compensation was not competitive with that of the private sector.

Through the School-Leavers Programme, the HEART Trust had also tried to promote on-the-job training. Although this was an important step, the employers' response remained modest, in spite of a significant tax credit, and HEART then was not well prepared to regulate on-the-job training.

As a result of the policy option selected and because of considerable bureaucratic inertia and resistance, the HEART Trust failed to perform the greatly needed co-ordinating function and to create a demand-driven system. Similarly the HEART Fund, financed by the 3 per cent payroll, was restricted to a narrow financial role: financing HEART-operated programmes. Although such mechanisms saved on government resources, they did not foster a sense of ownership among employers nor did they contribute to stimulating overall training supply.

This first, inconclusive, attempt in establishing a co-ordinating body showed that in spite of its potential merits the concept of a national training agency can be difficult to implement. In particular, its success can be affected by political and also institutional variables. Genuine political commitment, transparency and deep partnership with the enterprises are certainly among the key necessary conditions.

In 1989, change in government provided an opportunity to review the previous experience. However, the concept of a national training authority as well as the payroll tax-based financing mechanism were retained. Reshaping the HEART Trust was meant to create a real National Training Agency, a body both autonomous and responsive to the needs and views of the enterprises. The design of the new institution benefited, to a large extent, from the work being done at the subregional level within the framework of the Caribbean Community. Indeed, the Regional Strategy for Technical and Vocational Education and Training adopted by the CARICOM Ministers of Education in May 1990 provided the conceptual basis for developing, improving and co-ordinating training (see *Box II.1* and *Charts II.1, II.2* hereafter). The new HEART Trust/National Training Agency was officially launched in 1991.

## ***2.2 Implementing the National Training Agency concept***

The first step to dissociate the agency from the political agenda was to transfer HEART Trust responsibility from the Prime Minister's Office to the Ministry of Education. The second step was to consolidate the role of the new agency through the definition of new operational objectives:

- to achieve optimum resource utilization, cost-effectiveness and operating efficiencies in the institutions which comprise the TVET system;
- to promote the expansion and continued development of the TVET system in order to meet the effective demand for skilled and semi-skilled workers;
- to act as a catalyst for incorporating the private sector in the direction and delivery of TVET in Jamaica;
- to ensure that instructional and administrative arrangements in all training institutions comply with established standards; and
- to administer the provision of the HEART Trust Act with respect to employers' contribution tax and trainee welfare.

The 1994 amendments to the HEART Trust Act authorized/enabled the National Training Agency concept as well as the establishment of the National Council on Technical and Vocational Education and Training (NCTVET). However, it is worth noting that the reform process did not affect the legal framework governing the management and activities of the agency. In particular, the national training agency never received additional judicial power to co-ordinate training. Expanding HEART Trust training delivery was preferred to revising the co-ordinating mechanisms. This expansion took place by transferring several institutions to the HEART Trust, especially the training centres and the instructors' training centres (Vocational Training Development Institute) originally operated by the Ministry of Youth, as well as the responsibility of the apprenticeship programme. Later on, in 1995, an additional institution, the National Tool and Engineering Institute, was transferred from the export promotion agency, JAMPRO, to the HEART Trust. However, such decisions should be seen as tactical measures rather than reflecting the new strategy of the reformed agency. Indeed, the stated intention was not, and still is not, to assign additional operational activities to the HEART Trust, but to devote training provision to external institutions. The rationale behind this policy is to separate training regulation from the actual training delivery. To a certain extent, the adjustments made to the organizational chart of the agency in 1991 reflect this concern, as training delivery departments were separated from those related to planning, financing and quality control (see below).



HEART Trust/National Training Agency building, Kingston (HEART/NTA, 1998)

## **Box II.1    Establish a National Training Agency**

### ***Rationale***

An effective and well-managed National Training System is essential for the effective delivery of TVET. The System comprises two essential complementary training subsystems: Institutional and In-plant.

Institutional training is usually co-ordinated by various ministries, the University, professional bodies and other related organizations. In-plant training is co-ordinated by industry. To avoid omissions or overlaps in training programmes and to achieve continuum, the overall co-ordination and management of a National Training System will involve functional linkages among various ministries, organizations and other systems that impact on TVET. The co-ordination and management of this system could be achieved through the establishment of a National Training Agency. These linkages are shown in Chart II.1 – A Model of a National Training System. The various linkages will allow for the flow of information to the National Training Agency in order to facilitate decision-making and co-ordinating and monitoring activities.

### ***Composition***

The National Training Agency should comprise representatives from the Ministry of Education, training institutions, industry, public and private sectors, trade unions and the community. The National Training Agency could be developed out of existing systems for administering TVET. For example, boards established for technical institutions could co-opt other persons to obtain the composition recommended for carrying out the functions of the National Training Agency. The technical Secretariat that would service the National Training Agency could perform its functions by drawing on the part-time assignments of permanent staff from other agencies in the education/training continuum.

## **Box II.1 (continued)**

### ***Functions***

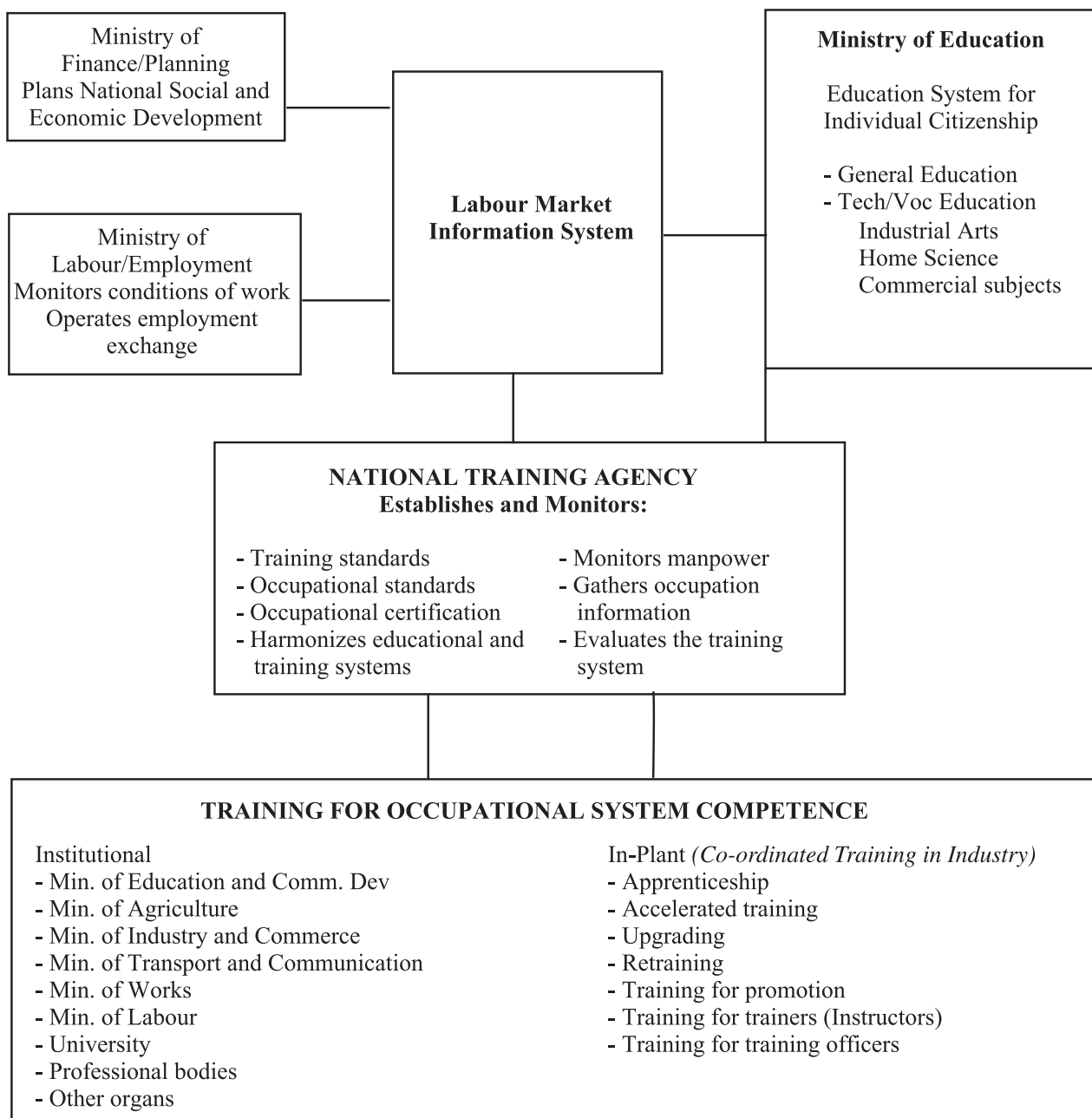
The co-ordination and management of TVET will be the main function of the National Training Agency. Through subcommittees and the use of technical persons, the National Training Agency can co-ordinate and monitor these essential activities:

- identifying training needs;
- establishing and monitoring training standards, and monitoring the delivery of training;
- testing and certification;
- harmonizing activities in education and training systems at both formal and non-formal levels;
- monitoring manpower demand and supply;
- monitoring the gathering of occupational information;
- evaluating the training system in terms of efficiency and effectiveness;
- publishing materials;
- monitoring and advising on curricula activities;
- advising on use of available resources;
- co-ordinating and executing promotional and motivational programmes;
- monitoring vocational and career guidance;
- monitoring teacher/instructor training;
- orienting training programmes in keeping with the Labour Market Information System.

*Source: Regional strategy, technical and vocational education and training, Caribbean Community Secretariat, May, 1990.*



**Chart II.1 A Model of a National Training System**



Source: Regional strategy, technical and vocational education and training, Caribbean Community Secretariat, May, 1990.

Chart II.2 Organization structure, 1991

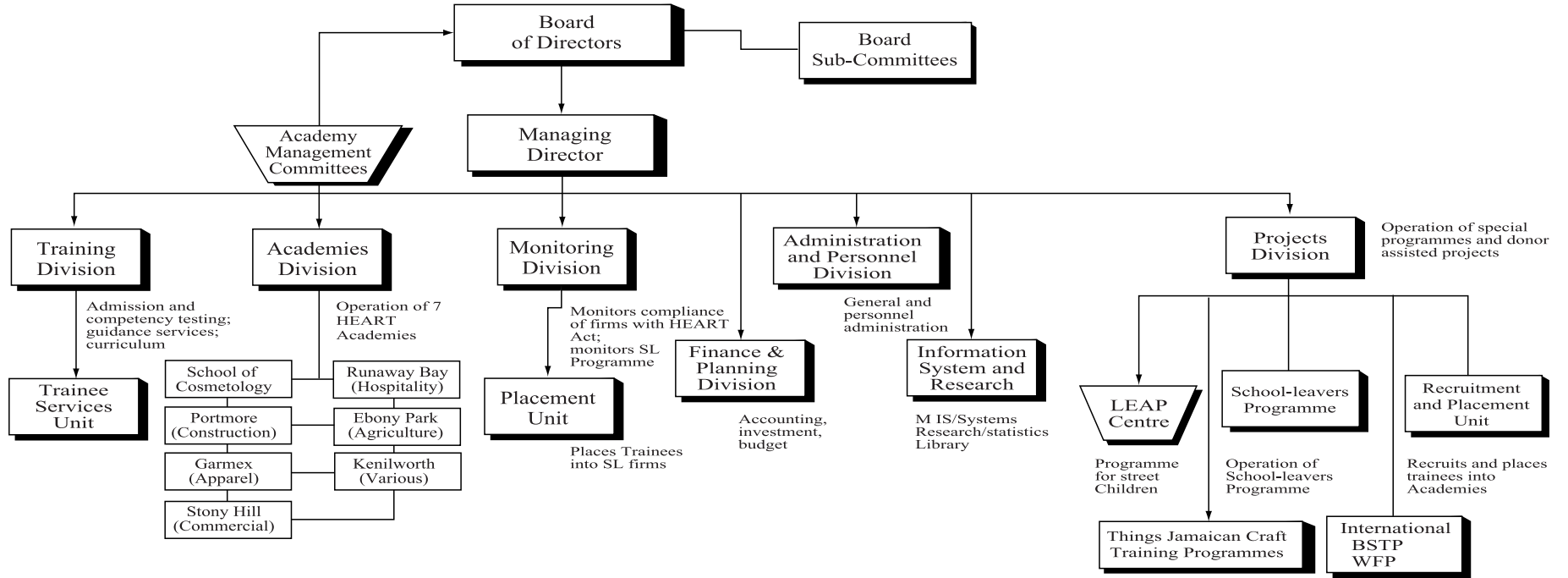
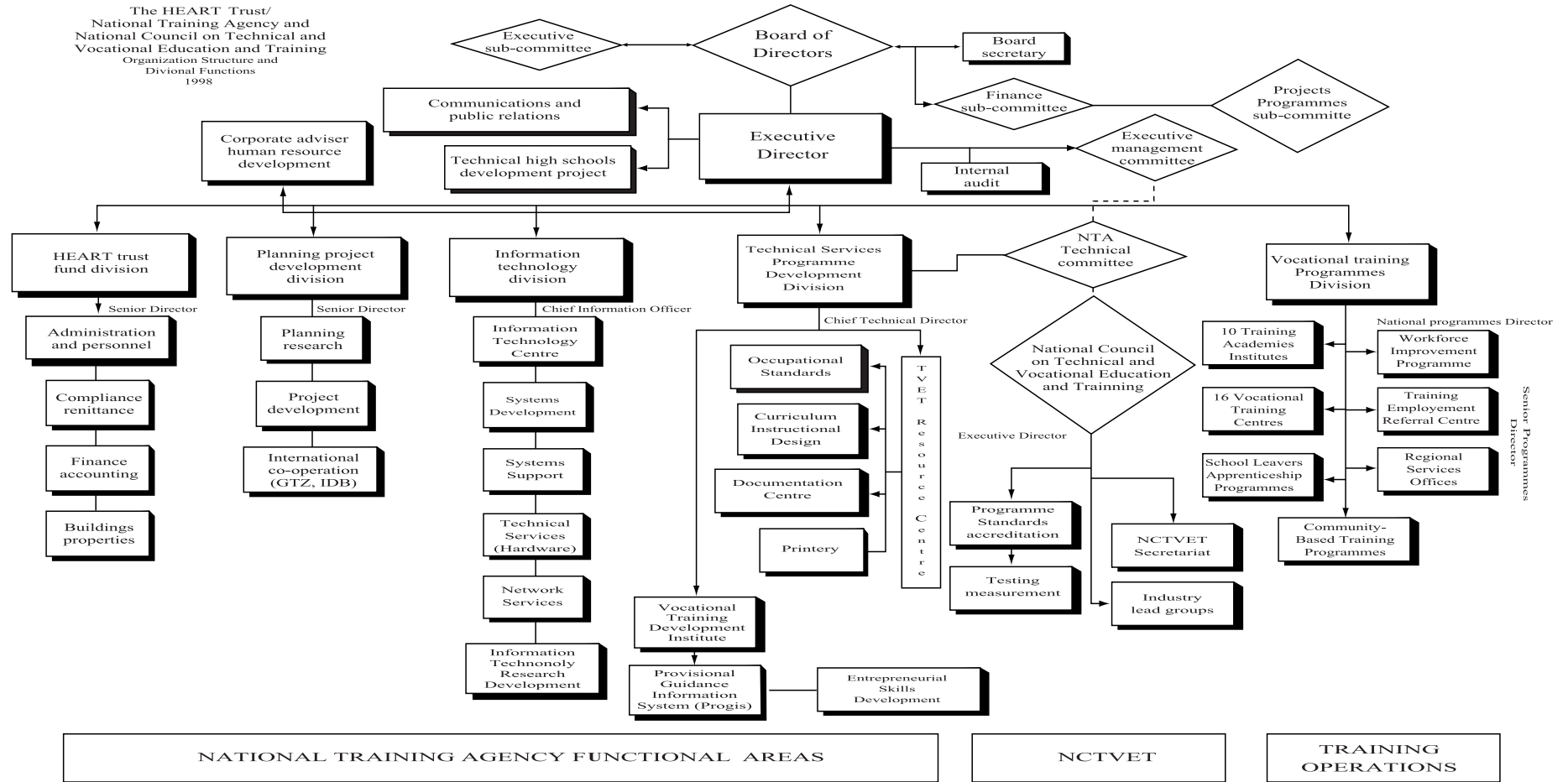


Chart II.3 Organization Structure 1998



The first experiment of a national training agency in Jamaica (1982-1989) taught two lessons of general significance. First, such a body must be truly autonomous, autonomy also meaning freedom from political interference. Second, success requires genuine representation of the private sector.

In order to meet those two conditions, the strategy chosen involved three main options: (i) shifting the responsibility for the agency from the Prime Minister's Office to the Ministry in charge of Education; (ii) reforming the organizational and management structure; and (iii) defining a new training policy aimed at establishing a demand-driven and coherent national training system. Although changes in that direction have been significant, ensuring more employers' involvement seems hard to develop, especially in a context of economic difficulties. Progress has been even slower in clarifying the role and responsibility of the trade unions. Again, this task is made more difficult by the erosion of unions' membership and representatives.

As of 1994, the definition and implementation of a national qualifications framework has been an important feature to increase employers' participation. Likewise, the intended reform of the apprenticeship scheme will lead to substantial efforts to persuade employers, and possibly trade union organizations, of the importance of offering more opportunities for youth. Those developments suggest that the partnership issue is being addressed by policy responses, as opposed to legal responses such as modifying the balance of power within the board and changing its membership. Assuming that different combinations of legal and policy instruments will lead to various patterns but also outcomes of participation, it could be tempting to push further the comparison with other experiences such as the Dominican Republic and Mauritius. However, it is also clear that the concept of a national training authority changes according to national traditions and circumstances. To a large extent, institutional arrangements regarding training are shaped by contextual factors. Analyzing and comparing cases require recognizing the fact that countries have different concepts of social partnership and are at

different stages of their socio-economic development. Such differences explain different options in setting the national training agency. It can be expected that, in Jamaica, once the policy responses are fully implemented, the institutional aspects will probably need to be revisited.



