

SKILL TRAINING AS AN INSTRUMENT  
FOR REGIONAL DEVELOPMENT

by

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Thesis

submitted in partial fulfillment of the  
requirements for the degree of  
Bachelor of Arts with  
Honours in Economics


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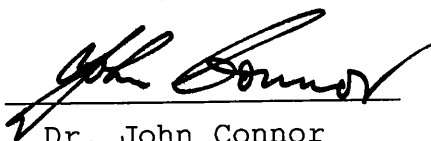
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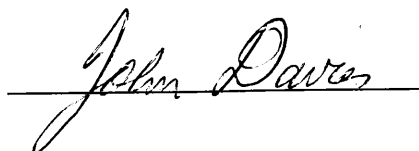
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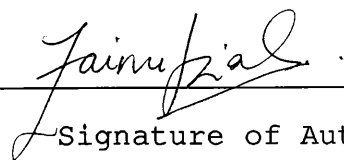
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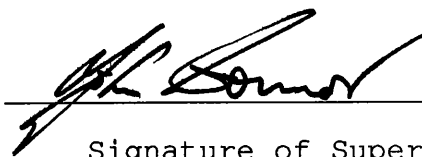
  
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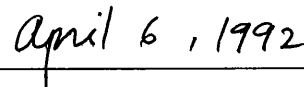


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**ABSTRACT**

The objective of the thesis is to consider the merits of alternative approaches to promoting skills training in the context of the Malaysian economy with particular reference to the State of Melaka. Federalism in Malaysia is highly centralized in contrast with Canada. While education and skills training is under the constitutional jurisdiction of the federal government in Malaysia, it is a matter of provincial jurisdiction in Canada. The study provides an overview of the Malaysian economy with special emphasis on population and the labour force. An essential feature is the federal-state split in economic development policy. This is followed by a description of the education and skills training system in Malaysia and how it relates to economic development. The particular circumstances of Melaka and the Malaysian approach to education and skills training is contrasted with that in Canada. This is applied in listing the advantages and disadvantages of the relatively more centralized Malaysian system.

## Chapter 1

### Introduction

The objective of the thesis is to consider the merits of alternative approaches to promoting skills training in the context of the Malaysian economy with particular reference to the State of Melaka.

"Development economics is the study of how human economic circumstances change over time and how these can be made to change."<sup>1</sup> Contemporary societies are deeply committed to development as a means towards achieving better living standards for their people. This is certainly true for Malaysia and its constituent states. It is equally certain that, whatever path is chosen as a development route, a well informed, educated, skilled labour force will be required for the improvement of 'human economic circumstances'.

Federalism in Malaysia is highly centralized in contrast with Canada. While education and skills training is under the constitutional jurisdiction of the federal government in Malaysia, it is a matter of provincial jurisdiction in Canada. Thus the procedures for skill training in Malaysia will be examined. To this end, the principal features of the Melakan economy will be outlined, the institutions for

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<sup>1</sup> Hogendorn J.S, Economic Development, (Harper Collins, 1992)

education and training will be described and these will be compared with their counterparts as observed in Nova Scotia. The advantages and disadvantages of a centralized approach to education and skills training will be considered.

The study provides an overview of the Malaysian economy with special emphasis on population and the labour force. An essential feature is the federal-state split in economic development policy. This is followed by a description of the education and skills training system in Malaysia and how it relates to economic development. The particular circumstances of Melaka and the Malaysian approach to education and skills training is contrasted with that in Canada. This is applied in listing the advantages and disadvantages of the relatively more centralized Malaysian system.

## Chapter 2

### **Location**

Malaysia is strategically located in the middle of South East Asia. Malaysia's neighbours are Thailand in the North, Singapore in the South, Indonesia in the West and the Philippines in the east. Malaysia is geographically divided in two. Peninsular Malaysia (or West Malaysia) is bounded by the South China Sea in the east and the Straits of Melaka in the west. East Malaysia is located in the north of Borneo Island and consists of the states of Sabah and Sarawak. Melaka, one of the 14 states in Malaysia, is located on the south-western coast of Peninsular Malaysia. Malaysia covers the area of 336,700 square km. Melaka on the other hand covers 1,657 square km.

### **History**

The modern history of Malaysia begins in the 15th century when Parameswara, a prince of Palembang, entered Melaka. Melaka is the oldest and the most historic state in Malaysia. Melaka became an important entrepot under the Melaka sultanate. In 1511, Melaka was invaded by the Portuguese who held the territory until 1641 when the Dutch took over possession. In 1795, Melaka became a colony of the British Empire but was returned to the Dutch after the Aceh War.

However, in 1824, Melaka was transferred back to the British (as the Dutch agreed to switch with the possession of Java).<sup>1</sup> At that time, the British also occupied several other states and soon took control of all the Malay states. Malaya gained independence on the 31st of August 1957 under the leadership of Tun Abdul Rahman who later became the first prime minister of Malaya. In 1963, Malaysia was formed comprising Peninsular Malaysia (with 11 states), Singapore, Sabah and Sarawak. However, in 1965 Singapore separated from the Federation to become an independent republic, leaving Malaysia as it is today.

### **POPULATION**

Malaysia is a multi-racial society. Basically, there are two groups. The first is known as the bumiputras or "the sons of soil". They are the Malays and indigenous groups located in both Peninsular Malaysia or East Malaysia. Examples of indigenous groups are the Iban, Kadazan, Bajau, and Penan peoples. The second category includes the Chinese and Indians and others such as Eurasian, Arabs and Sinhalese.

Malaysia had a total of 17.7 million people in 1990. Peninsular Malaysia itself has the population of 14.6 million people. Melaka has 578,035 people.<sup>2</sup> The Malays or Bumiputras

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<sup>1</sup> Information Malaysia 1984, (Kuala Lumpur, 1984)

<sup>2</sup> Vital Statistic Peninsular Malaysia 1991, Department of Statistic Malaysia, (Kuala Lumpur, Jan 1991) p 45

are the largest component of Malaysian population representing close to 59% (including Sabah and Sarawak). Chinese and Indians, the second and third largest component, are 32.1% and 8.2% of the population respectively. With the same pattern, the population of Melaka is dominated by the Malays numbering 324,733 people. Chinese, the second major racial group, constitute 206,571 people, while Indians are represented by 43,013 people. Other racial groups such as the Portuguese constitute 3,718 people of the Melakan population. Of the total population, 34% live in the urban areas while 66% live in rural areas.

The average annual growth of Malaysia's population was 2.8% over the period 1981-1985.<sup>3</sup> This means that the population increased by an average of almost half a million people each year during the period. The natural increase of Melaka's population was 10,262 in 1989. The increase according to racial division is provided in Table 2-1.

According to the Fifth Malaysian Plan, there were differences in growth rates among Malaysians of different age group. Table 2-2 below clarifies the preceding statement. In 1986-90, the population of children below the age of 15 grew at an annual rate of 1.8%. This is lower when compared with the growth rate for adolescents and young adults, defined as

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<sup>3</sup> Fourth Malaysia Plan of Malaysia 1980 - 1985, (Kuala Lumpur, 1980)  
p 56

**Table 2-1**  
 NATURAL INCREASE BY ETHNIC GROUP AND SEX IN  
 MELAKA: 1989

RACES	Total	Male	Female
TOTAL	10262	5162	5100
MALAYS	7393	3788	3605
CHINESE	2238	1085	1153
INDIANS	595	275	320
OTHERS	36	14	22

Source: Vital Statistics Peninsular  
 Malaysia 1991, Department of Statistic  
 Malaysia, (Kuala Lumpur, Jan 1991).