## *Chapter III*

# Training provisions and policies

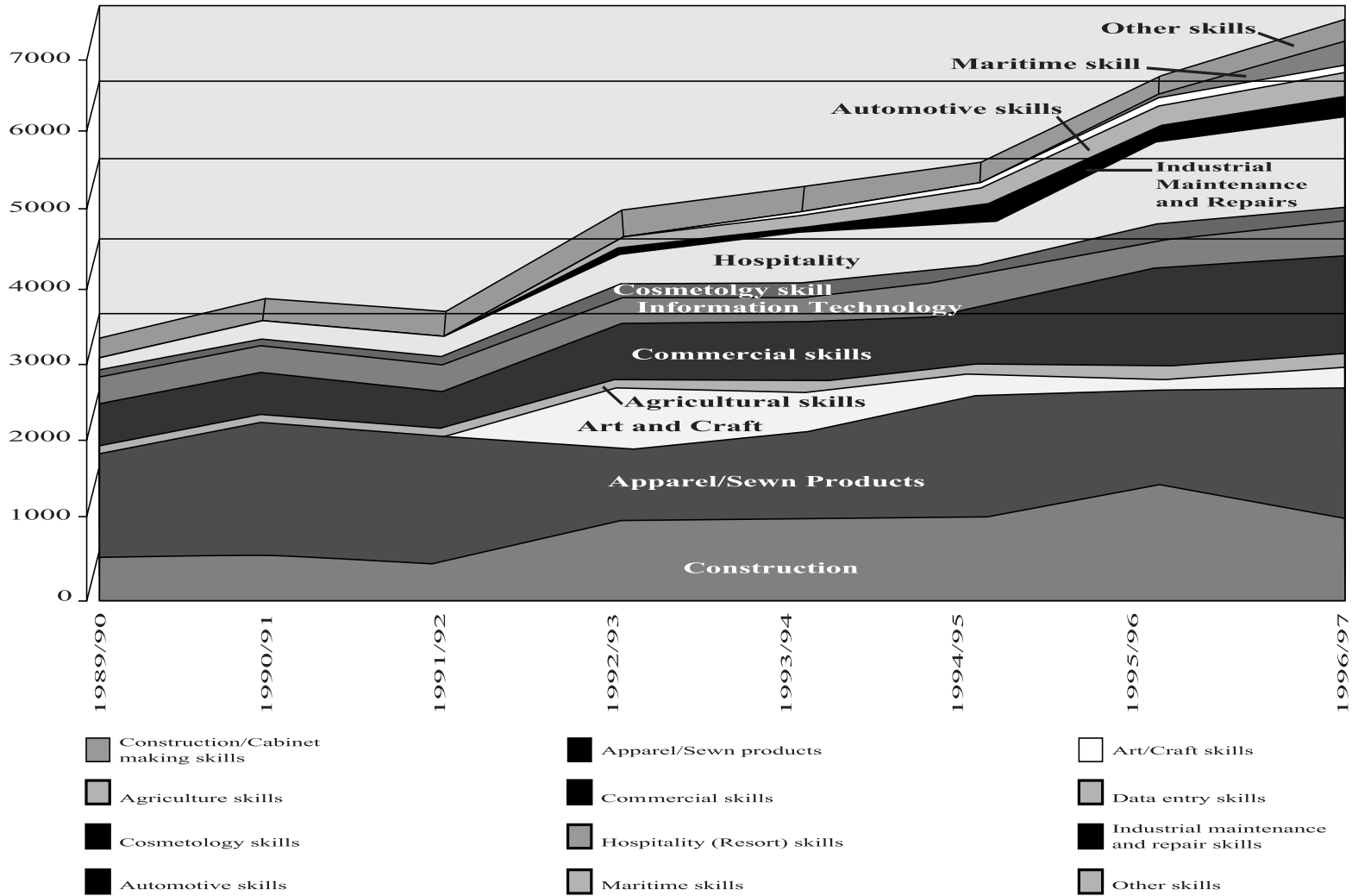
### 1. The training supply: output, offerings, facilities and delivery modes

#### *1.1 Growth of the training portfolio*

Since 1989 HEART Trust/NTA has more than doubled the output of trainees, while enrolments have grown over 400 per cent, due in some measure to the transfer of operations from other entities to HEART Trust/NTA as well as to growth in its own capacities.

As shown on the chart, the growth is fuelled by increasing capacity in construction, commercial and hospitality skills training, and to a lesser extent by the automotive training. For 1998, the HEART Trust/NTA has set an enrolment target of over 30,000 trainees.

Figure III.1



Source: Planning and Project Development Division, HEART Trust/NTA.



## ***1.2 The array of training programmes***

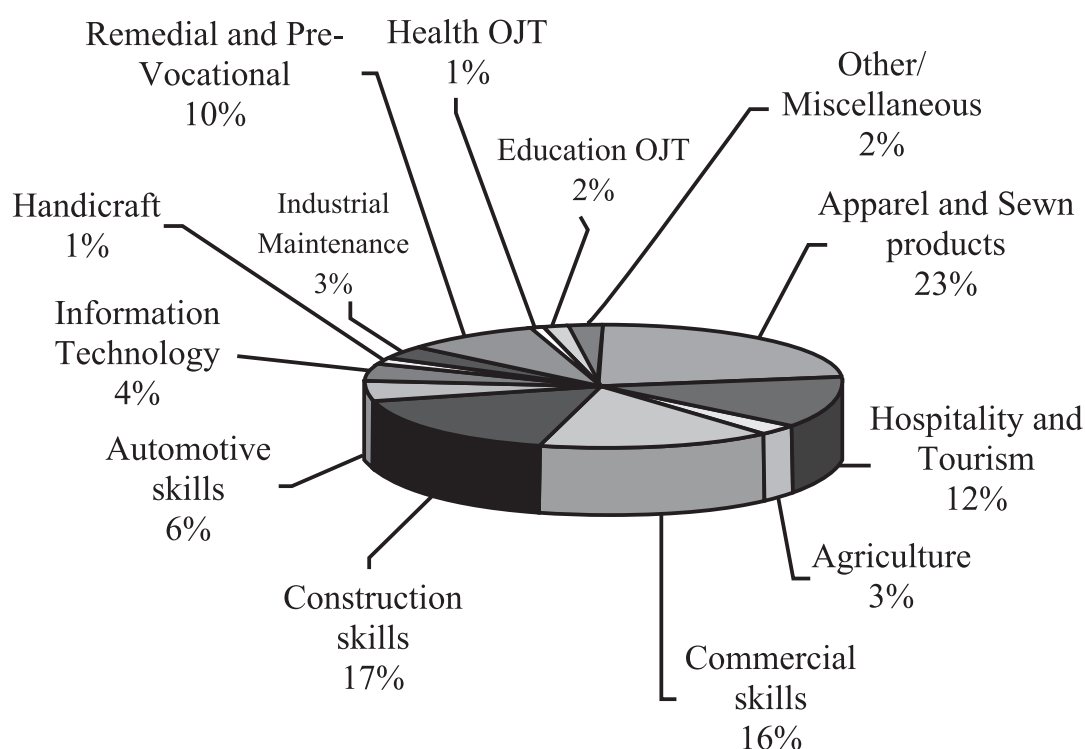
The delivery of vocational training programmes in Jamaica is organized under one senior director, the National Programmes Director. The programmes are arranged under this directorship according to type:

- one department operates the nine Academy and Institute programmes;
- another operates the 16 Vocational Training Centres;
- a third operates the 80+ programmes operated by community-based providers via subvention; this department also oversees some training projects operated by the industry in a training institution (information processing, maritime skills);
- a fourth operates the on-the-job training programmes; and
- a fifth department involves the recruiting and placement functions centrally and regionally.

This organizational pattern is a product of the historical emergence of the programming in several stages; in other words, the School-leavers programme was staffed first, then a section grew to supervise the academies, etc. This pattern is a kind of ‘product line’ organization and should be distinguished from both a *regional* or from a *sectoral* organizational form. The regional form would combine all services within a given region under a director, while a sectoral organization would group programmes nationally under the various sectoral definitions agreed upon (agriculture, construction, hospitality, etc.). The regional form of organization has been under discussion for some time and it looks like a re-organization under a regional framework will be adopted before long. This is due to the need to blend the training modalities more closely. Institutional training programmes will need to co-operate more closely with on-the-job programmes, so placing both kinds of programmes under the same director is one way of facilitating this. The organizational design, however, will need to consider a stronger sectoral aspect to its structure, perhaps with the use of a matrix type of organizational pattern.

The sectoral distribution of training is shown in *Figure III.2*. This shows training in apparel skills comprising 23 per cent of enrolment, followed by construction at 17 per cent, commercial skills at 16 per cent and hospitality and tourism at 12 per cent. Together these four sectors account for 68 per cent of projected enrolment.

**Figure III.2 Projected 98/99 enrolment by sector**



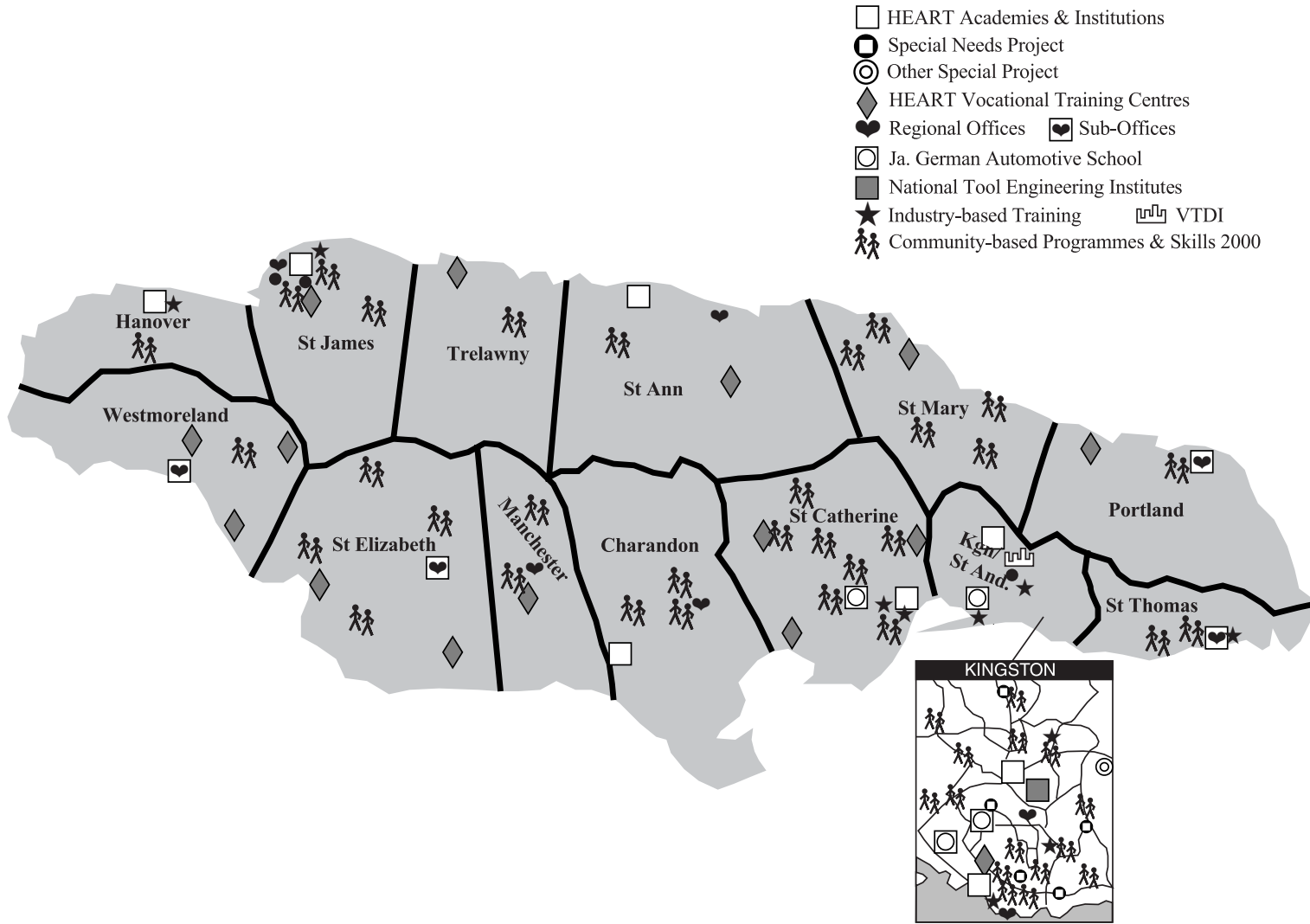
Source: HEART Trust/NTA.

### ***1.3 The geographic distribution of programmes***

Vocational training programmes are widely distributed across the island. The recruitment of trainees involves a central unit (the Training and Employment Referral Centre, or TERC) with regional offices that receive applications, test trainees and refer trainees to appropriate programmes based on their interests and background. Regional Office staff also monitor on-the-job training programmes to ensure trainee attendance and trainee welfare. Most trainees have a preference for a particular skill and a particular location and type of programme. A prospective trainee may apply for admission to a residential Academy, non-residential Academy (or Institute), a Vocational Training Centre, for a Special Programme, or for admission to the School-Leavers Training Opportunities Programme (SL-TOP), or for an Apprenticeship.

For an overall *vocational training age population* of approximately 472,000 persons (from the 1991 census), the training system operates a total of 102 training locations (in early 1998) with 17,721 training spaces in these programmes at a given time. On a national basis this computes to a provision of *one training space for each 27 members of the training-age population* and *one training space for each 1.7 square kilometre of area*.

Chart III.1 HEART Trust/NTA Programme Centres



Source: HEART Trust/NTA

There is considerable variability by parish around these national figures; some parishes enjoy a smaller ratio, while others show too few spaces in proportion, and a few parishes show a large deficiency. This is shown in *Box III.1*.

### **Box III.1 Training space/training age population ratio**

Parishes with high capacity include:	
• Hanover	1:6
• Kingston and St. Andrew	1:17
• Trelawny	1:25
• Clarendon	1:30
• Westmoreland	1:30
A middle group would include:	
• St. Catherine	1:36
• St. Ann	1:39
• St. Elisabeth	1:39
• St. Mary	1:53
The parishes well below the average include:	
• Manchester	1:63
• St. James	1:71
• Portland	1:72
• St. Thomas	1:111

*Source:* HEART Trust/NTA.

The analysis needs to take into account the following considerations as to the geographic concentration of programmes:

- St. Mary, Portland and St. Thomas, all at the eastern end of the island, are rural areas with few and smaller main towns.
- The rural parish of Hanover, while similar to these, has a large facility not far from the border with St. James. When the data for these two parishes are combined a ratio of 1:17 is derived, well below the national

average and similar to Kingston. (St. James contains Montego Bay, the second largest city.)

- There is a rationale for Kingston's relatively high capacity as the capital and centre for education and training.
- St. Thomas and Portland should be provided with more spaces to get them into line with the middle range of the other, mostly rural parishes like St. Elisabeth and Clarendon, in the range of one space per each, say, 35 persons of vocational training age. An additional VTC on the border between these two parishes is under consideration. A very few special programmes could reduce the ratio further.
- Manchester should be allotted more spaces. Mandeville is one of the faster growing main towns.
- Much of the rural capacity is based on the subventions provided through the community-based training programmes. To the extent these programmes are SKILLS 2000, there may be additional disparities since these programmes are not at the same standard as those in the Academies and VTCs.
- The spatial distribution of programmes and spaces is striking with respect to the dominance of the Kingston and St. Andrew area and the variability among the rural parishes. The rural variability is consistent with that of the population data. If the more dense Kingston area is removed the average is 1.15 spaces per kilometre. The median figure is .74 spaces per kilometre. This crude analysis suggests the needs in St. Thomas and Portland and in the town of Mandeville.

**Table III.1 Number of training spaces by parish by key population and geographic variables, March 1998**

Parish	Vocational training Age population (15-24; 1991 Census)	Area size (sq km)	Vocational training locations	Vocational training spaces	Training age 16-24 spaces ( 1 : X )	Spaces per sq km
Kingston and St Andrew	131,126	453	43	7,614	17.22	16.81
St Thomas	16,061	743	2	145	110.77	0.20
Portland	14,449	814	2	200	72.25	0.25
St Mary	20,492	611	6	385	53.23	0.63
St Ann	28,477	1,213	4	727	39.17	0.60
Trelawny	13,445	338	3	530	25.37	1.57
St James	31,246	595	5	442	70.69	0.74
Hanover	13,079	450	2	2,104	6.22	4.68
Westmoreland	23,513	807	4	775	30.34	0.96
St Elisabeth	27,713	1,212	6	707	39.20	0.58
Manchester	31,734	830	4	503	63.09	0.61
Clarendon	40,263	1,196	9	1,363	29.54	1.14
St Catherine	80,453	1,192	12	2,226	36.14	1.87
Total	472,051	10,454	102	17,721	26.64	1.70
Combined Parish Figures						
St James	31,246	595	5	442	70.69	0.74
Hanover	13,079	450	2	2,104	6.22	4.68
Combined St J/Han Total	44,325	1,045	7	2,546	17.41	2.44

Source: HEART Trust/NTA.



Food and beverage service, Runaway Bay Academy



Food preparation, Runaway Bay Academy

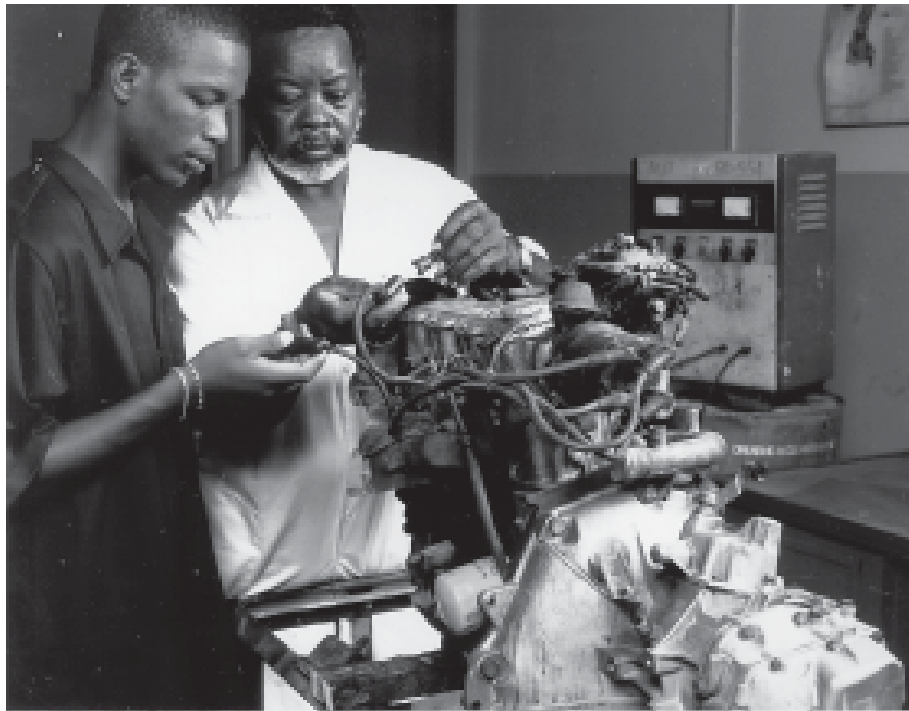




Computer training, Stony Hill, Academy



Information processing, Kenilworth Academy



Automechanics, Cornwall Automotive



Woodwork, Portmore Academy



Masonry, Portmore Academy



Horticulture, Ebony Park

#### ***1.4 The array of institutionally-based skill offerings within HEART Trust/NTA***

The HEART Trust/NTA directly operates nine academies and institutes, 16 vocational training centres, and finances and monitors:

- 35 community-based training locations offering Level 1 training,
- 35 (pre-Level 1) SKILLS 2000 locations,
- 7 small institutions operated by the Ministry of Education offering mostly pre-vocational courses,
- 6 programmes and projects aimed at specific sectors operated by private-sector entities in maritime occupations, information technology, furniture, transport, etc., and
- 6 specialized institutions focusing on special target groups and groups with special needs (persons with disabilities, street children, wards of court, etc.).

All of these institutions are categorized as offering institutionally-based skills training. Training programmes are offered in nine main sectoral groupings:

- agriculture,
- apparel and sewn products,
- automotive skills,
- beauty services,
- commercial skills,
- construction skills,
- hospitality and tourism,
- industrial maintenance,
- information technology.

Training programmes are offered by levels of competency that correspond to levels of employment in the skill area. For the most part this means Levels 1-3 offering semi-skilled, skilled and technician/supervisory

levels of training. The TVET Resource Centre has completed new curriculum documents for the Level 1 training in 36 skill areas to date, for the Level 2 training in 25 areas and Level 3 training in 10 skill areas. Some programmes continue to operate without new curricula developed, based on occupational standards and the agency's Technical Operating Model; this includes some courses in the industrial maintenance area. Some courses in information technology have been acquired 'off-the-shelf', as the occupational standards involved are rather more global than local.

The academies and institutes operate within a mostly sectoral orientation. Programmes are aimed at particular industries as follows:

- Ebony Park Academy – Agricultural skills,
- Garmex Academy – Apparel,
- Jamaican-German Automotive School (JAGAS) and Cornwall Automotive Training Institute – Automotive skills,
- School of Cosmetology – Beauty services,
- Stony Hill Academy – Commercial skills,
- Portmore Academy – Construction skills,
- Runaway Bay Hotel and Training Institute – Hospitality and tourism skills,
- National Tool and Engineering Institute – Industrial maintenance skills,
- Kenilworth Academy is a large institution that focuses on four sectors: Hospitality, Information Technology, Commercial skills and Apparel.

This category of institutions has a standing capacity of about 4,100 training places and an annual capacity to achieve a total enrolment of about 9,000 persons.

The agency also operates a network of 16 small Vocational Training Centres, each accommodating anywhere from 60 to 140 trainees at a time with a total capacity to train about 2,700 persons at a time and about 5,400 per year. The programmes in these centres include building construction

courses (electrical, plumbing, masonry, carpentry), commercial skills such as clerical and receptionist, garment construction, automotive, metal engineering, and hospitality titles such as food preparation. Most centres include some pre-vocational programmes that assist underqualified applicants to gain admission to a certification-track programme. The centres are distributed around the island in all but three parishes – there is no VTC in the parishes of Hanover, Clarendon or St. Thomas.

Institutional training also takes place in community-based locations operated by community-based organizations (CBOs) and non-governmental organizations (NGOs), and in specialized programmes aimed at particular industries operated by sectoral organizations, specialized institutions, or by firms themselves. The community-based training includes:

- Level 1 training provided through NGOs and CBOs for about 1,500 persons at a time and 3,000 persons per year;
- Pre-Level 1 training focused on income-generating capability under the government's National Poverty Eradication Programme through the agency's involvement in SKILLS 2000, also operated by NGOs and CBOs for about 800 to 1,000 persons at a time and about 2,000 persons per year;
- Level 1 training in specialized programmes operated by sectoral interests for 200-300 persons at a time and 650 per year; and
- Programmes aimed at special target groups for about 1,600 at a time and 2,000 per year.

These programmes are operated in every parish in Jamaica and have been an important source of additional capacity for the training system. In most instances the sponsors of the programme put in place the training venue and most of the equipment needed to conduct the training, while the HEART Trust/NTA finances recurrent costs of operation and provides technical support in terms of planning, monitoring supervision and programme development, and accreditation and certification procedures via NCTVET.

**Table III.2 Curricula developed by the TVET Resource Centre, 1993-1998**

Curriculum Guides/Outlines	Level 1 (✓)	Level 2 (●)	Level 3 (★)
<b>Hospitality skills</b>			
1. Food preparation	✓	●	
2. Food and beverage service	✓	●	
3. Housekeeping	✓	●	
4. Hotel maintenance	✓		
5. Front Office operations	✓	●	
6. Hotel accounting	✓	●	
7. Catering			★
<b>Commercial skills</b>			
1. Accounting	✓	●	★
2. Marketing and sales	✓		
3. Clerical/Receptionist	✓		
4. Secretarial skills	✓	●	
5. Retail sales	✓	●	
<b>Construction skills</b>			
1. Plumbing	✓	●	★
2. Masonry	✓	●	★
3. Welding	✓	●	★
4. Carpentry/Joinery	✓		
5. Cabinet making	✓	●	★
6. Electrical installation	✓	●	★
7. Carpentry		●	
8. Joinery		●	
9. Steel fixing	✓		
<b>Industrial maintenance</b>			
1. Metalwork engineering	✓		★
<b>Beauty services</b>			
1. Cosmetology skills	✓	●	
2. Beauty therapy	✓		

**Apparel and sewn products**

1. Garment construction	✓	●	★
2. Tailoring	✓		
3. Pattern making and grading	✓	●	
4. Machine embroidery	✓		
5. Sewing-machine operations	✓		
6. Machine mechanics	✓		
7. Hand embroidery	✓		

**Automotive**

1. Auto-body repair	✓		
2. Auto mechanics	✓	●	★

**Agricultural skills**

1. Livestock rearing	✓		
2. Crop production	✓	●	
3. Apiculture	✓		
4. Farm machine operations	✓		
5. Inland aqua-culture	✓		
6. Farm maintenance	✓		
7. Rabbit rearing		●	
8. Pig rearing		●	
9. Goat rearing		●	
10. Cattle rearing		●	
11. Poultry rearing		●	

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*Source:* HEART Trust/NTA. New courses are always in development. Modules from the curricula are packaged into employable skills programmes for SKILLS 2000 (pre-Level 1).

### ***1.5 On-the-job training programmes***

The agency oversees two different on-the-job training programmes. In 1982 after its founding, the first programme implemented by the Trust was the School-Leavers Programme (now School-Leavers Training Opportunities Programme, or SL-TOP). The (traditional) Apprenticeship Programme was formally transferred to the Trust from the Ministry of Youth in 1994. SL-TOP is aimed at youth aged 17 and over who have completed the secondary level at grade 11 and who demonstrate some evidence of achievement, i.e.



two CXC subjects or various local equivalents. SL-TOP was launched to address the problem of unemployment among youth who had achieved at the secondary level. Empirical research in the 1980s pointed to employers' reluctance to hire graduates who lacked job experience as an impediment to the absorption of otherwise qualified first-time job seekers into the labour market. Thus this programme was originally conceived as a *work or job experience* programme as well as a job training programme. The Apprenticeship Programme, on the other hand, was a modality of training on the decline during the 1980s. This programme was structured like many other apprenticeship schemes, with legal authorities, Trade Orders that set the conditions of training, etc. It fell into decline due to weak financial and institutional support, an absence of incentives for firms, and a general turning away from these kinds of schemes in many countries in the post-industrial era.

There are other significant differences between these two on-the-job training programmes. The HEART Act of 1982 authorizes a tax credit up to a (low) ceiling against amounts paid to trainees on a weekly basis. Basically, this amounts to a modest training subsidy. This programme is also shorter in duration, more focused on specific jobs or functions as opposed to an occupation in Apprenticeship, and organized under a much more flexible framework. SL-TOP uses a Skills Development Report (SDR) that documents the training content and minimum duration, while Apprenticeship is supposed to use the Board-approved Trade Order. It is also important to note that Apprenticeship is 97 per cent male, while SL-TOP is 73 per cent female.

Regardless of these differences, they are now both administered under one organizational umbrella that administers both frameworks, and each framework is undergoing a process of transformation. Two pilot projects have explored how a new technical framework might work. On-the-job training in both programmes is less than adequate in the absence of structured

contacts with training institutions, and is uneven in regard to training standards, actual programme content, competency assessment, and certification. The overall framework needs to be changed in the following way: both approaches and frameworks will be regulated by means of a Training Regulation that sets out the conditions of the training and the division of training tasks between the employer and the institution (HEART Trust/NTA).

A modest subsidy to reduce the cost of on-the-job training is needed for both modalities. Since the *automatic* nature of the tax credit undermines the agency's efforts to enforce standards, there is a preference to replace this legal provision with a contractual approach to placing trainees in firms.

Content will be regulated in relation to the defined occupations and level of employment developed through both the TVET Resource Centre and the NCTVET. In other words, on-the-job training will employ the same content (via the use of standard curricula) as institutionally-based training.

As part of the arrangement, trainees and employers will be required to pursue certification by successfully completing assessments at milestones in the training. An additional monetary or other incentive is proposed for employers if trainees become certified. The terminal certification objective is Level 2.

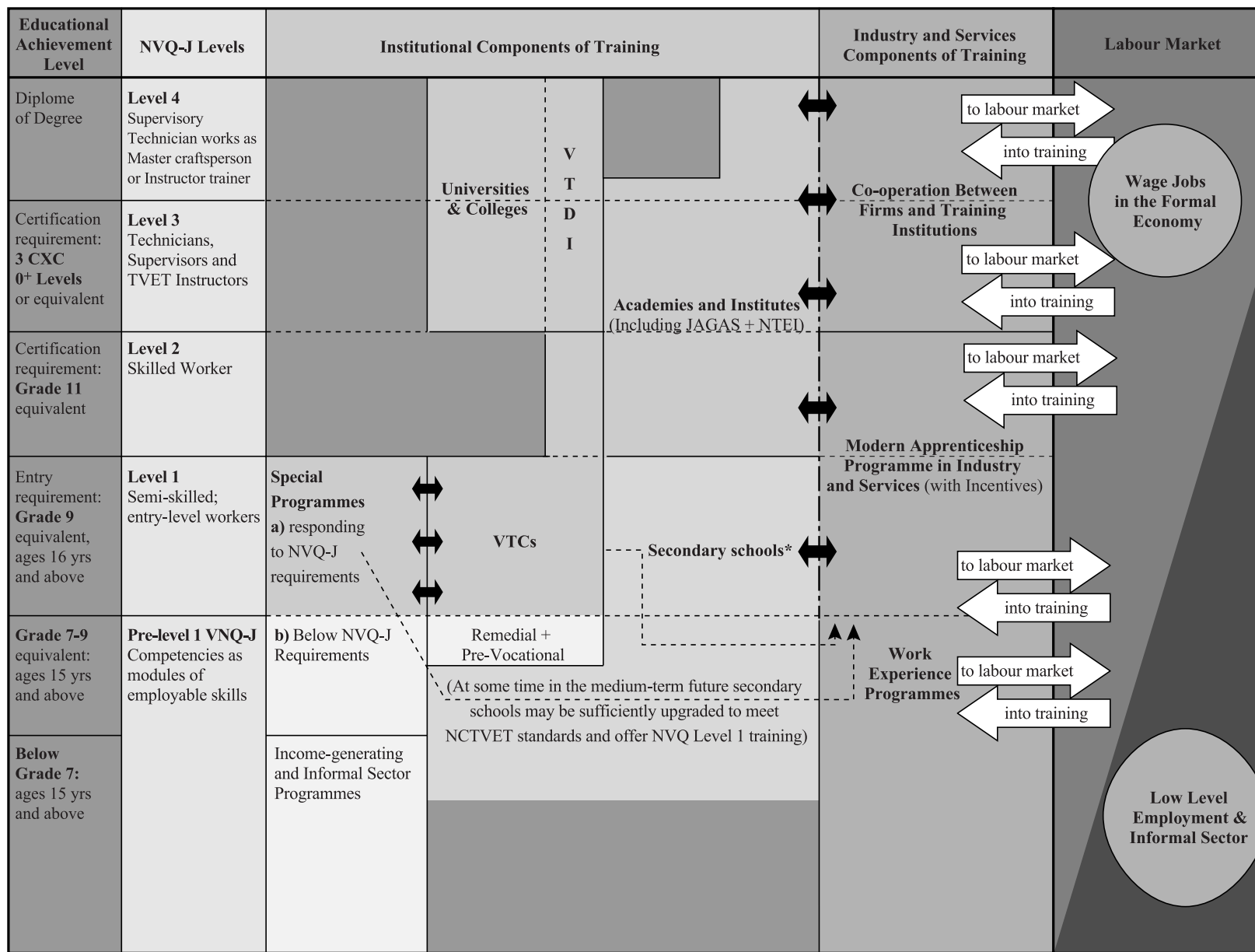
For the current year, on-the-job training opportunities in both SL-TOP and Apprenticeship include a planned enrolment of 5,000 trainees, 3,800 in SL-TOP and 1,200 in Apprenticeship. As of June 1998 1,132 firms had SL-TOP trainees and 241 firms had apprentices. Depending on how one classifies and counts the large assortment of specific jobs included in these two programmes, it is fair to say that Apprenticeship offers training in 17 skill areas and SL-TOP in 34 areas. As noted above, the titles in the SL-TOP category are more narrow and much more specific than are those in Apprenticeship, and SL-TOP has many newer jobs (that one would not expect

to find in an apprenticeship scheme) that focus on commercial skills, computers, health care, etc.

### ***1.6 Integrating the training portfolio***

The integration of the on-the-job training modality into the larger TVET framework being developed in Jamaica (standards-driven, competency-based, occupational certification) is an enormous challenge. Enabling legislation, organizational arrangements and practices, and programme development processes all need to be responsive to a system that integrates on-the-job training with institutional training in an overall framework of co-operative training. *Chart III.2* shows how the proposed structure of a more integrated training system appears.

**Chart III.2 The proposed vocational training system in Jamaica**



Source: HEART Trust/NTA.

### ***1.7 Additional key policies of HEART Trust/NTA***

- **Age:** Historically, the HEART programme was aimed at unemployed youth between the ages of 17 and 24 years of age. In 1991/92 the upper age limit was abolished. In 1996, the Board authorized that there is youth 16+ to be enrolled in a community-based programme. The Planning Division's research has shown that there is no legal prohibition against admitting 15 year-olds, but basically the 17 year-old and above entry requirement has remained.
- **Employment status:** The agency has historically focused on unemployed youth, and a lot of promotional literature and advertising invite the unemployed for training. This concept, however, is under review as it relates to how a person qualifies to enter training. First, the modular system was intended to allow *employed* persons to enter a training programme to pursue certification. Second, employed persons and displaced formerly employed persons are applying for admission to the HEART Trust/NTA. The question of whether one is unemployed or not has more to do with the inability to pay than with a bona fide admissions criterion. While unemployed youth remain the primary target group, the agency now recognizes that the employed will need to be accommodated. However, the employed should pay a fee.

The primary criterion to become a HEART Trust/NTA trainee should be the need for vocational training among out-of-school individuals. This suggests lowering the absolute age requirement to 15+ and doing away with any unemployment criterion. However, 15 year-olds need to be carefully screened and placed in pre-vocational programmes. The 15 and 16 year-olds targeted should be those who lack sufficient access to upper-secondary education, and, as such, they comprise a *special target group*.

- **Trainee stipends and trainee fees:** At present all Level 1 (entry level) trainees receive a stipend of J\$250 per week to defray costs of transport and lunch, and they attend the training free of cost. Level 2 and 3 trainees pay fees and do not receive stipends. Over the course of the next two years the agency will develop a way to assess the financial circumstances of the trainees. Those who can afford to pay something should pay it. Those who cannot afford to pay should be placed into a *Work/Study Programme* in which they contribute their labour to the training situation in some way. This means that all trainees make a contribution to the cost of the training.
- **Special target groups:** In 1997 the HEART Trust/NTA defined three *Special Target Groups* (STGs) based on work in the Planning Division with the assistance of the GTZ (Germany). STGs are groups who are at a disadvantage in the labour market through no fault of their individual members. The idea is that special provisions need to be made for these groups in order to assist them to overcome the disadvantages facing them. The groups the agency has defined and the basic rationale for including them is as follows:

- ◆ *Special Target Group No. 1: Women*

Women achieve higher educational qualifications on average than men, but despite this apparent advantage, they suffer twice the rate of unemployment of males. Further, women are relegated to traditional occupations that pay less than those available to men. The overall HEART Trust/NTA portfolio supports both females entering traditional areas of employment for women as well as non-traditional occupations.

- ◆ *Special Target Group No. 2: Persons with disabilities*

Persons with disabilities reportedly suffer unemployment rates above 90 per cent and the range of jobs available to them is severely restricted

by discrimination. The agency currently finances three programmes aimed at persons with disabilities and has made special arrangements to accommodate others. Additional special programmes and modifications to existing programmes and facilities will be implemented to address these needs.

- ◆ *Special Target Group No. 3: Unemployed youth without access to upper-secondary education*

This is the most controversial of the STGs defined. What is meant by this is that some young people, about 5,000 per year, do not really have any access to grade 10 due to the structure of the school system. Provisions for this group should include special targeting programmes that get these youth into the pre-vocational opportunities available at the VTCs; this programme will combine one year of intensive remediation and exposure to the skills with a second year of skills training.

- **Gender equity issues:** The programmes financed by the Trust have consistently enrolled more females than males. Over the past few years enrolments have tended to be about 60 per cent female and 40 per cent male. This worries some people who are concerned about the future of the young men and who believe that males are ‘marginalized’ in Jamaica. Development planners, on the other hand, would say that because the female unemployment rate is much higher than the male rate, and because females’ range of job opportunities is limited by gender stereotyping, that it is appropriate for a vocational training agency to aim more of its programming at women. It is also a fact that the educational achievement of females is, on average, higher than for males. This means they are more likely to be accepted for training, since this requires passing a test pegged at a grade 9 level. It is fair to say the imbalance in enrolment is primarily due, however, to the lower number of male applicants compared to females. This may reflect a greater demand among females but may

also be related to opportunity costs for males and males' lack of confidence to pass the entrance test.

There are also capacities for training that reflect gender patterns in the labour market, for example, most apparel and commercial trainees are female, while auto mechanics and construction trainees are male. And there are gender patterns by type of programme as well, with academies featuring more females and VTCs enrolling more males.

**Table III.3 Enrolment by gender (1998)**

Programme	Male enrolment %	Female enrolment %	Total 1998 planned enrolment
Academies	36%	64%	10,081
Vocational training centres	58%	42%	5,358
Remedial programmes	54%	46%	1,960
On-the-job training	49%	51%	5,000
SL-TOPS on-the-job	27%	73%	3,800
Apprenticeship	98%	2%	1,200
Special programmes	27%	73%	8,900
Community-based	21%	79%	3,042
Industry-based	44%	56%	650
Special needs	50%	50%	734
Skills 2000	31%	69%	1,899
Other	17%	83%	200
VTDI	55%	45%	1,024
<b>TOTAL</b>	<b>41.6%</b>	<b>58.4%</b>	<b>30,363</b>

*Source:* HEART Trust/NTA.



**Table III.4 Distribution of enrolment by gender (1995-1998), in %**

Year	Males %	Females %
1998 Year to date	41.6	58.4
1997/98	39.9	60.1
1996/97	43.3	56.7
1995/96	42.4	57.6

Source: HEART Trust/NTA.

From a policy perspective, the agency has concluded that given women's disadvantages in the labour market, it is appropriate to have an enrolment bias that favours females, but the proportions should be more like 55 per cent female and 45 per cent male. With a rounded total enrolment figure of 30,000 trainees, this comes to 16,500 females and 13,500 males. To achieve this improved gender balance the following general approaches will be used:

- Academies will reduce their imbalance by increasing male enrollees at Stony Hill (now only 11%) to achieve a 20 per cent enrolment of males (about 200 more), and Kenilworth (currently only 18% male) should achieve 30 per cent male enrolment (an increase of about 300 per year). This will bring academies to about 41 per cent male enrolment, with about 4,130 male trainees.
- Special programmes (and the Project Development activity) should work to change the portfolio to a ratio of 35 per cent males (current rate = 27%). This would add about 710 males, especially in community-based level one programmes and in Skills 2000. This is not an easy task, however, as it assumes developing programmes aimed at males.
- Since males do not pass the entrance test at the same rate as females, remedial programmes should make a special effort to target males in this programme.

These changes alone would bring the gender proportions closer to the desired level, as these changes would then accommodate about 13,800 males, bringing the proportions to more like 45-46 per cent males.