**TABLE 2-2**  
 MALAYSIA: POPULATION SIZE AND AGE STRUCTURE, 1980-90

Age group	'000	%	'000	%	Ave. annu. growth	
					1981-85	1986-90
Total	15,791	100	17,877	100	2.6	2.5
0 - 14	6,046	38.3	6,614	37	1.7	1.8
15 - 24	3,291	20.9	3,551	19.8	2.3	1.5
25 - 39	3,357	21.3	4,019	22.5	4.0	3.6
40 - 54	1,823	11.5	2,180	12.2	3.2	3.6
55 - 64	716	4.5	852	4.8	3.2	3.5
65+	558	3.5	662	3.7	2.5	3.4

Source: Fifth Malaysia Plan of Malaysia 1986-90,  
 (Kuala Lumpur, 1986)

those aged 15-24 and the growth rate of 3.6% for persons aged 25-64. Thus, the age composition of the population is changing as a reflection of the differences in these growth rates.

Overall, Malaysia has a balanced male-female ratio. From the 1980 census, the male-female ratio is 50.1% and 49.9% respectively. The ratio however slightly varies within Peninsular Malaysia, Sabah and Sarawak and between races. In Melaka the male-female ratio is 48.9% males and 51.1% females.

Malaysia's birth rate in 1989 was 27.1 per thousand people. Its death rate per thousand was 4.7 which can be considered as low. Malaysia's natural increase per thousand was 22.4. The infant mortality rate was 13.5 per thousand.<sup>4</sup> Melaka has essentially the same rates as Malaysia in the birth rate, death rate, and natural increase. The report on the Fourth Malaysia Plan showed that the infant mortality rate in Melaka in 1970 was 43.8% and it dropped to 23.6% in 1980.

The decrease in the infant mortality rate shows an improvement in general health. Furthermore, the number of persons per registered doctor and dentist also fell significantly between 1970 and 1980. The availability of hospital beds increased but not significantly. Life expectancy has increased for both males and females. In 1970,

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<sup>4</sup> Fifth Malaysia Plan 1986-1990, (Kuala Lumpur, 1986) p 45



life expectancy for males was 62.2 and for females was 66.5 but by 1989 these had risen to 69 and 73 years, respectively.

### **INCOME DISTRIBUTION**

The distribution of income can be discussed either according to racial division or according to regional division. Both will be taken into consideration. It would be helpful to acknowledge that one of the major objectives of the New Economic Policy (NEP) was 'to narrow the disparities in the standard of living between regions' and 'to eradicate poverty and restructuring society so as to achieve an equitable share of ethnic distribution'<sup>5</sup>. The NEP, indirectly, also intended to increase the Bumiputra's share in the wealth of the nation.

An upgrade of income of the population can be achieved by raising the level of economic activity. This is reflected in the changes in Gross Domestic Product (GDP) and per capita GDP of the states. Table 2-3 shows per capita GDP for each of the states as well as the monthly income, measured in 1985 prices. Selangor, being the richest state, has per capita GDP almost double the national average. On the other hand, Kelantan, the poorest state, has less than half the national average of per capita GDP. Melaka is within the category of middle income

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<sup>5</sup> Sixth Malaysia Plan 1991 - 1995, (Kuala Lumpur, 1991) p 3

**TABLE 2-3**  
PER CAPITA GROSS DOMESTIC PRODUCT (IN 1978 PRICES) BY STATES

	1985 (\$)	Ratio to National Average	1990 (\$)	Ratio to National Average	Average Annual Growth (%)
Malaysia	3599		4392		4.40
Johor	3170	0.88	3983	0.91	1.20
Kedah	2092	0.58	2600	0.59	4.85
Kelantan	1426	0.40	1739	0.40	4.39
<b>Melaka</b>	<b>2775</b>	<b>0.77</b>	<b>3587</b>	<b>0.82</b>	<b>5.85</b>
Negeri Sembilan	3111	0.86	3824	0.87	4.58
Pahang	2677	0.74	3278	0.75	4.49
Perak	2760	0.77	3357	0.76	4.32
Perlis	2470	0.69	2973	0.68	4.07
Pulau Pinang	3780	1.05	4934	1.12	6.10
Sabah	3845	1.07	4500	1.02	3.40
Sarawak	3452	0.96	3883	0.88	2.50
Selangor	5185	1.44	6558	1.49	5.29
Trengganu	5901	1.64	7124	1.62	4.14
Wilayah Persekutuan Kuala Lumpur	6768	1.88	7608	1.73	2.48