The gender aspect to policy for females should focus on opportunities for *women in non-traditional occupations*. The agency is embarking on a regional project with the Inter-American Development Bank (IDB) to increase these training opportunities. Right now it counts a planned enrolment of 4,512 trainees in skill areas traditionally for males. Academies comprise 2,372 of these spaces and VTCs 2,140. The current enrolments show that for academies, female enrolment in non-traditional skill areas comprises about 8 per cent of the total, while in the VTCs females account for 12.5 per cent of enrolment in those skill areas. The non-traditional skill areas are automotive, industrial maintenance, woodworking and construction skills. The current enrolment levels produce a combined total of about 10 per cent for these areas and provide opportunities in the range of *enrolment* of 450 female trainees per year in non-traditional skill areas, with about 300-350 completers, depending on the length of the courses in which females are enrolled. The commitment under the project with the IDB involves training 400 females in non-traditional occupations *to completion* (rather than enrolled) each year. The agency should already be near this level.

Regardless of whether the HEART Trust/NTA is on target with that project, it can also increase female enrolments in these skill areas by taking measures to address issues at particular centres. VTCs have done a good job at getting females into construction opportunities in rural areas. In fact, the number of traditional skill areas in VTCs aimed at women is rather low, especially at Junction, Lluidas Vale, Old Harbour, Petersfield and Rockfort, and less so at Buff Bay, Falmouth, Port Maria and Seaford Town. The real targets for this initiative are the 'flagship' institutions; their enrolments are as follows:

**Table III.5 Enrolment and % of females in ‘flagship’ institutions**

Institution	Annual enrolment capacity	Current % Female
National Tool and Engineering Institute	500	5
JAGAS	662	4
Cornwall Automotive	60	8
Portmore Academy	1,150	13

Source: HEART Trust/NTA.

One can see from this that NTEI and JAGAS need to pay particular interest to increasing female enrolment; doubling their rates would provide opportunities to an additional 50 females annually. Portmore is doing a fair job of recruiting females.

## 2. The HEART Trust/NTA technical operating model

HEART Trust/NTA has adopted a Technical Operating Model that determines the process by which training programmes are defined, developed and implemented and by which trainees are then certified. This model, shown graphically on the accompanying page, is characterized as:

- driven by the labour market and standards set by employers, and
- based on the achievement of measurable and certifiable competences by trainees.

### 2.1 Sectoral planning

The model begins with the identification of training needs within the various sectors and sub-sectors of the economy. A *Sectoral Training Needs Study* is conducted to define the needs of particular industries and service groupings within the economy, particularly those that employ large numbers

of people, are experiencing growth, earn foreign exchange, or are otherwise defined as strategically important within the context of planning by the government. Sectoral training studies attempt to gather primary and secondary information about the labour market and may use surveys and discussions with key informants to collect data. The studies describe the industry and the firms that comprise the sector in terms of size, location, market segments, and the issues and problems firms in the industry confront. The studies also capture information about the labour force for the industry or sector: its size, age, gender and qualifications composition. The studies analyze what employers describe as the required knowledge, skills and attitudes needed for the firms to compete in their respective markets. Employees may describe working conditions and pay levels.

Brief job profiles are completed to identify key occupations. Another section of these reports analyzes the amount and kind of training available at present and examines the gaps between what the data say is required and what is actually in place. These studies conclude with recommendations about:

- the kinds of projects or programmes needed by the sector, especially for programming for key occupations;
- the worker profile required by firms;
- new directions for programme development, again, especially for key occupations;
- and the overall direction the agency should take in relation to the sector.

In addition, the processes of Programme Review and Programme Evaluation eventuate in recommendations that inform the process of programme development and implementation as these evaluative processes draw conclusions about how programmes can be made more relevant to employers' needs and more effective in their delivery.

## **2.2 Occupational analysis**

The occupations defined as important in the Sectoral Training Study, or suggested as needing updating after programme evaluation activities, are then analyzed in depth by the Standards Unit at the TVET Resource Centre. Using a functional analysis methodology, occupations are broken down into their respective job and task functions by level of employment, i.e. semi-skilled (Level 1), skilled (Level 2) and so on. Each job within the occupation is broken down into its constituent parts, referred to as tasks or elements; these elements are further analyzed to develop a competency standard. This standard would include:

- the job element or task,
- the performance level required for the task to be considered ‘well done’, and
- a statement of the conditions under which a task might have to be performed.

Such a standard might read something like this in the field of plumbing and pipe fitting:

### **Box III.2 Occupational standard (plumbing and pipe fitting)**

Level 1 Plumbing and pipe fitting

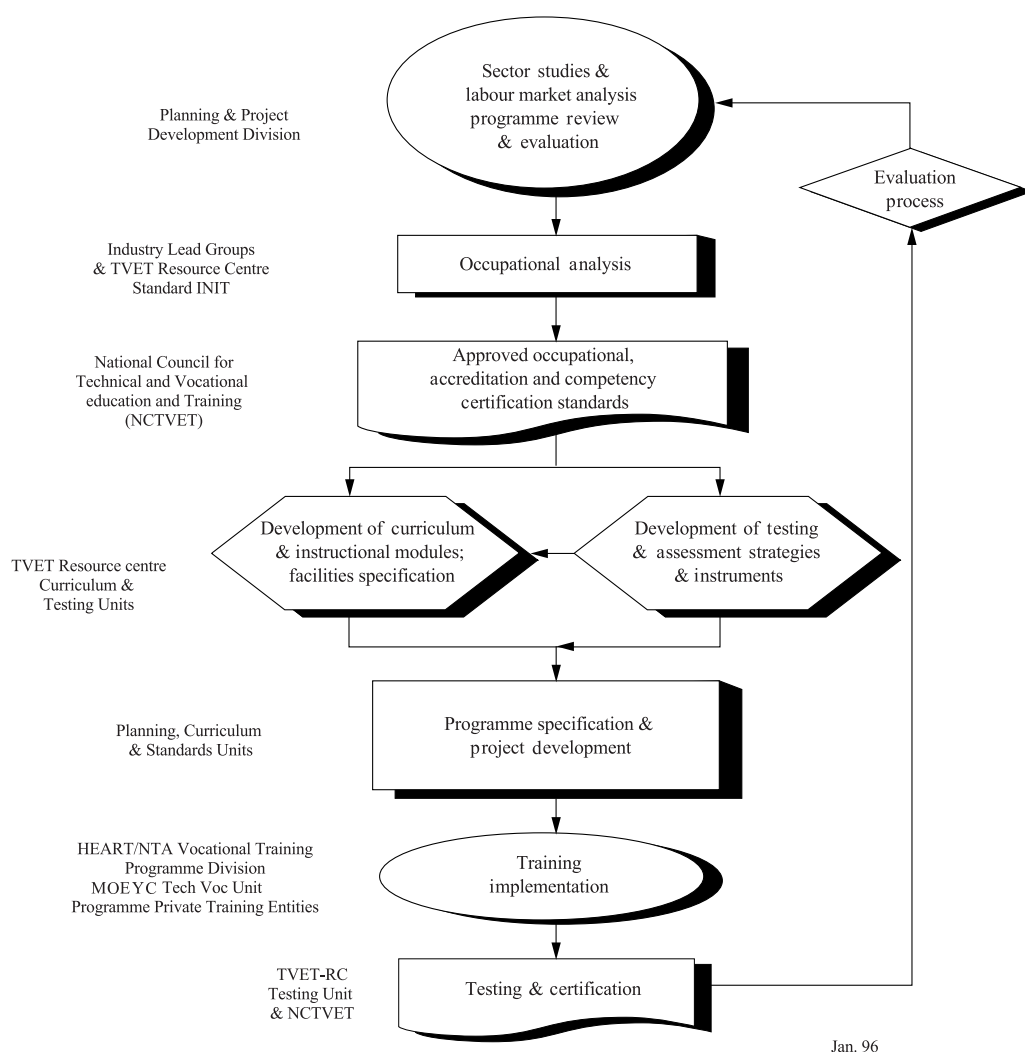
Task 2.5 Thread and connect pipe

The worker must be able to thread all sizes of available metal and PVC pipe to within plus or minus .05 per cent of the required specification and connect the piping without leaks under the following conditions: at a workbench, on a scaffold, in a trench.

*Source:* HEART Trust/NTA.

These standards are derived by HEART Trust/NTA analysts through contact with employers and are documented as Proposed or Draft Standards. This consultation process takes place under the auspices of the industry lead groups of the NCTVET. The Technical Operating Model then turns to the employer community to study, review, evaluate, revise and approve the Draft Standards.

**Chart III.3 HEART Trust/National Training Agency, Technical Operating Model**



Source: HEART Trust/NTA.

### ***2.3 Industry lead groups***

The employer community is represented by Industry lead groups. These groups are comprised through collaborative efforts between the HEART Trust/NTA and NCTVET at this point in time. Lead groups are formed on a sectoral basis, e.g. hospitality, apparel manufacturing, agriculture, etc. The composition of these groups includes a chairman elected by the group, and representatives of the various segments of the industry based on geographic locations and inclusion of larger and smaller firms. The lead groups review the draft standards over a period of time, sometimes co-opting additional assistance from firms and specialists in order to refine the standards. They eventually recommend that NCTVET formally approve and adopt the standards.

### ***2.4 Programme development***

The next step in the process involves the development of an instructional design and curriculum. The process of standard setting facilitates the *modular* approach to the development of a training programme. In this approach groups of related tasks are collected into a curriculum module, and this is treated as a stand-alone competency that can be discretely taught and measured as to whether competency has been achieved. Programme development, then, includes the development of a curriculum (for each level), the specification of facilities and equipment, and the development of testing procedures and instruments. Instructional materials including instructor manuals and trainee workbooks are also developed or sourced, depending on cost effectiveness. This work is all carried out by the TVET Resource Centre. NCTVET reviews, recommends revisions and eventually validates and approves the programme. A comprehensive chart showing all the products of the programme development process is shown hereafter.

## **2.5 Programme specification and project development**

At this point the training programme is considered developed. The Planning and Project Development Unit works with training providers to establish projects using the programme that has now been completed. A programme of training can be implemented in any category of institution or programme where labour market demand can be ascertained. Proposed new projects are reviewed and approved by a Projects and Programmes Sub-committee and a Finance Sub-committee at the HEART Trust/NTA and are forwarded to the Board of Directors for final approval.

## **2.6 Implementation of training**

Programmes and new projects are implemented by the Office of the National Programmes Director within its various components including HEART academies, VTCs and Special Programmes, and are made available to other training providers including the Ministry of Education and private training providers. Programmes are offered by employment level. This means a programme is implemented for Level 1 (semi-skilled) or Level 2 (skilled), etc. Programmes implementing national curricula can pursue accreditation through NCTVET, and trainees are pursuing certification through NCTVET.

## **2.7 Training, testing and certification**

Training programmes are delivered in modules. Attainment of the required competences is organized in modular fashion with an *Institutionally-Based Assessment* (IBA) conducted and documented by instructors. The Testing and Measurement Unit of the NCTVET co-ordinates final competency testing; this testing is a sampling of the competences comprising the course. A recommendation for certification is made to the NCTVET upon review of the results of the IBA and the final examination. A trainee must meet the requirements in each module for certification and opportunities are created

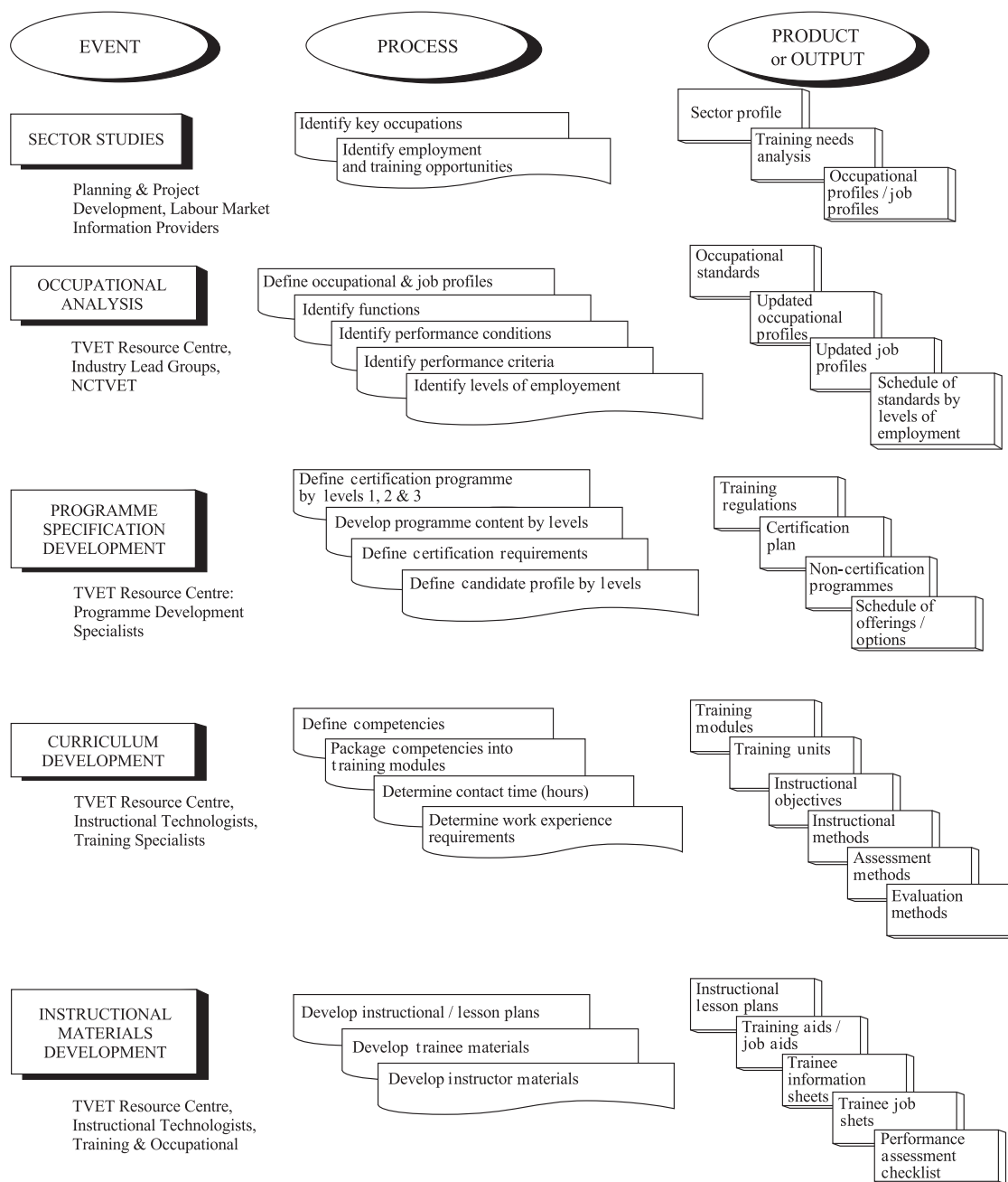


to allow those who did not achieve the standard to re-train and re-sit modules in which the standard was not attained. Persons are being certified within the structure of a Certification Framework approved by the NCTVET (see *Box III.3* and *Table III.6*).

## **2.8      *Programme evaluation***

The evaluation of programmes, whether in a formal and comprehensive fashion or on a more ad-hoc basis, often generates new information about the relevance of the programme to the employment setting (although programme evaluation usually highlights weaknesses in how training is delivered). To the extent that this occurs, occupations, jobs and tasks can be re-analyzed and occupational standards updated. Formal programme reviews and evaluations, tracer studies and employer surveys are conducted by the Planning and Project Development Division.

**Chart III.4 Process and Products of the programme development process, Technical Operating Model**



January 1997

Source: HEART Trust/NTA.

### **Box III.3 Occupational certification National Vocational Qualifications of Jamaica (NVQJ)-Levels of award**

*Level 1: Entry-level: Apprentice, supervised worker*

Including competence in a significant range of varied work activities performed in a variety of contexts. Work activities range from simple and routine to more complex and non-routine involving some individual responsibility and autonomy. Collaboration with others through work groups or teams may often be a requirement. Substantial supervision is required especially during the early months, evolving into more autonomy with time.

*Level 2: Journeyman: Technical/specialized independent worker (Licensed, etc.)*

Recognized competence in a broad range of complex, technical or professional work activities performed in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and the allocation of resources is often a requirement. The individual is capable of self-directed application, exhibits problem-solving, planning, designing, and supervisory capabilities.

*Level 3: Technician/supervisor*

Recognized competence in a broad range of complex, technical or professional work activities performed in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and the allocation of resources are often a requirement. The individual is capable of self-directed application, exhibits problem-solving, planning, designing, and supervisory capabilities.

*Level 4: Master craftsman/ managerial/entrepreneur*

Recognizes competence which involves the application of a significant range of fundamental principles and complex techniques across a wide and unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources, as well as personal accountabilities for analysis, diagnosis, design, planning, execution, and evaluation.

*Level 5: Graduate, professional, and/or managerial*

Recognizes the ability to exercise personal professional responsibility for the design, development, or improvement of a product, process, system or service. The award recognizes technical and managerial competences at the highest level and may be confined to those who have occupied positions of the highest professional responsibility and made outstanding contribution to the promotion and practice of their profession.

Source: HEART Trust/NTA.

**Table III.6 Occupational levels, educational qualifications and training programmes:  
The certification framework of the National Council for Technical and  
Vocational Education and Training (Jamaica)**

Occupational level and NCTVET level	Requirements to enter training	Duration of typical programme	Job experience requirement for certification	Educational requirement for certification	Training modalities
<b>Level 1</b> Semi-skilled worker Apprentice, entry level	Grade 9 equivalence, or 2 CXC 'O' levels or equivalent for some skills; Grade 7 equivalent for other skills	3 months to 1 year full-time	160 hours in an approved <i>work experience</i> site	Grade 9 equivalence	Institutionally-based or in-plant or via <i>co-operative training</i> (employers and institutions)
<b>Level 2</b> Skilled worker	Grade 10 equivalence or 2 CXC 'O' levels	1 year part-time while employed in skill	Usually 2 years	Grade 10 equivalence	Co-operative training
<b>Level 3</b> Technician, supervisory vocational instructor	Grade 11 equivalence or 2 CXC 'O' levels	1 year part-time while employed in skill	Usually 3 years	Grade 11 equivalence (Preferably 3 'O' levels)	Co-operative training
<b>Level 4</b> Master craftsman Instructor trainer	3 CXC 'O' levels or equivalent	1 year part-time while employed in skill	Usually 4 years	First degree or equivalent	Co-operative training
<b>Level 5</b> Professional	Tertiary or university admissions requirements	1 year of full-time study	Usually 4 years or more	A university degree with professional courses	Set by professional bodies

Source: HEART Trust/NTA.

## *Chapter IV*

### Entering the demand-driven era

#### 1. You've got the power: decentralization and autonomy<sup>7</sup>

##### *1.1 Centralized power vs. autonomy, institutions' leadership vs. local partnership*

The HEART Trust/NTA, just like similar training organizations worldwide, is under increasing pressure to provide training that addresses current and anticipated workforce needs. In search of greater flexibility and relevance, the training policy developed by the HEART Trust/NTA has been paying increasing attention to devoting operational responsibilities to external training providers. However, the implementation of such a market-oriented strategy faces a number of technical and institutional difficulties. In that context, a programme of decentralization towards HEART Trust training institutions is viewed as a significant step to further differentiate training delivery from planning, policy and financing functions. Decentralization would mean devoting more administrative, financial and pedagogic autonomy to institutions, the overall objective being to improve the efficiency, effectiveness and relevance of their offering.