Source: Sixth Malaysia Plan 1991-1995, (Kuala Lumpur, 1991)

states. It has a relatively high level of activity in the primary and secondary sectors.

The implementation of policies and strategies aimed at a more equitable income distribution have brought about a significant improvement in the pattern of income distribution. The income of the bottom 40% of households, mostly in rural areas, increased faster than other groups in Peninsular Malaysia. These households improved their income share from 12.8% to 14.5% in Peninsular Malaysia. The incidence of poverty dropped significantly from 20.7% in 1985 to 17.1% in 1990, or 30,000 fewer households at the poverty level.

The improvement in the income distribution pattern reflects significant economic progress made by the Bumiputra. Their share in certain higher paying professional occupations increased from 22.2% to 29%. Table 2-4 shows the position of the Bumiputra compared with the Chinese and Indians in the professional occupations as it was in 1990. In essence, although the Bumiputra gained 60% of the new jobs generated in the Fifth Malaysia Plan, their occupation in the work force was still in the lower paid job categories.

**TABLE 2-4**  
REGISTERED PROFESSIONAL BY ETHNIC GROUP, 1990

Profession	Bumiputera (%)	Chinese (%)	Indians (%)	Others (%)	Total (%)
Architects	231	728	12	8	979
(%)	23.6	74.4	1.2	0.8	100
Accountants	627	4524	346	77	5574
(%)	11.2	81.2	6.2	1.4	100
Engineers	7018	11741	1065	342	20166
(%)	34.8	58.2	5.3	1.7	100
Dentists	406	847	396	21	1670
(%)	24.3	50.7	23.7	1.3	100
Doctors	1951	2430	2410	216	7007
(%)	27.8	34.7	34.4	3.1	100

Source: Sixth Malaysia Plan 1991-1995, (Kuala Lumpur, 1991)

## EDUCATION

In the Sixth Malaysia Plan, human resource development is given much attention because the achievement of socio-economic objectives depends on the availability of an educated, skilled and trainable labour force. Another reason is that education and training are among the instruments of the National Development Policy (NDP) to eradicate poverty and reform the standard of living for some ethnic groups. The growing importance was realized since the Fifth Malaysia Plan as it showed a continued increasing demand for education. This was the result of having the majority of the population in the 5 to 14 year old age group during the Fourth Malaysia Plan.<sup>6</sup> During the Fifth Malaysia Plan, measures were taken to improve the quality of education and delivery system as well as classroom accessibility. Vocational education was strengthened through the restructuring of new curricula for vocational schools in 1987.<sup>7</sup> This was undertaken by the federal government as education is under the jurisdiction of federal government.

### Pre-school Education

As in other countries, the education system begins with pre-school education. Nursery schools are not very common. There are a few in urban areas and usually privately owned.

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<sup>6</sup> Fifth Malaysia Plan 1986-1990, (Kuala Lumpur) p 120

<sup>7</sup> Sixth Malaysia Plan 1991-1995, (Kuala Lumpur, 1991) p 148

Pre-school education is aimed at preparing the child for primary school. This is provided by both public and private sectors. The role of Ministry of Education (MOE) is limited to the preparing of curriculum and the registration of pre-school centres. Of the total number of 6,960 pre-school centres in 1990, 77% were operated by government agencies.<sup>8</sup>

#### Primary Education

Primary school education takes place over six years. Pupils in government and government-aided schools increased by 11.7% from 1985 to 1990 or by about 0.26 million. The increasing number of students entering has led to the need for more classroom and other facilities. Overcrowding, especially in the urban areas, resulted in 16% of primary classes being held in the afternoon. The New Primary School Curriculum (KBSR), established in 1983, which required smaller class size, made the classroom shortage more acute.