Such a contemplated move towards assigning decision-making authority and transferring more administrative responsibility to the institutional level, corresponds to a broader international trend of decentralizing training systems.

<sup>7</sup> This part is based on a survey of institutions jointly conducted by IIEP and HEART Trust/NTA (Planning Project Development Division).

The basic proposition behind that reform is that institutions are better able to satisfy varying local demands for training. In other words it assumes that, as a result of decentralization, the design of public goods and services (training and related commodities) may be more in accordance with local preferences. Furthermore, granting additional autonomy to training institutions is also viewed as a way to obtain a higher degree of user-participation, in this case particularly employers.

This review of HEART Trust training institutions' linkages with enterprises and their broader socio-economic environment must be put in this overall policy framework. Although the rhetoric of decentralization has already gained ground within the NTA, the management of training provision remains relatively centralized, as HEART Trust headquarters keeps a tight control over its institutions. In practice, their autonomy in managing budget, staff, investments and operating expenditures can be considered as still modest. Indeed, lack of autonomy is the first management problem mentioned by heads of institutions (13 times out of 22 responses) especially within academies.

However, management committees have been established at the institution level, which include local partners. Although those structures mainly play an advisory role, they provide wide opportunities for intense and productive interactions between training institutions and their environment. At this stage of the modernization process being undertaken in the training system, this type of partnership does not yet counterbalance the still prevalent 'top-down' bureaucratic style of management, nor does it make full use of the opportunities already available to enhance enterprises' influence in decision-making at the local level.

Although in the case of Jamaica, resource mobilization for training is not an issue at the moment, due to the financial stability granted by the levy, decentralization is often also viewed as a way to enhance revenue-raising

capabilities at the institution level. Under a decentralized framework, public training institutions may seek to recover part of the cost of provided services. This option gained increased attention in the international arena as most governments were experiencing tight budgetary constraints. While user fees for basic education raise important equity issues, training can more easily accommodate cost-recovery measures, except for socially motivated programmes. However, it has been argued that an extensive application of user-fee principles could generate efficiency problems, in limiting the potentially high positive externalities associated with training.

Besides purely financial arguments, advocates of user charges for training services insist on the fact that cost recovery at the local level brings institutions closer to beneficiaries and makes their offerings more amenable to the needs of the neighbouring enterprises. Hence, cost recovery at the institution level could form a strategic instrument to promote responsiveness and foster a demand-driven training system. To a certain extent, it provides a voting mechanism allowing local employers to express their preferences, such preferences being reflected in the type of training they would be willing to pay for. This view is obviously imparted by labour market failures which may limit employers' investment in training. The argument about diversifying institution resources is, however, useful in highlighting the built-in incentive dimension of such measures to bring them closer to local needs and eventually make training more relevant.

Collected information on HEART Trust/NTA institutions' attitude towards cost recovery does not reflect a clear concern for resource mobilization. Although many initiatives are taken, they are not integrated into a comprehensive strategy and their returns seem to be modest. The relatively favourable financial environment in which the HEART Trust operates, although not necessarily reflected at the institution level, may explain such a weak cost-recovery culture. As indicated above, apart from the total resource mobilization aspect, changing this attitude could contribute to further

consolidating the links between institutions and the business community, and eventually make institutions more responsive to labour-market needs.

However, in spite of the absence of financial incentives, the results of the survey indicate that institutions have been able to develop many linkages with their environment. The extent to which they participate in, and contribute to, the local socio-economic life suggests that their impact goes well beyond training. Consolidating this strength may require headquarters to provide back-up services, particularly in areas related to local labour-market analysis.

Finally, the findings suggest that administrative capacity may constitute a serious obstacle to increasing the autonomy of institutions. Addressing this issue will require appropriate measures aimed at consolidating the managerial competence of heads of institutions and establishing management information systems at the institution level.

This situation perfectly reflects the broader issue regarding institution capacity. In many countries, administrative feasibility places severe limits on the autonomy of training institutions and, more generally, on decentralization. The prerequisite of staff competence, well-defined regulations and effective management tools are often missing. Capacity-building at the institution level is usually considered as a prerequisite for an effective decentralization policy leading to strong and meaningful autonomous institutions.



## 1.2 Profile and activity of the training institutions

### 1.2.1 Overall presentation of the institutions

As indicated in *Chapter III*, the HEART/NTA training network encompasses three main types of institution:

- (1) The *Academies*, forming the heart of the network: they were conceived as residential training institutions serving the qualification needs of the economy;
- (2) The *Vocational Training Centres (VTCs)*, widely spread within the island; they were intended to stimulate the economy of local communities;
- (3) *Other institutions*, which include a variety of training centres catering for specific target groups or providing specialized training:
  - *Paul Bogle Vocational Training Institute* (building institute);
  - *Abilities Foundation* (training for the disabled);
  - *LEAP Centre* (training for street children).

While academies and VTCs represent two relatively homogeneous sub-populations, the group called *other institutions* constitutes a heterogeneous category mainly reflecting the social mission of the HEART Trust/NTA.

**Table IV.1 Type of institutions**

	Total (1996)	% (1996)	Total (1998)	% (1998)
Academies	8	31	<b>9</b>	29
Vocational Training Centres (VTCs)	15	58	<b>16</b>	52
Other institutions	3	11	<b>6</b>	19
<b>Total</b>	<b>26</b>	<b>100</b>	<b>31</b>	<b>100</b>



Ebony Park HEART Academy



Stony Hill HEART Academy



Pentecostal Gospel Skills Training (A special programme at a church)



Newport VTC

**Box IV.1 List of surveyed institutions (Academies, Vocational training centres and other institutions)**

1. Garmex Academy
2. Jamaican-German Automative School
3. Kenilworth Academy
4. National Tool and Engineering Institute (NTEI)
5. Portmore Academy
6. Runaway Bay
7. School of Cosmetology
8. Stony Hall Academy
9. Above Rocks
10. Beechamville
11. Black River
12. Boys Town
13. Culloden
14. Falmouth
15. Junction
16. Lluidas Vale
17. Newport
18. Old Harbour
19. Petersfield
20. Port Maria
21. Rockfort
22. Seaford Town
23. Abilities Foundation
24. LEAP
25. Paul Bogle Vocational Training Institute
26. Mel Nathan Institute

The data related to the number of years the institutions have been in existence show that the training network is relatively recent. The average is 10 years of existence (13 institutions were established (or re-established) in

the last 10 years). The mean value for vocational training centres is a little higher (12 years).

Since 1972, an average of one institution has been added to the network every year; such a trend reflects a rather sustained effort to strengthen the national training capacity, although it was not originally within the framework of HEART/NTA.

### *1.2.2 Local environment*

The environmental setting of the institutions is rather diversified: most of them are located in semi-urban areas and the rest of them are almost equally divided between urban and rural areas. An analysis of the location, according to the type of institution, confirms the difference in nature between academies, which are predominantly urban and semi-urban, and VTCs which are located, to a large extent, in semi-urban and rural areas. This pattern of geographic distribution seems consistent with the objectives of each type of institution.

These differences are also reflected, in the opinion of heads of institutions, on the economic context. While most heads of academies consider their economic environment as being dynamic, a majority of VTC managers qualify their area as economically depressed. Altogether, 75 per cent of the respondents consider their environment to be either depressed or stable, which is reasonably consistent with the macro-economic situation of the country.

### *1.2.3 Mode of training*

Work-experience programmes form an important component of the training offered by HEART/NTA institutions. Such linkages with enterprises are considered crucial to provide quality training. Indeed, all regular programmes include work-experience periods. When asked about the rationale for enterprise-based learning, heads of institutions most frequently mention

providing industrial experience and hands-on work. It is interesting to note that job placement was only mentioned three times.

**Table IV.2 Objectives of work-experience periods (multiple responses allowed)**

Objectives	Number of institutions
Hands-on work	17
Industrial experience	14
Job placement	3
<b>Total</b>	<b>25</b>

*Source:* HEART Trust/NTA-IIEP Survey, 1996.

Placement for work experience periods is considered *relatively difficult* by 80 per cent of the respondents. Organizing this aspect of the training proves, therefore, to be a serious problem, although not a major one since none of the respondents classify it as *very difficult*.

**Table IV.3 Placement for work-experience periods**

Stated opinion	Number of institutions
Very difficult	0
Relatively difficult	20
Easy	5
<b>Total</b>	<b>25</b>

*Source:* HEART Trust/NTA-IIEP Survey, 1996.

### 1.3 Local participation in decision-making

#### 1.3.1 Decision-making structures

It is often argued that local participation may ensure greater relevance of training provision to local conditions, needs and available resources. Therefore, securing community support and involvement in decision-making and implementation forms part of a broader effort to place institutions closer to local development needs. The arrangements for obtaining such participation differ according to the opportunities available, the interest of the stakeholders and the local culture. Opening the governing structures of training centres to local partners is one of the most common ways of institutionalizing partnership at the institution level.

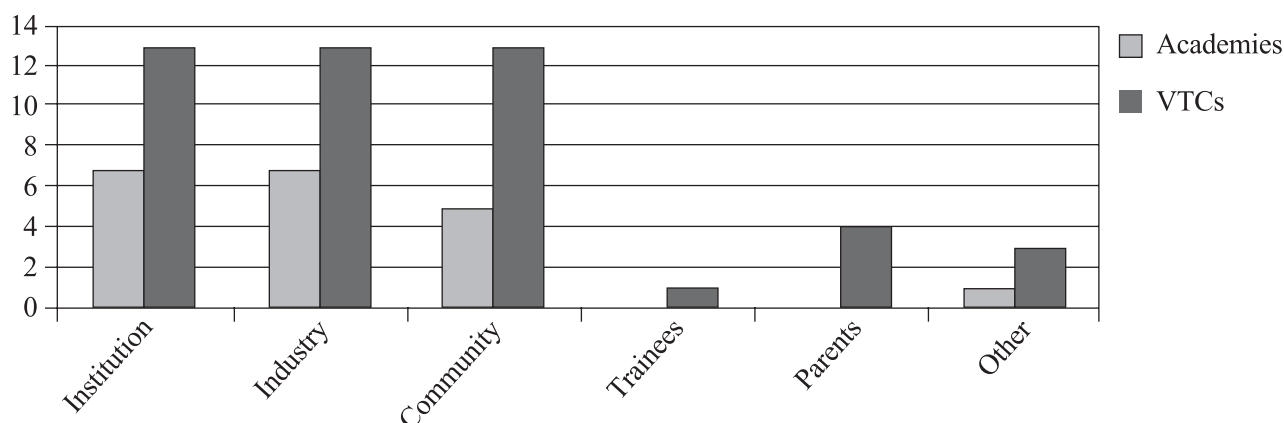
Adopting this pattern, HEART Trust/NTA institutions have established a management committee, including in almost all cases, representatives from the institution, the industry and the community.

**Table IV.4 Committee membership**

	Academies	VTCs	Other	Total
The institution	7	13	2	<b>21</b>
The industry	7	13	1	<b>21</b>
The community	5	13	1	<b>19</b>
The trainees	-	1	-	<b>1</b>
The parents	-	4	1	<b>5</b>
Others	1	3	2	<b>6</b>
Number of responses	7	13	2	<b>22</b>

Source: HEART Trust/NTA-IIIEP Survey, 1996.

**Figure IV.1 Management committee membership (frequency distribution)**



Source: HEART Trust/NTA-IIEP Survey, 1996.

The involvement of the business community in the management of institutions is also reflected in the chairman's occupation. In 71 per cent of the 21 responding institutions, out of 22, the chairman is either a company manager, an executive or a businessman. On the contrary, parents and trainees, especially, are hardly represented on the committee.

**Table IV.5 Chairman's occupation**

	Total	%
Company manager	7	26.9
Other company executive	4	15.4
Businessman	4	15.4
Educator	3	11.5
Minister (religious)	3	11.5

Source: HEART Trust/NTA-IIEP Survey, 1996.



### 1.3.2 Decision-making process

The replies concerning the role of the committee show that it is mainly a *consultative structure*. Only five boards out of 22 are involved in the decision-making process, while all of them are considered to participate in an advisory capacity. A little more than half of the committees are said to be involved in monitoring and providing information to outside partners.

**Table IV.6 Committee's role\***

	Academies	VTCs	Other	Total
Advisory	7	13	2	<b>22</b>
Monitoring	3	7	2	<b>12</b>
Information to outside partners	1	9	-	<b>10</b>
Decision-making	-	3	2	<b>5</b>
Others	-	3	1	<b>4</b>
Number of responses	7	13	2	<b>22</b>

\*multiple replies included

Source: HEART Trust/NTA-IIEP Survey, 1996.

This advisory role is mainly applied to the training policy, while in 19 of the 22 concerned institutions, the committee contributed to build and strengthen relationships with outside partners.

**Table IV.7 Areas of involvement\***

	Academies	VTCs	Other	Total
Relationship with partners	7	12	-	<b>19</b>
Training policy	6	8	1	<b>15</b>
Budget	4	2	2	<b>8</b>
Personnel	2	3	2	<b>7</b>
Other	2	3	2	<b>5</b>
<b>Number of responses</b>	<b>7</b>	<b>13</b>	<b>2</b>	<b>22</b>

\*multiple replies included

Source: HEART Trust/NTA-IIEP Survey, 1996.

When asked about what they consider to be the most important role the committee should play or plays, 10 of the 20 respondents mentioned ‘advisory’. These results, compared to *Table IV.6* seem to indicate that heads of institutions are rather satisfied with the present role of the committee.

**Table IV.8 Most important role\***

	Academies	VTCs	Other	Total
Advisory	3	7	-	<b>10</b>
Monitoring	2	3	2	<b>7</b>
Policy formulation	1	2	1	<b>4</b>
Decision-making	1	2	-	<b>3</b>
Linkages with the environment	1	2	-	<b>3</b>
<b>Number of responses</b>	<b>6</b>	<b>12</b>	<b>2</b>	<b>20</b>

\*multiple replies included

Source: HEART Trust/NTA-IIEP Survey, 1996.

Data collected on the number of meetings held in 1996 indicate that boards tend to gather every other month, regardless of the type of institution. Such frequency reflects a relatively high level of activity.

### *1.3.3 Resources mobilization*

A majority of institutions (19 out of 25 responses), including all the academies, conduct fund-raising activities; 13 institutions declared having undertaken specific measures to establish or expand their fund raising. However, the data provided on the amount and source of self-generated resources did not allow the giving of average figures. Furthermore, the information provided on the utilization of those resources is poor.

These results indicate that most institutions feel the need to complement their allocated budget and take initiatives in that direction. However, the little information available seems to show that those funds remain marginal (less than 1 per cent of the total resources in most cases; a maximum of 5 per cent for one institution).

### *1.4 Local partnership*

As already mentioned, local participation in decision-making is expected to enhance the appropriateness of training provision. Furthermore, it is often considered that the presence of a training institution in a particular community must produce positive economic and social effects. However the impact of training institutions on their environment is difficult to assess. In particular it is difficult to say to what extent training institutions contribute to promoting local development. In principle, training institutions may stimulate local economic activity through several means, including increased infusion of skills and competences and a more effective enabling environment. It could be argued that they are well positioned to promote and support local

entrepreneurship through providing not only training but also technological and management assistance.

In the absence of adequate indicators to precisely measure the impact of Academies and VTCs on their environment, examining the patterns of partnership that they have established as well as their linkages with enterprises provides interesting information.

#### *1.4.1 Pattern of partnership*

Enterprises are considered a major partner by all the responding institutions, a strong majority also mentioned churches, NGOs and local authorities. This pattern of partnership is valid for all types of establishment. While enterprises can be considered as a natural partner for training institutions, it is interesting to note the important position that churches seem to hold. Local authorities represent a major partner for almost all VTCs, while they are only considered so by two academies. This difference can be related to their respective geographic location, VTCs being established in rural and semi-rural areas where, possibly, local authorities play a greater role.

**Table IV.9 Major partners**

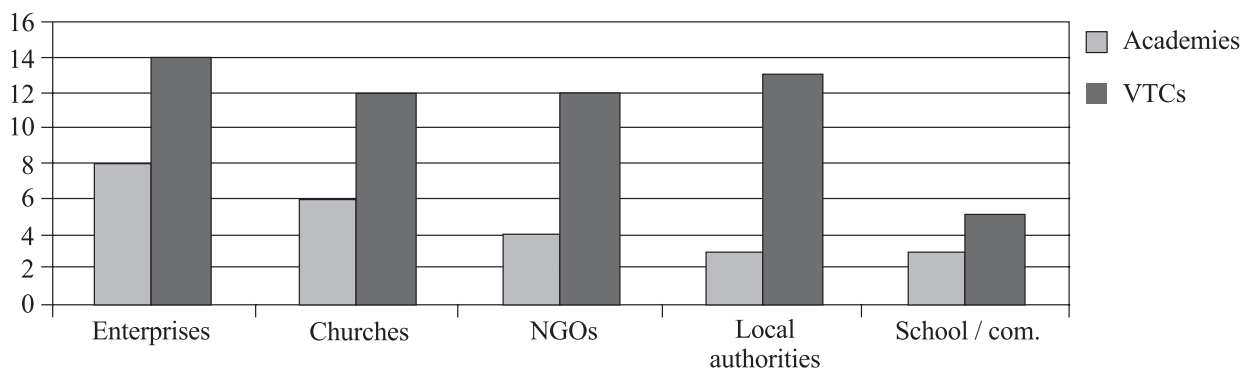
	Academies	VTCs	Other	Total
Enterprises	8	14	3	<b>25</b>
Churches	6	12	2	<b>20</b>
NGOs	4	12	2	<b>18</b>
Local authorities	3	13	1	<b>17</b>
School and/or community	3	5	2	<b>10</b>
Total number of institutions	8	14	3	<b>25</b>

*Source:* HEART Trust/NTA-IIEP Survey, 1996.

Twenty institutions declared having a stated strategy regarding outside partners. The most frequent objectives of their strategy are:

- consolidating work-experience programmes;
- promoting demand-driven training.

**Figure IV-2. Major partners (frequency distribution)**



Source: HEART Trust/NTA-IIIEP Survey, 1996.

Managing relations with outside partners is, in a majority of institutions (14), the sole responsibility of the director. That function is shared with other staff members in six cases and in only two institutions is a trainer in charge of partnerships.

Altogether, only four institutions do not have someone specifically responsible for managing links with partners. Such a pattern seems to indicate a high level of institutionalization of that function.

It is worth recording that a large majority of institutions take part in community development structures (22 cases) and/or projects (23 cases). Such involvement in local development initiatives suggests that institutions are well integrated in their environment, their activities and contribution going far beyond providing training.

### 1.4.2 Co-operation with enterprises

Partnership between training institutions and enterprises represent the key to a successful transition into the labour market. For the 22 valid responses, a total of 584 partner enterprises has been recorded, resulting in an average figure of 27 per institution. This average picture does not vary much according to the type of institution, since the figure is almost the same for academies as it is for VTCs.

**Table IV.10 Number of partner enterprises**

	Academies	VTCs	Other	Total
Total number	202	327	55	<b>584</b>
Average number	29	27.2	18	<b>27</b>
Total number of responses	7	12	3	<b>22</b>

Source: HEART Trust/NTA-IIEP Survey, 1996.

Among the various forms of co-operation mentioned in the survey, the enterprises' contribution to information sessions on job opportunities appears to be the most frequent modality, while instructors' in-service training, donation of equipment, financial support or providing consultancy services to enterprises are, in most cases, rare or inexistent.