#### Secondary Education

At the secondary school level, enrolment in the government and government-aided schools increased by 2.4% from about 922,210 in 1985 to about 942,920 in 1990. As with primary schools, 32.8% of the classes have to be conducted in the evening because of classroom shortages. During the Fifth

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<sup>8</sup> Ibid p 158

Plan, about 12,960 classrooms were built to accommodate for the increased enrolment. The transition rate between primary and lower secondary levels in government and government-aided schools remained constant at about 84%. Other students enrolled in private schools, some joined the Islamic religious secondary schools (managed by state government), while others left the school system.

The extension of KBSR to secondary schools started in 1989 as New Secondary School Curriculum (KBSM). The new curriculum emphasized business-related and pre-vocational subjects. At the same time, efforts were made to increase the number of students in the science stream. There is a gap in the achievement of students in the urban and rural schools especially in subjects like Science, Mathematics and English. Government has continued to implement measures to improve the quality of education for the poor.<sup>9</sup>

#### Secondary Technical and Vocational Education

A student can either continue high secondary academic programmes or proceed to secondary technical and vocational schools. In secondary vocational school, there was an increase in enrolment of 64.4% between 1985 and 1990 (from 15,300 to 25,160)<sup>10</sup>. The increase was accommodated by building new vocational schools as well as an expansion of existing

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<sup>9</sup> Ibid p 161

<sup>10</sup> Ibid p 162

schools. The effectiveness of vocational education was improved as the curriculum in secondary vocational schools was restructured. Now, graduates from vocational school have the same status and recognition as graduates from high secondary schools.

#### Tertiary Education

During the 1950's, Malaysia had no tertiary education centre except for one in Singapore (Raffles Institute). Today, Malaysia has seven Universities with a capacity in total of about 60,000 students.

The enrolment in certificate, diploma and degree courses registered an increase of 33%, 12% and 59% respectively.<sup>11</sup> This included five new polytechnics. These universities and polytechnics are scattered throughout Peninsular Malaysia. However, not every state has a university or a polytechnic. Melaka has a technical institute, that is a branch of an institute called the Mara Institute of Technology but no university.

#### Training Programmes

During the Fifth Plan, about 111,000 trainees completed their programmes at skilled and semi-skilled levels.<sup>12</sup> The demand for these skilled labourers continues to increase,

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<sup>11</sup> Ibid p 163

<sup>12</sup> Fifth Malaysia Plan 1986-1990, (Kuala Lumpur, 1986) p 92



indicating that the nation needs to produce more and better trained manpower.

Training institutions are fully funded by the federal government. During the period of the fifth plan, the following institutions were built: five Industrial Training Institutions (ITI), one Advance Training Centre, and fifteen Pusat Giat MARA. In Melaka, there is only one ITI located in Bukit Piatu.

The National Vocational Training Council (NVTC) replaced the National Industrial Training and Trade Certificate Board, to improve coordination of programmes. Another major responsibility of NVTC is to ensure that the curricula and trade standards meet the requirements of industry.

In the fifth plan period, government aimed to improve the effectiveness of the existing skills training system in supplying the required trained manpower and making sure that the skills delivered were up-to-date. Trainers in ITI for example are graduates in related areas from overseas, primarily Germany, Japan, the United States, and Canada. From time to time, either local trainers will be given courses abroad or an expert from abroad will give a course locally.

### Summary

This chapter has given a brief overview of the population and approach to education in the Malaysian economy. Malaysian population, with various ethnic group, was crucial to the design of the NEP. As the majority of lower-income groups are concentrated in one ethnic group, the government took action through the NEP to restructure the income distribution. The chapter has outlined the approach to the education in Malaysia to give a clear picture of the school system.

### Chapter 3

This chapter looks at skills training in Malaysia with special emphasis on Melaka. However, relevant data are limited at the state level. Due to that, this chapter will present data on skills training at the national level but with frequent reference to Melaka. The issue of how the federal government formulates and implements policies directed at human resources will be examined. Then, the chapter will assess the extent of federal-state's interaction in skills training. Finally, the chapter will examine the funding issues pertaining to skill training.

In Malaysia, a central agency in policy formation is the Economic Planning Unit (EPU). EPU is a federal government agency that acts as the director of Malaysian economic planning. It has a broad function that basically covers economic development in the nation. Under a director general, EPU is divided into three divisions but only two are relevant here and will be discussed; these are the *Macro Planning Division* and *Sectoral Planning Division*.<sup>1</sup>

The *Macro Planning Division* is involved with the formulation of overall strategies and policies for socioeconomic development of the country based on the forward projection of the economy and takes into account the sectoral

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<sup>1</sup> Information Malaysia 1990 - 1991 Yearbook, (Kuala Lumpur, 1990) p 379

plans, programmes and projects at the Federal , Regional and State levels.<sup>2</sup> It also examines the NEP and establishes appropriate targets and strategies for policy consideration. The activities of the Macro Planning Division revolve around four main areas of work: **Macro-Economics, Regional Economics, Distribution, and Human Resources.**

The **Regional Economics Section** is involved in matters pertaining to the distribution of economic activities between regions and analyses the distribution and potential for natural resource development in the country as well as linkages between regions, urban areas, and growth centres. It aims at spatially balanced overall development of the country so that a region is fully developed consistent with its resource potential. In line with this, a corporation in each state is set up to handle the development of the state.<sup>3</sup> In Melaka, the agency is called the State of Economics Development Corporation (SEDC). However, skill training is not a responsibility of this corporation but comes under the jurisdiction of the Human Resources Section.

The most important section is the **Human Resources Section.** It is concerned with the analysis of population and the labour force, Migration, Employment, Wages and Productivity, Manpower requirements and supply as well as

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<sup>2</sup> Ibid

<sup>3</sup> Ibid p 380

evaluation of the five-year development plans in these fields. Projections are also made for example of population, labour force, employment and manpower requirement by occupation.<sup>4</sup> Therefore, any needs of labour in any specific sector are expected and the requirement may be foreseen. The establishment of skills training centres is in response to a specific demand in a given area and these are assisted by the Social Services Section (under Sectoral Planning Unit discussed below).

The *Sectoral Planning Division* is responsible for the planning of the five-year development and annual development plans by the process of allocating funds for the various sectors of the economy. It comprises seven main sections - Agriculture, Commerce and Industry, Social Services, Infrastructure and Utilities, Energy, Development Budget, and Technical Services Section. The **Social Services Section** assists in the formulation of policies and development programmes relating to education and training, health, housing, environment, youth, sports and other social services.<sup>5</sup>

The EPU acts as the coordinator for policies implemented through the government ministry. It also makes sure that the policies are in agreement with the main

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<sup>4</sup> Ibid  
<sup>5</sup> Ibid

objective of the government whether in skills training or other areas.

Four ministries share responsibility for labour force development: **Ministry of Education, Ministry of Human Resources** through Manpower Department, **Ministry of Rural Development**, and **Ministry of Youth and Sport**.

The **Ministry of Education** (MOE) is responsible for the maintenance, development and progress of education in the country and its authority extends over all educational institutions from the kindergarten to university in all states in Malaysia.<sup>6</sup> In addition, the ministry also has a division called Technical and Vocational Education Division. The importance of technical and vocational education has been increasingly emphasized since 1983. In line with the Look East Policy, the syllabuses are being expanded to reflect the policy.<sup>7</sup> The overall aim behind the extended change is that of turning Malaysia into an industrialized country. This division is responsible for the planning, organisation, and supervision of pre-vocational studies in the upper secondary and tertiary levels of the education system.