The analysis of those results, according to the types of institution, provides a contrasted picture. For instance, if academies often organize visits to enterprises, they remain a rare event for VTCs. Once again, this difference may be related to the location factor. On the contrary, tutoring is important for VTCs while it is a moderate priority for academies. Curriculum development constitutes a *frequent or very frequent* area of co-operation for academies, but it remains a middle-level concern for VTCs. Technical co-operation represents a *frequent or very frequent* activity for VTCs, but is much less important for academies.

Altogether, the co-operation between institutions and enterprises covers a wide range of activities. However, there is a large diversity both between individual institutions and between academies and VTCs. The academies seem to be more frequently inclined to develop co-operation activities aiming at improving training provision.

**Table IV.11 Nature of co-operation with enterprises**

	Academies		VTCs		Other		Total		Number of responses
	Frequent or very frequent	Rare or inexistent	Frequent or very frequent	Rare or inexistent	Frequent or very frequent	Rare or inexistent	Frequent or very frequent	Rare or inexistent	
Information on job opportunities	7	1	9	4	1	2	17	7	24
Visit of enterprises	7	1	5	10	1	2	13	13	26
Job search	5	3	7	5	1	2	13	10	23
Trainee tutoring	4	4	8	4	1	2	13	10	23
In-class participation	4	3	7	6	1	2	12	11	23
Continuing education for workers	1	3	7	6	1	2	9	11	20
Technical co-operation	3	4	8	4	1	2	12	10	22
Instructors training	6	2	5	8	-	3	11	13	24
Curriculum development	6	3	5	7	-	3	11	13	24
Participation in examinations	3	5	4	9	-	3	7	17	24
Consultancy services to enterprises	2	5	4	8	-	3	6	16	22
Donation of equipment	1	6	2	12	1	2	4	20	24
Financial support	-	7	2	11	2	1	4	19	23

Source: HEART Trust/NTA-IIIEP Survey, 1996.

If institutions wish to further develop their linkages with enterprises, many face various types of difficulties, the main problems being the lack of enterprises in their environment and the lack of time.

**Table IV.12 Main problems in developing linkages with enterprises**

	Academies	VTCs	Other	Total
Lack of enterprises	2	10	1	13
Lack of time	3	6	2	11
Lack of adequate competences	-	5	1	6
Lack of interest on their side	-	4	-	4
Financial problems	-	1	1	2
Trainers' resistance	-	1	-	1

Source: HEART Trust/NTA-IIEP Survey, 1996.

In 22 institutions, co-operation with enterprises is a responsibility given to a particular member of staff. However, in nine of these institutions it is the manager who is solely responsible for this function, while in nine others it is shared with other staff members. Moreover, in five of the responding institutions (22) the responsibility is given to the guidance counsellor or the deputy manager. Such results seem to indicate that co-operation with enterprises is more often delegated than external relations at large.

## **1.5 Main findings**

### **1.5.1 Combining education and training goals**

So far VTCs are concentrated on level 1, while academies provide levels 1 through 3. This current pattern of delivery deserves to be reviewed taking into consideration two issues:

- Can VTCs' offerings remain focused on basic skills oriented to entry jobs, with no perspective for further training? The Plan (see *Chart III.1*) calls for VTCs to level 2;
- Should academies concentrate on higher-level training, while level 1 programmes would be delivered by VTCs, or should they adopt a stream



approach through a comprehensive training pathway including levels 1 to 4?

Addressing those issues is clearly an important stake both to attract more students to VTCs, preferably with a higher educational profile, and to maintain coherence in a period of rapid change by upgrading programmes and modernizing training.

Besides their vocational activity, training institutions, especially VTCs, conduct a number of educational programmes either to upgrade the academic level of trainees missing the basic knowledge expected of them (pre-vocational courses) or to offer a second chance to youngsters who failed to successfully complete their general education (remedial courses). This situation reflects both the educational deficits of many VTCs' trainees and the wish of those institutions to meet the social demand of their community. Such a context raises two policy issues:

- How to recruit, in VTCs, trainees with a stronger academic profile, while fully assigning the training of educationally disadvantaged groups to HEART Trust's Special Programmes?
- What pedagogical support can be given to VTCs to strengthen their capacity to provide remedial courses?

### *1.5.2 Community participation in decision-making*

The frequency, structure and actual functioning of the institutions' management committees reflect a clear pattern of participation. Nonetheless, at this stage, committees' responsibilities are mainly of a consultative nature or meant to support/facilitate the policy and the activities of the institutions. In most cases, management committees do not take part in the decision-making process and are not expected to do so.

Therefore, it is important to observe that although key stakeholders (enterprises and the local communities) are involved in the operation of the institutions, decisions are not shared with outside partners. Fostering a genuine sense of ownership among local employers and the community at large may require assigning them more responsibilities in the operation of institutions.

### *1.5.3 Linkages with enterprises and the community: a strong asset*

Developing linkages with the socio-economic environment seems to be a clear, often formally stated policy for most institutions. Its implementation is reflected in their frequent involvement in community development structures and/or projects. Such results are positive signs of the integration of the institutions in their environment.

The enterprise appears as the key partner for all the institutions. However, only a few (seven, including only two academies) have institutionalized those co-operative links within the framework of formal agreements or contracts. Therefore it appears that most academies have not felt the need, or have failed, to stabilize co-operation with industries and rely mainly on informal relationships.

Most institutions declare having a strategy regarding linkages with outside partners, including enterprises. Similarly, all directors reported contacts with employers regarding jobs for graduates.

Provided the concern to gradually increase the financial autonomy of institutions is recognized, special consideration should be given to ways to reflect this goal in the overall industry co-operation strategy (only four institutions had benefited from enterprises' financial support in 1996).

Consolidating institutions and improving training efficiency and relevance also requires adequate institutional capacities. The survey reflects an

increasing effort to analyze the local (VTCs) or sectoral (academies) labour market, and the existence of initiatives to communicate with the outside world. Although this investigation does not provide any information on the returns of those activities, they represent an important stake to increase and upgrade trainees' recruitment and to adjust training programmes to local labour market conditions.

#### *1.5.4 Fund-raising initiatives*

Most institutions undertake fund raising through various forms. However, the little information available seems to indicate that those activities still form a modest contribution to the budget. The reasons may be found in the lack of willingness – or capacity – of enterprises and the community at large to provide funds, although it could also be linked to the lack of incentives to drive institutions in that direction. The availability of resources at the central level should not be seen as a motive for not encouraging institutions to raise additional resources, including the provision of continuing education programmes for workers. Progressively building this capacity, at a period when there is no strong financial constraint, may be a way of ensuring the sustainability of training institutions. Such a strategy would not only require providing adequate guidance and support to institutions, but also to increase their financial autonomy by implementing new control mechanisms.

#### *1.6 Prerequisite for a sound decentralization policy*

History, target groups, size, location and training levels are some of the factors differentiating academies from VTCs. However, it is interesting to note that in spite of those differences the two groups of institutions share a number of common patterns as far as management and relationship with the environment are concerned.

While both categories of institutions still enjoy modest administrative, financial and pedagogical autonomy, they have gained initiative through establishing and developing contacts and co-operation with outside partners. This trend implies new tasks for the heads of institutions and their teams. Beside their core training function, they have to develop specific capacities for managing co-operation links with the environment, especially with enterprises, participating in community development projects, formulating a communication strategy and, for VTCs, providing pre-vocational/remedial courses to academically weak trainees. Addressing those emerging issues probably requires renewed forms of support from the central level.

This reality, together with the need for more autonomy expressed by many directors, may call for reconsideration of the link between the central and the institution levels. A sound decentralization policy would first require consolidating the managerial capacities of institutions, especially in the area of management information systems. Transferring increasing responsibility to institutions would imply conducting a comprehensive information system reform that would assist heads of institutions to monitor performance but also allow the central level to better monitor, assess and compare institutions.

## 2. A new apprenticeship scheme

### *2.1 Apprenticeship schemes: basic concepts and principles*

In most countries, getting businesses to commit themselves to training young people is hard to achieve. This difficulty is compounded in periods of crisis or economic uncertainty. Ironically, it is often when an economic downturn forces business to opt out of training programmes that government wants to saddle it with extended responsibilities, especially for helping young people to fit into the job market. In fact, employers are often considered to be the best placed to provide the right kind of training, and also to teach the

values and attitudes applicable to working life. This wish sometimes also coincides with a philosophy which assigns business a social role alongside its economic one. Such thinking also implicitly assumes that this social mission goes hand in hand with economic efficiency. Here again, structural conditions play a key role and countries which give high priority to social dialogue and collective negotiations find it much easier to mobilize employers for youth training and employment.

In Jamaica, the HEART Trust/National Training Agency (HEART Trust/NTA) has embarked upon an extensive reform of vocational education provision and financing in view of establishing a comprehensive national training system. Upgrading HEART Trust training institutions, fostering a market for training, establishing a competency-based framework and curricula, and promoting employers' involvement in training delivery are among the key points of the ongoing reform. It is in this framework that the HEART Trust/NTA wishes to revitalize apprenticeship, building on the strengths of existing arrangements for enterprise-based training (SL-TOP and apprenticeship programmes).

### *2.1.1 The Jamaican context*

Apprenticeship models vary greatly from one country to another. The extent of government intervention in regulating the system and in financing apprenticeship are among the key variables that differentiate national models.

The apprenticeship scheme contemplated by the National Training Agency is conceived as a full component of the emerging national training system. Relying on an anticipated increasing participation of employers in training delivery, the new apprenticeship scheme based on competency will be an attempt to address the changing and uncertain labour market requirements and to further contribute to increasing productivity and competitiveness.

The transition from the present apprenticeship scheme, governed by the 1954 Act, to the competency-based model will require extensive and complex changes. One of the goals of this reform is to move away from the traditional 'time-served apprenticeship' and implement a performance-based system within the framework of the new National Vocational Qualifications of Jamaica (NVQ-J).

The foreseen financing system would substitute direct subsidies to the present option of deducting part of the trainees' allowance from the total 3 per cent earmarked payroll tax that currently applies to the SL-TOP programme only. Although both methods aim at reducing the cost for the employer, it is felt by the HEART Trust/NTA that a reimbursement scheme would foster a spirit of commitment and partnership among employers.

It is generally accepted that the apprentice's wage depends on his/her productivity and on the cost of training for the employer. Public intervention through providing subsidies for apprentices' wages assumes that the net cost of training is a key variable in employers' decision regarding training, the demand for apprentices being inversely related to their relative wage.

Considering the present depressed economic conditions, it is expected that the reimbursement scheme will result in enterprises training beyond their needs, creating a pool of qualified Level II workers which, in the medium term, will serve an expected increase in GDP and employment growth. In the short run, the new apprenticeship scheme is viewed as a way to address skill shortages felt in certain areas.

The HEART Trust/NTA also implicitly assumes that the unit cost of the apprenticeship scheme will be less than the present institution-based training programmes in VTCs and academies.

Although the agency realizes that implementing a reimbursement scheme will generate new administrative costs, the objective is to minimize such additional overheads and paperwork. Establishing a relatively user-friendly and transparent system should constitute another incentive for employers.

### *2.1.2 Cost-sharing pattern*

Traditionally, apprenticeship is a type of on-the-job training. The apprentice, in return for the training received, contributes to production. This two-way relationship provides the basis for the apprenticeship contract and for the surrounding financial arrangements.

Considering that labour and training services are exchanged between both parties, one can expect that payments will only be due if the value of this exchange is unequal. Hence, apprentices would receive a salary only when the labour value exceeds the training value.

In reality, in Jamaica as in other countries, the financial arrangements are more complex. In addition to wages, apprentices (as well as SL-TOP trainees) often receive benefits in cash or kind for food, clothing or transportation. These forms of payment are identified by firms as distinct from wages and constitute a non-taxable compensation.

As a form of training, apprenticeship can be analyzed within the framework of the human capital theory. The training entails a cost which includes the time spent by the master and other employees supervising the apprentice. At the beginning of the training period the apprentice's productivity is the marginal product of an unskilled worker. During the training period the apprentice's productivity rises gradually.

According to the human capital theory, workers should pay for their training if they receive transferable skills. Investment in general training

should be made by the apprentices (or by the state) because the returns to such training can benefit other firms.

Similarly, employers should pay the cost if the skills delivered are specific. Considering that firm-specific training has value only as long as the employment relationship is maintained, both parties have an interest in avoiding early termination of the work contract. The more specific the training, the greater the probability that the apprentice will continue working for the firm after training is completed.

Sharing the training investment, so that workers and firms bear some of the costs and capture some of the benefits, avoids inefficient separation decisions by both parties. Through cost-sharing the investment, an apprentice would accept a wage that is lower than marginal productivity during training and receive a share of the returns to this investment thereafter, reflected in an increasing earning profile.

Under a pay-as-you-go framework, apprentices pay the full amount of their training cost through deductions from wages during the training period. In a low labour-cost environment the net training cost is usually covered by the apprentice's work. Only then, does apprenticeship become a profitable activity for the employer.

In real life it is difficult, if not impossible, to distinguish between general and specific competences, which is partly due to the lack of transparency of the labour market. Therefore, the policy challenge is to involve employers in the delivery and financing of training while ensuring that the competences acquired are transferable from one enterprise to the other.

Financing decisions also affect training duration. Employer financing requires that apprentices stay on after training is completed. In Jamaica, this



situation is reflected in the relatively long apprenticeship contract signed in some cases (up to five years).

HEART's concern should be that enterprises supply general training as well as general skills that are useful in other firms and that provide apprentices with a preparation for entrepreneurship.

### *2.1.3 Growth determinants*

The supply of training places depends on the well-being and anticipation of firms. This relationship leads to the assumption that the training supply correlates with business cycles, and is mediated by the net cost and net return of training. If net training costs are high, training will be linked to the employers' perceptions of short-term labour needs. Training will increase during thriving economic periods, while it will diminish during a recession.

Firms with low net cost, or even with net returns, tend to constantly invest in training beyond their own needs for skilled workers. This behaviour leads to anti-cycle training supply.

Once an employer starts recruiting apprentices, marginal costs related to the recruitment of one or two additional apprentices can be considered as being relatively low. Therefore, the recruiting pattern is not only influenced by average costs but it is also linked to marginal costs.

The wage structure is also a significant variable in understanding the incentive to recruit apprentices. The wage disparities between unqualified, semi-qualified (Level I), qualified (Level II) and highly qualified workers (Levels III and IV) vary from country to country. A low wage differential decreases the relative price of qualified labour. Hence, by investing in apprenticeship, employers can secure a higher productivity level for a modest additional wage compared to the cost of unqualified labour. In other words, a low wage differential between unqualified and qualified labour force

constitutes an additional incentive for employers to invest in apprenticeship (the negative side being that such a wage structure contributes to the unemployment of unqualified workers, which in Jamaica constitute the majority of the workforce). Unfortunately, the little information available on wages does not allow an appreciation of the prevailing salary structure in the country.

#### *2.1.4 Assessing costs and benefits*

Returns to the employer are generated by goods and services produced during the training period and sold on the market. Various methods can be used to assess the value of those returns. The most common is the 'productive time approach'. It consists in measuring the time spent by the apprentice producing goods or services (productive time) and comparing it to the cost incurred if the same work had been done by a skilled worker. The corresponding skilled worker's salary saved would account for the training return. This could be considered as an 'opportunity return' concept.

The net cost of an apprentice includes the wages, other benefits and the training cost (tutors, training equipment, wastage, administrative cost and other related costs). It can be expressed as follows:

*Net cost = (training cost + wages) – (value of the output produced by the apprentice).*

In reality, when training is not formalized, as is the case in most firms, skills are acquired on the job, in an informal way, and it becomes very difficult to assess training cost. It is even more difficult to accurately measure apprentices' contribution to production.

Germany is one of the few countries where extensive surveys have been conducted to assess the cost of apprenticeship (Hegelheimer, 1986; Timmermann, 1993). Available data show that the training cost varies greatly according to sectors, occupation groups and size of enterprises. Empirical

research also confirmed the assumption that apprentices are productive during the training period.

In fact, even in Germany the knowledge about the size and structure of training cost is still moderate. Training cost is integrated into the overhead cost and representative surveys are difficult and costly to undertake.

For these reasons it will be assumed, in the following simulation exercise, that apprentices' wages constitute most of the total cost to the employer. Salaries paid to the apprentices will therefore be used as a proxy to training cost.

#### *2.1.5 Incentive rationale*

The new financing system should provide enough incentives to ensure an adequate number of training places, while respecting affordable limits for the agency. The basic principle would be to reduce the net cost of recruiting an apprentice.

Until recently, Jamaica did not have a global framework to certify and recognize workers' qualification. This lack of transparency regarding competences has apparently been contributing to an under-investment of employers in training. However, in an open, highly competitive environment, enterprises should invest in training.

In the medium and long term, the implementation of the NVQ should contribute to raise employers' investment in training. In addition, the much-needed improvement in the quality of basic education and the 'trainability' of school graduates will eventually become a strong incentive for employers to invest in training.

In the present economic context, where demand for labour is low, the launching of the new apprenticeship system will require an incentive level

high enough to convince firms to hire apprentices and train them beyond their needs. However, it is expected that beyond this starting point, medium- and long-term investment in apprenticeship will eventually follow economic trends, as employers recruit more apprentices when they anticipate an increase in demand.

Enforcing specified rules will, however, be required to ensure that the 'subsidized apprentices' are not used as cheap labour to substitute regular semi-skilled workers.

## ***2.2 The Jamaican experience in enterprise-based training***

### *2.2.1 The macro-economic framework: a brief recall*

During the 1990s, Jamaica has made strong efforts to restore macro stability and generate substantial growth. In spite of this ongoing reform of the economy, progress has been relatively slow. Between 1991 and 1996, Gross Domestic Product has grown at an average annual rate of less than 1 per cent while inflation has averaged about 40 per cent per year. Most improvements have been recorded in the financial sector as reflected in a reduced debt-service level and increased international reserves.

Although public-sector management has significantly improved, since 1993, wage increases have contributed to relatively high inflation levels. Under the present system, salary bargaining between employers and employees takes place every two years. Considered inflationary, this wage-setting mechanism is currently under review.

The high level of inflation, together with expensive real lending rates (22 to 37%), have increased economic uncertainty and affect investment decisions in productive sectors, while financial capital was attracted to profitable short-term speculative instruments. High inflation also has a

negative impact on poverty which, together with unemployment, fuel crime and violence (see *Chapter I*).

**Table IV.13 Inflation rates (1987-1997)**

Recorded rates of inflation for the period 1987 to present											
Year	Dec. 87	Dec. 88	Dec. 89	Dec. 90	Dec. 91	Dec. 92	Dec. 93	Dec. 94	Dec. 95	Dec. 96	Dec. 97 (projected)
Inflation	8.4%	8.8%	17.2%	29.8%	80.2%	40.2%	30.1%	26.8%	25.5%	12.8%	7.83%

Source: Statistical Institute of Jamaica (STATIN).

**Table IV.14 Relationship between inflation and growth**

	1986/90	1991/94
Real GDP growth (% per year)	4.9	1.1
Inflation rate (% per year)	13.2	44.3

Source: World Bank.

In addition to the macroeconomic policy, improving the quality of the workforce is a key component of any economic growth strategy in a context where labour productivity remains relatively low. This is partly a result of the poor quality of education as well as deficiencies in the training system.

The current government policy is to restructure public spending in the education sector towards basic education (grades 1 to 9). The ongoing Reform of Secondary Education (ROSE) project is aimed at improving the quality in grades 7 to 9 through various inputs including upgrading schools, revising curriculum materials and training of principals. Further restructuring and consolidation of the training system, under the co-ordination of the HEART Trust/NTA, is also part of this effort for increased competitiveness and sustained growth.

In spite of domestic effort, the impact of an unfavourable external environment (closing up of preferential markets, increasing competition, drying up of external grant financing, net transfer of resources to external agencies for debt repayment) motivates, at most, a modest medium-term growth prospect.

This macroeconomic framework has two immediate implications for the HEART Trust:

- the expected low employment growth in the formal sector does not constitute a very favourable prospect for the financial resource base of the agency;
- the labour market situation is not expected to significantly improve job opportunities, including those for HEART graduates.

In the long run the 3 per cent payroll tax may come under scrutiny. Altogether the existing three earmarked payroll taxes (3% for housing, 5% for social insurance, and 3% for training) can be suspected of having a negative effect on employment, although a precise evaluation would be difficult to conduct. Furthermore, the tax is paid by employers to mainly finance pre-employment training, in a context of downsizing and low employment growth. Finally, if one accepts that payroll taxes in general are ultimately paid by the workers, the system can be viewed as producing a distorted effect, since most of them do not perceive direct benefits.

Although at this stage the 3 per cent payroll tax for training is not a labour market issue, especially compared to labour productivity, labour conflict, and union rivalry, the sustainability of the training levy system will eventually require achieving genuine social partnership. In particular, the greater participation of enterprises in training policy formulation will be a major step towards establishing an industry-led system.

### *2.2.2 Apprenticeship today*

Present apprenticeship training is regulated by the Apprenticeship Act of 1954. The central organization for apprenticeship training is the Apprenticeship Board. It is the role of the Board “ to establish and recommend standards of training for apprentices and facilitate the provision of skilled craftsmen to satisfy the manpower requirements of industry ”.

Detailed provisions on the apprenticeship programme are contained in Trade Orders that have been issued for different trades (apprenticeship programmes are offered in 23 trades). According to the legislation, apprenticeship contracts last from three to five years and make provision for a combination of institution-based and on-the-job training.

Admission criteria include a minimum age of 15 and educational requirements depending upon the field of training (completion of grade 9, 10 or 11).

Apprentices’ wages are normally defined as a percentage of the grade II craftsman’s salary rate. In reality, apprentices often receive the legal minimum wage (J\$800 per week) but the wage conditions may vary widely from trade to trade or according to the enterprise’s size. The legislative framework also makes provision for an optional saving to be placed on a special account and served back to the apprentice with 10 per cent interest at the end of the training. However, it seems that this provision is no longer used.

At the end of the contract, apprentices are issued a certificate of completion on the basis of attendance and progress reports submitted by employers.

Although regulated by law, the apprenticeship scheme has progressively entered a phase of decline: the Board is inactive, institution-based training is

not enforced and the number of contracts has been declining (now down to about 400). The recent revival reflected in an increase of the number of registered contracts is due to an effort by the HEART Trust/NTA to make employers sign contracts for youngsters who were already employed as 'de facto' apprentices.

**Table IV.15 Enrolment in apprenticeship programmes (1995-1997)**

Trades	April 1995	April 1996	April 1997	September 1997
Automobile mechanic	159	217	362	419
Welder	15	24	50	72
Machinist and turner	59	62	67	73
Fitter	1	1	2	2
Automobile electrician	17	23	34	40
Installation electrician	4	11	19	17
Heavy-duty mechanic	24	43	44	43
Industrial maintenance mechanic	37	38	41	35
Industrial maintenance electrician	51	38	35	35
Plumber and pipe fitter	1	1	1	0
Carpenter and joiner	19	29	57	102
Automobile partsman	0	0	3	5
Automobile painter	3	6	5	9
Automobile body repairer	8	18	53	66
Mason	1	1	1	1
Coach trimmer (upholsterer)	1	1	3	3
Cooper	3	0	0	0
Hospital engineering	6	0	0	0
Baking and pastries	0	0	0	3
Refrigeration/air-conditioning mechanic (up)	0	5	6	6
Jewellery	0	0	1	1
Electronics	0	0	4	6
Tyre-retread technician	0	0	0	3
Upholsterer and trimmer	0	0	3	3
Garment construction	0	0	0	8
<b>Total</b>	<b>409</b>	<b>518</b>	<b>791</b>	<b>952</b>

*Source:* HEART Trust/NTA.



The lack of tax incentive is said to be a major reason for employers' low interest in the programme. Eligible firms prefer to employ youngsters under the SL-TOP programme which offers a tax credit of J\$150 per week per trainee (and imposes fewer duties and responsibilities on them).

**Table IV.16 Apprenticeship Programme (Monthly report – September 1997)**

Number of apprentices in training as at 30 September 1997	952
Number of apprentices registered during the month	41
Number of firms as at 30 September 1997	199*
Number of additional firms	12
*35 of these also have SL-TOPS trainees	

Source: HEART Trust/NTA.

### *2.2.3 Principal features of the school-leavers programme (SL-TOP)*

The SL-TOP programme was conceived as a way of providing work experience and on-the-job training for school-leavers. Admission criteria differ from those applied for apprentices; candidates must possess two general proficiency CXC levels 1, 2, 3 (or 2 SSCs ranges 3, 4, 5 or 4 SSCs) and be between the ages of 17 and 23 years. Therefore, compared to apprenticeship, the target population of this scheme is older and better educated. In addition, whereas apprenticeship is 97 per cent male, SL-TOP is 73 per cent female.

Training is entirely provided on the job, under a supervisor designated by the firm. The placement and monitoring officers (PMOs) follow trainees by performing in-plant visits and collecting trainees' assessments every three months. Programmes may last up to three years, although one year seems to be the most frequent arrangement. The SL-TOP programme does not make provision for any institution-based training and does not lead to NVQ certification, although an experiment is currently being conducted.

Unlike what is happening with apprentices, participating companies save on their basic levy. Under the Human Employment and Resource Training Act, 1982, any eligible firm may deduct J\$150 per week from the total contribution liability. Furthermore, during the second and third year an amount equivalent to 75 per cent (80% for female trainees) of the remuneration of reference (J\$150 per week) can be used to reduce company tax payment. However, in reality this additional tax incentive is not used by employers.

It is clear that the present system granting fiscal incentives for the SL-TOP programme, which does not require much from the employer, but excluding a more strictly regulated apprenticeship scheme from such benefits, seems paradoxical.

The programme recorded a total enrolment of 2,332 trainees at the end of the 1996/97 fiscal year (March 1997) representing almost 20 per cent of the overall enrolment. It is interesting to note that the SL-TOP programme has recently been enlarged to place trainees in specific government institutions (e.g. Ministry of Health). This new trend reflects the inability of the scheme to accommodate increasing demand. Moreover, the lack of opportunities for candidates tends to be attributed to the low level of the financial incentive. It may also reflect the situation of the labour market.

Although it could be considered as a potentially powerful instrument to provide work experience to secondary-school graduates, the SL-TOP concept faces three major problems:

- Firms seem to have developed a high degree of specialization, as reflected in the number of recorded skill areas. Furthermore, in most cases only restricted learning possibilities are offered to trainees. Firm-specific training limits flexibility and mobility of labour.
- There is also some discrepancy between the structure of the training demanded by the youngsters and the structure of the training offered by companies.

- The conditions under which the scheme has been growing make it difficult to prevent or to correct situations of trainee exploitation where the SL-TOP programme is used as a source of cheap labour (at present each PMO must follow an average of more than 200 trainees).

**Table IV.17 The Apprenticeship and School-leavers' Training Opportunities Programmes: similarities and differences**

Factors	Apprenticeship	SL-Tops
<b>1. Age</b>	15 and over	17-23
<b>2. Entry qualifications</b>	(a) Proof of having attended secondary school (b) Medical report (c) Graduation from any HEART institution	(a) Two passes in externally recognized examinations (CXC, GCE, etc.) or four in local examinations (JSC, SSC, etc.) or any mixture of both (b) Cannot have received training through another HEART Trust institution
<b>3. Structure</b>	(a) On the job and institution based (b) Day release (classes paid for by firm; annual school report sent by schools to firms) (c) Specific number of hours of training	On-the-job
<b>4. Certification</b>	(a) Awarded (b) Two levels Part 1 – completion of practical and theoretical training, Part 2 – completion of practical training only (c) Has international recognition	(a) Proposed
<b>5. Skill areas</b>	23 prescribed trades	Any skill area for which there are no legal restrictions
<b>6. Selection of tasks during training</b>	Dependent on gazetted information and firm's needs	Dependent on firm's needs

*Reforming training governance: the Jamaican experience*

<b>7. Length of training</b>	3-5 years (prescribed)	One-three years (decided by firm with guidance from HEART Trust)
<b>8. Monitoring of training</b>	Done by PMOs quarterly	Done by PMOs six-weekly
<b>9. Training materials</b>	Gazetted information stating what should be learned each year	Provided by HEART Trust in the form of skills development reports (SDRs) and workbooks which are developed through job analysis and other research methods
<b>10. Savings scheme</b>	Used to be mandatory. Now optional	Non-existent
<b>11. Remuneration</b>	Pegged to grade II craftsman's rate	At discretion of firm but cannot be less than the rebateable allowance set by government, currently J\$150 per week per trainee
<b>12. Tax rebate</b>		Received by firms with monthly paybill of at least J\$14,444
<b>13. Vacation leave</b>	10 working days per year	At least 10 working days
<b>14. Contract</b>	Signed by employer Signed by parent/apprentice Registration of contract may be refused if firm is assessed not to have adequate training facilities	A 'gentleman's agreement' No grounds for refusal other than wage bill
<b>15. Probationary period</b>	6 months	
<b>16. Transfer of trainees</b>	May be done from one firm to another providing apprentice trains in the same trade	Transfer not dependent on maintaining skill area
<b>17. Graduation</b>	Once per year or once every 2 years	None
<b>18. Sex</b>	Mostly male	Mostly female
<b>19. Popular employers' view</b>	Long-term trainees for employment	(a) An alternative to paying taxes (b) Temporary workers

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*Source: Financing of in-plant training, HEART Trust/NTA, IIEP, 1997.*

## ***2.3 Financing a new apprenticeship scheme: issues and prospects***

### *2.3.1 Resources and expenditures pattern*

#### *Trends in tax collection*

The collection of the 3 per cent payroll tax is the major source of income for the national training system. In accordance with the Human Employment and Resource Training Act of 1982, amended in 1994, an employer whose gross monthly payments of emoluments to employees are at least equal to \$14,444 is required to contribute to the HEART Fund a sum equivalent to 3 per cent of the total payroll; selected organizations such as ministries and department of government and parish councils are exempted.

Collection takes place on a monthly basis and is the responsibility of the Inland Revenue Department, operating through its 26 collectors over the 14 parishes. Contributions are lodged to the HEART Trust Fund in designated banks and transferred on a daily basis to the HEART Trust Fund Account in Kingston.

**Table IV.18 Number of contributing firms by sector (Financial year 1996-1997)**

Sector	No. of firms	%
Manufacturing	764	13.28
Financial services	283	4.92
Agricultural	186	3.23
Transportation	378	6.57
Construction and mining	363	6.31
Professional organizations	1 009	17.54
Distributors	1 777	30.89
Statutory/Utilities	23	0.40
Tourism and entertainment	624	10.85
Education and training	86	1.51
Other services	259	4.50
<b>Total</b>	<b>5 752</b>	<b>100.00</b>

*Source:* Compliance and Remittance Department, HEART Trust/NTA.

The HEART Trust Compliance and Remittance Department was only established in 1991, as part of the restructuring of the organization. Since then, the recorded increase in both the number of contributing firms and the fiscal contributions reflects the efficiency of the Department.

**Table IV.19 Estimate of contributing firms over the period 1991-1997**

Year	No. of firms
1991	1814
1992	2414
1993	3014
1994	3614
1995	4550
1996	5091
1997*	5632

\* 1997 figure is for the months (January – July)

*Source:* HEART Trust/NTA Compliance and Remittance Department.

**Table IV.20 Fiscal contributions 1991-1997**

Fiscal Year	3% Collections	% Growth
1991-92	172M	
1992-93	315M	83%
1993-94	496M	57%
1994-95	721M	45%
1995-96	1.00B	39%
1996-97	1.26B	26%

Source: HEART Trust/NTA Compliance and Remittance Department.

In a context of depressed economic conditions and low employment growth in the formal economy, if not a slight decrease, an active policy of ‘evaders hunting’ explains the recorded growth of collected income. In spite of such performance there is probably still much room for improving compliance. Unfortunately, the present state of the existing fiscal information systems does not allow a precise assessment of a compliance rate. The compliance ratio currently computed is based on the number of contributors already in the database and therefore cannot provide an accurate assessment of the number of evaders. In other words, the existing information system is not sufficient to assure that all eligible employers pay what they owe. It is expected that the ongoing tax reform, including the use of a unique taxpayer identification number, will eventually reduce fiscal evasion.

It must be noted that besides the 3 per cent contribution (about 76% of total income in 1997), interest from deposits became a significant resource over the years, representing, in 1997, 21 per cent of the total income (see *Table IV.21*). This trend is due to the process of surplus accumulation rewarded by high interest rates.

*Spending trends and financial statements*

At HEART Trust/NTA the practice of budget formulation involves a zero-based budgeting system. Each cost-centre manager must justify his/her budget. Then, finalizing the budget requires a series of discussions and negotiations involving cost-centre managers, the Finance Department, the Finance Sub-Committee of the Board and the Ministry of Finance. Budget estimates must take into account guidelines issued by the Ministry of Finance regarding public-sector spending.

Over the years, expenditures' trends have revealed continued spending deviations, actual spending being often below the budgeted figure. This situation suggests that projected expenditures overlook the actual spending capacity of the agency.

**Table IV.21 Financial statements (1989/90 – 1996/97)**

	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97
Revenue (000)	96 409 121 466	207 411 384 918	613 688 928 313 1 270 275 1 681 019					
3% payroll (%)	97.6	96	84.3	83.9	78.8	77.7	79.3	75.9
Interest (%)	0.1	2.3	7.3	11.5	17.6	*	17.8	21.1
Expenditure (000)	86 689 96 798	139 805 244 234	368 750 594 707	845 182 1 294 789				
Surplus (000)	9 720 24 668	67 606 140 684	241 250 333 606	425 093 386 230				
Surplus as % of expenditure	11.2	25.5	48.3	57.6	65.4	56.1	50.3	29.8

\* = missing value.

*Source:* Heart Trust/NTA financial statements (unaudited).



### 2.3.2 Financial projections

The HEART Trust/NTA Fund Division produces financial projections. The medium-term forecast, up to the year 2001, is shown in the following *Table IV.22*.

**Table IV.22 Medium-term financial projections (1998-2001)**

	1997/98	1998/99	1999/2000	2000/01
Income (Million J\$):	1 766	2 484	2 680	3 341
- 3% contributions	1 380	1 510	1 642	1 888
- Other income	348	911	1 038	1 458
- Grants	38	63	-	-
Operating expenditure (Million J\$)	1 583	2 378	2 616	3 101
Capital expenditure (Million J\$)	623	155	100	119
Current-year surplus (Million J\$)	183	106	64	240
Accumulated surplus (Million J\$)	1 833	2 016	2 122	2 186

*Source:* HEART Trust/NTA Fund Division.

The projection results reflect an effort to reduce the surplus of income over expenditure. However, a current surplus is projected for every year, providing a security to monitor actual developments and to modify, if required, expenditure patterns.

The growth of the accumulated surplus in nominal terms, maintains the substantial reserves necessary to guard the HEART Trust/NTA against unforeseen adverse events and to provide for a sinking fund from which to replace capital assets.

At this stage those figures are not generated by a comprehensive financial model. The forecasting process combines the income forecast made by the Compliance and Remittance Department and the expenditure projections prepared by the Finance and Accounting Department. Projections are made

in nominal terms which requires formulating hazardous assumptions concerning future inflation rates. On the revenue side, the growing size of interest-generated resources in total income makes it increasingly difficult to produce reliable financial forecasting (see *Table IV.21*).

### *2.3.3 The surplus issue: shortage in education vs. abundance in training*

Over the years, HEART Trust/NTA has generated a current surplus (J\$386 million in 1997) which amounted to a cumulative figure of J\$1.57 billion in 1997. This accumulated surplus represents a comfortable reserve strengthening the financial viability of the agency in a context of high economic uncertainty and unpredictable political contingencies.

However, the persistence of a current surplus (*Table IV.21*) together with the level of accumulated resources has fuelled increasing concerns, particularly when compared to the financial situation of the education sector. The budget of the Ministry of Education and Culture declined from 5.2 per cent of GDP in 1989/90 to 4.7 per cent in 1994/95. Although an increase was recorded for the year 1995/96, due to an unusual wage adjustment (teachers' salaries increased by 87 per cent for the April 1994 – April 1996 period), budgetary allocations are still far from the 6 per cent of GDP target. Furthermore, education expenditures for 1994/95 were comparable, in real terms, to the level recorded in 1982/83.

The annual surplus generated by the HEART Trust becomes marginal when compared to the recurrent budget of the Ministry of Education and Culture. For instance, for the fiscal year 1993/94 the surplus (J\$241 million) represented less than 5 per cent of the actual recurrent expenditures of the Ministry (J\$5,112 million). Nevertheless, in a context where commitment to basic education is considered as a priority, the financial accumulation achieved

by the HEART Trust/NTA becomes a matter of debate on the basis of the overall cost/efficiency of public-sector spending in education and training.

The main reason for such an annual surplus is the persistence of the high interest rate regime, generating comfortable returns on accumulated resources. This peculiar situation is a result of government policy to control inflation (*Table IV.13*) and defend the exchange rate. As from 1995, compulsory deposits made by commercial banks and financial institutions with the Bank of Jamaica reduced the liquidity in the economy. They also contributed to low private investment, slow growth and high financial returns for the HEART Trust/NTA.

**Table IV.23 Comparative interest rates (Treasury bills, 90 days)**

Countries	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Jamaica	17.1	23.8	16.9	19.7	17.8	25.4	28.5	44.3	19.5	40.0	20.6
Trinidad and Tobago	3.5	4.0	4.4	4.8	6.9	7.5	7.5	9.3	9.3	10.1	7.2
United Kingdom	11.6	10.4	9.3	8.5	13.0	15.0	12.5	10.5	5.4	4.9	6.1
United States	7.5	6.0	5.6	5.7	8.8	7.9	5.9	4.1	3.0	3.5	5.7

*Source:* Bank of Jamaica.

It is difficult to predict the sustainability of the present interest rate regime, therefore the related income for the HEART Trust/NTA cannot be anticipated in a reliable manner. Such uncertainty partly explains the recorded gap between projected and actual yearly surplus.

Recognizing the need to avoid over-accumulation of ‘artificially’ generated surplus, while ensuring the long-term sustainability of the training system, the agency has planned to reduce the accumulated figure to a minimum of J\$550 million in 1997/98 (compared to J\$1.75 billion in 1996/97) and to limit the current surplus to J\$100 million annually.

## ***2.4 The new apprenticeship scheme: reviewing possible features***

### *2.4.1 Certification and curriculum development*

Within the new competency-based apprenticeship scheme, apprentices will most likely be awarded Level I and II NVQ-J, by the National Council on Technical and Vocational Education and Training (NCTVET), upon successful completion of training and assessment exercises. The implementation of Level I and Level II modularized courses in an apprenticeship format will give rise to operational difficulties concerning the share of major skill modules that could be taught on the job, for the different trades. The establishment of on-the-job training curricula and competency objectives, for each trade, calls for a cautious gradual approach in the introduction of new trades in the apprenticeship scheme. A selection of the 23 trades currently covered by the existing apprenticeship programme could be considered as the base line (some are no longer relevant), a limited number of new trades would be incorporated into the competency-based apprenticeship scheme every year.

### *2.4.2 Recruitment*

Considering the implications of a more regulated scheme, the time investment required to incorporate new trades, the additional pressure put on training institutions and the prevailing depressed economic conditions, opting for a gradual expansion would seem reasonable. The entry requirements could be similar to the ones currently applied for Level I programmes. However, the framework should allow sufficient flexibility to accommodate higher requirements for specific trades.

It is suggested that employers who do not contribute to the HEART Trust Fund may sign apprenticeship contracts, without benefiting from the reimbursement scheme. Nonetheless, they would still be entitled to claim a

specified amount for apprentice's remuneration as business expenses, thereby benefiting from income tax deductions.

#### *2.4.3 Apprenticeship duration*

Apprenticeship trades will most probably conform to a three-year term. This assumption seems consistent with the training and experiential requirements for Level I and Level II programmes and compatible with a reasonable cost/benefit expectation for both the apprentice and the employer. However, provision should be made for a different arrangement, subject to the particular requirements of specific trades.

#### *2.4.4 Accreditation*

An accreditation procedure should be put in place for firms wishing to take apprentices. Such a procedure would ensure that certain conditions are met prior to the signature of apprenticeship contracts. Accreditation criteria would include aspects such as: the nature of the activity, working conditions, qualification of the workforce, equipment available, number of people employed, etc. The first objective of accrediting training firms would be to guarantee minimum conditions for quality training. A ratio will need to be defined between the size of the workforce and the maximum number of apprentices an employer can have. Eligible firms seeking accreditation should be subject to auditing by the Compliance and Remittance Department in order to verify their contribution to the HEART Trust Fund.

In addition to quality concerns, accreditation will constitute another instrument to control the growth of the system and therefore the level of expenditure. Placement and Monitoring Officers (PMOs) may undertake the necessary accreditation visits.

Efforts will have to be made to avoid the establishment of a heavy bureaucratic procedure that could constitute a disincentive for firms.

Furthermore, the strict enforcement of the defined criteria may only be applied following a starting-up period during which some flexibility would need to be maintained. The challenge will be to intervene in a realistic and constructive manner. A speedy implementation of the new regulation is likely to be counterproductive and to discourage employers from training.

#### *2.4.5 Support measures for on-the-job training*

In view of facilitating and supporting the dual training mode, the TVET Resource Centre should produce guidelines and training materials for enterprise tutors. Eventually, the Vocational Training Development Institute (VTDI) could be asked to design special training courses for them.

#### *2.4.6 Policy co-ordination*

The establishment of a light structure – possibly a committee – could be considered to oversee policy development and implementation. Such a committee would replace the present, dormant, Apprenticeship Board. The HEART Trust/NTA could serve as a secretariat for the committee. With a view to securing partnership and commitment, the new structure could be a tripartite body including, in addition to the HEART Trust/NTA, representatives from government (the Ministry of Education, the Ministry of Labour), employers and from workers' trade unions.

Responsibilities of the committee could include notably:

- advising on the duration of the apprenticeship contract and on entry requirements for particular trades that are not compatible with standard regulation;
- establishing a list of priority for designated trades to be incorporated in the new scheme.

#### *2.4.7 Release and delivery options*

Under present conditions, most apprentices do not have access to vocational education institutions, therefore, their training is exclusively acquired on the job. Within the framework of the new competency-based apprenticeship scheme, each apprentice would benefit from off-the-job training. Institution-based training could be provided to apprentices in HEART Trust/NTA institutions (academies and VTCs) and possibly in technical high schools. Including the technical high schools in the scheme would ensure a better spatial and occupational distribution of institution-based training opportunities island-wide.

Off-the-job release models are on a day-release basis, or a block-release basis. At this stage, the day-release system could be retained as a reference. However, provision should be made for flexibility in trades where the nature of the demand, seasonal for instance, could result in poor attendance. Furthermore, while day release could easily be applied in the Kingston region, block release may be more appropriate in some rural areas. Block release in academies, for apprentices located in rural areas, may have to be considered in a situation where VTCs only provide Level I courses.

#### *2.4.8 Monitoring*

There is a need to define rules and standards for enterprise-based training to ensure that the competences acquired are general, and can therefore be used in various working environments, and be recognized by other employers. In the present situation, delivering general/transferable skills, certifiable by the NVQ system, will contribute to the mobility of qualified workers and produce a favourable effect on the functioning of the labour market.

A monitoring system needs to be established in order to ensure the quality of on-the-job training and control the working conditions of apprentices.

PMOs, who already perform such tasks for SL-TOP trainees, could be responsible for monitoring the on-the-job training process. The implementation of a competency-based apprenticeship scheme requires systematic monitoring as it is the most critical aspect, in view of the lack of training tradition among employers, as well as the considerable variation with regard to the availability and quality of training experience accessible across sectors and individual firms.

In addition to the monitoring functions of the PMOs, ensuring that the training requirements as well as the conditions defined in the apprenticeship contract are met, the instructors should perform support visits on a regular basis. Their task would be to follow-up the training process and assist both enterprises' tutors and apprentices in keeping on-the-job training experiences in line with the agreed competency-based format.

Safety and health inspections would be conducted by labour inspectors as part of their regular duties.

### *2.5 Simulating the cost of various options*

The financial feasibility of the new system will depend upon its cost. The determinants of total apprenticeship cost are:

- (1) the financial incentive granted to employers;
- (2) the training cost for the HEART Trust (time spent by the apprentices in Heart Trust institutions);
- (3) the monitoring cost (follow-up of the time spent by the apprentices on the job);
- (4) the administrative cost;
- (5) the transportation cost (compensation for the cost incurred by apprentices to attend institution-based classes).



### 2.5.1 Presentation of the different scenarios

The simulations were first conducted on the basis of two scenarios, projecting the impact of a gradual merging of the SL-TOP and apprenticeship programmes into the new, competency-based, apprenticeship scheme. At a second stage, two additional scenarios were developed on the basis of a continuation of the SL-TOP programme.

*Table IV.24* provides the main features of the four scenarios:

**Table IV.24 Summary of the main features of the four scenarios**

Scenario 1	Scenario 2	Scenario 3	Scenario 4
Gradual phasing-out of the SL-TOP programme	Gradual phasing-out of the SL-TOP programme	SL-TOP programme intake maintained at 2,450 trainees	SL-TOP programme intake maintained at 2,450 trainees
Constant increase of the apprenticeships intake (+400 per year)	Constant increase of the apprenticeships intake (+400 per year)	Constant increase of the apprenticeships intake (+400 per year)	Constant increase of the apprenticeships intake (+400 per year)
Reimbursement scheme on the basis of a J\$150 per-week wage	Reimbursement scheme on the basis of a J\$300 per-week wage	Reimbursement scheme on the basis of a J\$150 per-week wage	Reimbursement scheme on the basis of a J\$300 per week wage
Income tax deduction benefit on the basis of the J\$150 rate	Income tax deduction benefit on the basis of the J\$300 rate	Income tax deduction benefit on the basis of the J\$150 rate	Income tax deduction benefit on the basis of the J\$300 rate

*Source: Financing of in-plant training, HEART Trust/NTA, IIEP, 1997.*

### 2.5.2 Expenditures resulting from the simulation

**Table IV.25 Projection of the additional expenditures per annum for the four scenarios (constant price 1997, in million J\$)**

	Year 1	Year 2	Year 3	Year 4	Year 5
Scenario 1	33.3	41.0	55.2	74.9	96.2
Scenario 2	41.2	52.1	72.3	100.1	129.6
Scenario 3	34.3	47.6	71.9	105.4	139.0
Scenario 4	42.3	58.8	88.9	130.6	172.3

Source: *Financing of in-plant training*, HEART Trust/NTA, IIEP, 1997.

For each year, the additional expenditures are calculated as follows:

Additional expenditures for the year = (projected expenditures for the year) – (actual expenditure for the fiscal year 1996/97).

For the different scenarios the results for Year 5 correspond to the following enrolment levels:

**Table IV.26 On-the-job training capacity according to the different scenarios (Year 5)**

	SL-TOP		Apprenticeship		Total	
	Intake	Enrolment	Intake	Enrolment	Intake	Enrolment
Scenario 1 and 2	0	343	2 000	4 278	2 000	4 621
Scenario 2 and 3	2 450	3 570	2 000	4 278	4 450	7 848

Source: *Financing of in-plant training*, HEART Trust/NTA, IIEP, 1997.

*Scenario 2*, including a 100 per cent increase of the present level of incentive, reflects a clear policy to attract employers' interest in apprenticeship. At the same time it seems fiscally reasonable since it restores, more or less,

the level of incentive initially established by the legislators, that had been gradually eaten-up by inflation. On the basis of a J\$1,000 weekly wage, such a scenario consists in subsidizing 40 per cent of apprenticeship labour cost (see technical annexes, simulation results). Furthermore, such a policy seems compatible with the financial situation of the agency (see *Table IV.22*). The J\$130 million figure projected for the end of the period is beyond the J\$100 million targeted surplus. However, it could be easily absorbed, considering the projected annual surplus, corresponding to an average of \$148 million for the next four years.

*Scenario 4* shows that maintaining the SL-TOP programme in addition to the development of the new apprenticeship scheme could prove financially problematic. However, such scenario should not be completely excluded. There might be a case for keeping, besides a regulated apprenticeship scheme, a programme meant to provide both work experience and on-the-job training for secondary-school graduates. However, such a decision should be subject to an evaluation of the SL-TOP programme, and would require cutting costs in other areas. A complementary strategy would be to increase income by diversifying the services provided by the agency and developing cost-recovery training programmes in some areas and for specific target groups.

### *2.5.3 Main findings of the simulation exercise*

In the context of rapidly changing organizational systems and work practices, Jamaica has embarked on a restructuring and modernizing of its training system. Besides the upgrading of institution-based training, increasing attention is being paid to on-the-job training. To achieve this effort towards a quality national training system, the HEART Trust/NTA must be able to foster a training culture among enterprises and ensure that qualifications are recognized and transferable. The development of a new, competency-based, apprenticeship scheme is an important component of that overall strategy.

In the prevailing economic situation and taking into account the attitude of employers vis-à-vis training, establishing a regulated apprenticeship scheme, combining on-the-job and institution-based training, requires the provision of financial incentives to boost the demand for apprentices. At the same time the business environment and the situation of the depressed labour market call for a prudent policy in which the rise of the number of apprentices will be modest, at least at a first stage. As such, the targets will be dictated by quality concerns, taking into account that a modern apprenticeship system is complex to monitor and manage and more demanding in terms of time and resources.

Taking into account the present financial arrangements and the wishes of the agency, the new apprenticeship scheme would be funded through a reimbursement scheme whereby a significant share of the principal cost component (apprentice's wage) would be borne by the HEART Trust/NTA. Available data suggest that the extra cost attached to the new scheme seems compatible with the resources of the agency, and more specifically with the anticipated surplus.

Recognizing the wish of the agency to inject a performance-based mechanism into the incentive system, the formula could include two components: a monthly rate and an award paid when certification occurs.

Eventually, the overall expansion of the training system should be achieved through a new balance between institution-based training and enterprise-based schemes. It is understood that as much as possible, the dynamic of the latter should be linked to the needs of industry. Therefore, partnership with businesses needs to be further strengthened. In the short and medium term, incentive arrangements are expected to increase employers' awareness and investment in training. However, in the long run, the challenge is to foster an environment where employers will increasingly be involved in training delivery, not only to benefit from financial and fiscal incentives, or out of a sense of

commitment to the community, but because they recognize that it will improve their profitability and competitiveness.

### **Box IV.2 The simulation model**

A basic simulation model was designed to facilitate the analysis of the cost implications of implementing a new apprenticeship scheme. Besides the financial dimension such a model was seen as an instrument to facilitate informed dialogue between the various partners involved inside the agency, but also with the Ministry of Education and Culture and with other stakeholders (Ministry of Finance, donors).

With a view to achieving such objectives, the model was conceived to be simple and adaptable to changes in key parameters such as intake levels, efficiency rates, value of some unit cost components, etc. As such, it is usable by training planners who have basic knowledge of computers and spread-sheet softwares. Developed on Excel, it is compatible with the computer environment found at the HEART Trust/NTA.

The model was conceived as a medium-term projection tool and therefore covers a period of five years. The fiscal year 1996/97 was used as the reference year.



*Concluding remarks*  
**Many rivers to cross**

Governance reform is increasingly recognized as a major issue to improve training efficiency, effectiveness and market relevance. In this respect the Jamaican experience provides an interesting case which combines both institutional change, through the establishment of a National Training Agency, and policy reform towards the introduction of a competitive training market.

Beyond the governance issue, Jamaica offers an illustration of training reform in a ‘society at risk’, threatened both by economic marginalization and social fragmentation. The Jamaican society faces several challenges arising out of economic change. Confronted with an increasingly competitive global setting, the country must be able to secure and improve its integration in international markets. Achieving a more flexible and responsive TVET system represents a major effort to create a dynamic export-oriented economy. For many years, Jamaica had tried to provide foreign and domestic investors with an attractive environment, promising low production cost and high returns. In this context, the key variables were low-cost labour, based on wage control, moderate taxation, and external competitiveness achieved through currency devaluations. The limits of that formula have led Jamaica to revisit the competitiveness issue in adopting a more active policy aimed at consolidating the structures and the performance of the production system. Skill development and entrepreneurship are now core elements of the new competitive advantage policy. Therefore, TVET reform is of strategic importance.

It is often argued that the emerging systems of production and related work-organization patterns emphasize co-operation among workers, teamwork

and participatory management styles. Developing such ‘soft skills’ may prove problematic in a society suffering from conflict in labour relations and wide social distance. However, training certainly has a crucial role to play in order to overcome those legacies of the plantation economy and contribute to the sociocultural change required by the constraints of economic survival.

Poor economic records and widening social inequalities have amplified the magnitude of the challenges. As seen in *Chapter I*, there was a sharp slowdown in economic growth, and even a decline for some years, in the 1980s and the early 1990s. This economic turmoil and, to a certain extent, the measures taken to restore macroeconomic stability, have generated a high human cost. Those trends are reflected in widespread poverty. Unemployment and underemployment are closely associated with poverty. However, scarcity of jobs is further aggravated by income inequalities which undermine social cohesion. The rise of antisocial behaviour and of drug-related crime are clear manifestations of that critical trend. Increasing social pressure and tensions are making the reform of TVET more complex.

Sustainability requires that the National Training Agency be able to translate those constraints into meaningful policy directions for the training system. Taking stock of what has been achieved since 1991 already provides a good view of the types of responses that have been articulated and reveals some of the tensions which are emerging in the process. Among the issues that require particular attention are:

- Enlarging partnership: there is a need to further expand and strengthen stakeholders’ participation, particularly employers, in policy formulation, management, monitoring and delivery, at the national and local levels. In that perspective consensus-building mechanisms may need to be reinforced. The National Training Agency formula provides an adequate institutional framework to generate a social partnership in which the private sector would take increasing control over training-policy leadership.



- Reforming the funding scheme: the experience of Jamaica in financing training confirmed the capacity of the payroll tax to provide a solid financial base to set up a training system and expand pre-employment training delivery. In fact, the accumulated financial surplus tended to disseminate the belief that the training system had too much money. In a context of scarcity of resources in the school system, such a politically embarrassing situation obliged the HEART Trust/NTA to divert resources to support technical schools and even basic education. The recurrent nature of the surplus invites revisiting the funding principles under which the HEART Trust/NTA operates. Furthermore, based on a compulsory principle, this funding mechanism tends to be perceived as part of global taxation and as such fails to change employers' attitude towards training. Amending the present system by introducing an incentive linked to enterprise involvement in training delivery may constitute a promising way to increase participation and establish a market-driven mechanism. With respect to institutions, developing cost-recovery may be a useful way of generating labour market signals on the relevance of the training programmes.
- Laying the foundations of a training market: the mandate of the National Training Agency goes well beyond the development and control of a training system. One of its main tasks is to contribute to the diversification of training providers and promote a user-centred approach to training. A major step in that direction was the design of the National Vocational Qualifications of Jamaica (NVQ-J) and the subsequent establishment of the National Council on Technical and Vocational Education and Training (NCTVET). These developments express the move towards a competency-based system and a significant policy shift from access and participation to outcomes. In this respect the Jamaican experience reflects an international trend towards the deregulation of training provision and the dissociation between delivery on one side (HEART Trust/NTA, technical schools, private providers, NGOs) and accreditation and certification on the other (NCTVET). Advocates of a training market

argue that a deregulated system will lead to more efficiency and greater relevance. Opponents claim that market principles are unlikely to create an equitable and socially responsible system. At this early stage of the process it is not yet possible, in Jamaica, to assess the impact of this new policy. Devolution of training responsibilities to private providers has not yet taken place and the diversification of the training supply is still very modest. In fact the extent to which it will be possible for the National Training Agency to diversify training provision without deeply reforming the financing scheme remains questionable. International experience tends to indicate that the emergence of a training market requires the implementation of financing mechanisms whereby the allocation of funds to private providers is commanded by tendering procedures, on a competitive basis. The current practice of subsidizing NGOs and communities to conduct certain training programmes may constitute a first step in that direction.

- Developing institutions' autonomy: although HEART Trust/NTA institutions do not yet enjoy much operational autonomy, they have managed to develop intimate links with local enterprises and, more generally, with their environment. Such deep socio-economic rooting is a major asset for the relevance of training provision and its responsiveness to local circumstances and needs. Granting additional autonomy may contribute to reinforcing such linkages. Among other steps, it would, however, require putting in place instruments and mechanisms, including a proper institution-based management information system, that ensure accountability in procedures and expenditures, as well as maintaining overall coherence in training provision.
- Defining a specific but realistic policy on training for entrepreneurship and the informal sector: while it is often argued that the determinants of entrepreneurial behaviour are mostly cultural, training may play a key role in providing the skills and attitudes required for successful entrepreneurship and self-employment. In a context of job scarcity there may be a need to further adjust the training philosophy of the HEART

Trust/NTA. However, too many expectations should not be placed on the informal sector to provide work and income opportunities to vulnerable groups. Indeed, available information on the structure and functioning of the informal sector in Jamaica produces insufficient evidence on the extent of its contribution to poverty alleviation.

- Finally, the most complex challenge in the years to come may be to manage the growing tensions between economic performance and social cohesion. Reconciling what often appears to be contradictory objectives would require combining expanding access and participation, especially for disadvantaged youth, on the one hand and addressing the enterprise needs for a competitive workforce, on the other.

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The Institute's aim is to contribute to the development of education throughout the world, by expanding both knowledge and the supply of competent professionals in the field of educational planning. In this endeavour the Institute co-operates with interested training and research organizations in Member States. The Governing Board of the IIEP, which approves the Institute's programme and budget, consists of a maximum of eight elected members and four members designated by the United Nations Organization and certain of its specialized agencies and institutes.

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Professor, University of Paris I, Panthéon-Sorbonne, Paris, France.

*Inquiries about the Institute should be addressed to:*

The Office of the Director, International Institute for Educational Planning,  
7-9 rue Eugène-Delacroix, 75116 Paris, France.