The Manpower Department under the **Ministry of Human Resources** is responsible for providing training facilities in industrial skills so as to meet the need for basic and expert

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<sup>6</sup> Ibid p 402

<sup>7</sup> Ibid

skills and to provide standards and trade certification.<sup>8</sup> Another division under the MOE that has direct relation with skills training is the National Vocational Training Council.

The **Ministry of National and Rural Development** aims to ensure the attainment of national development objectives, especially in the rural areas.<sup>9</sup> This is achieved by providing basic amenities, and by building a disciplined, skilled and self-reliant society, along with structuring and promoting economic activities.

The agency under this ministry that specializes in education and training is called MARA (Council of Trust for the Indigenous People). The objective is to increase the number of trained, qualified, and skilled bumiputras to meet the needs of the commercial and industrial sectors. Besides making training centres and associated residential facilities available, this agency also provides scholarships for students from rural areas.

The **Ministry of Youth and Sports** main objective is the pursuit of national unity through the development of a united and disciplined youth society which will be socio-economically involved in nation building.<sup>10</sup> The ministry through the Youth Division aids in the establishment of training for youth

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8 Ibid p 454

9 Ibid p 459

10 Ibid p 500

leaders and workers, provision of training facilities and training schemes for unemployed youth.

Together with these, the private sector has participated in training labour especially when government has given incentives such as as the Double Deduction Incentives Schemes.<sup>11</sup> Under this scheme, employers are given generous tax benefits for promoting training in areas of new technology and product manufacturing.

Each of these ministries has a branch in each state in Malaysia with their headquarters in the Federal Territory of Kuala Lumpur. Basically, the headquarters give orders for the branch departments on the policies as well as any operations. The branches of these ministries in the states merely act as the medium in the operation of the functions of the ministries.

However, there are several departments that are run by the state government without interference from the federal government. For example, the Department of Islamic Affairs is under the jurisdiction of the State government.

Where skill training is concerned, the ministries mentioned each have a branch in Melaka. There is no Manpower Department in Melaka. Instead, like every other state, there is a Labour Department. Industrial Training

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<sup>11</sup> Ministry of Labour Malaysia, Labour and Manpower Report 1987/88, (Kuala Lumpur, 1987) p 36



Institutes in Melaka are run by the Federal Manpower Department (under the Ministry of Human Resources) from Kuala Lumpur. The Labour Department in Melaka deals with labour affairs within the state, for example handling registrants and locating employment for potential employees.

Just as they are controlled by the headquarters, these branches are funded fully by headquarters. The state government can only interfere with the location of these branches of ministries if they prepare the necessary building space to accommodate the ministry's building. The cost of buildings and related expenditures is borne by the ministry in Kuala Lumpur.

#### Funding

In line with the discussion of policies and their implementation, the issue of funding may not be left out. The public sector in Malaysia consists of the Federal, State and local government as well as statutory authorities and Non-Financial Public Enterprises (NFPEs).<sup>12</sup> Table 3-1 below reports the public sector development allocation and expenditure during the Fifth and Sixth Malaysia Plan. Under the Fifth Malaysia Plan this amounted to \$61,590 million. Of this amount, Federal government expenditure amounted to 57.1% of total overall public sector expenditure, followed by NFPE

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<sup>12</sup> Sixth Malaysia Plan 1991 - 1995, (Kuala Lumpur, 1991) p 62

(28%) and state governments (14.3%). In line with the responsibilities of the Federal Government compared with the state governments, the allocation is to be expected. In the Sixth Malaysia Plan, out of the total expenditure of \$104,000 million (increase 69% from the last Malaysia Plan), \$55,000 million (52.9%) is allocated for Federal Government expenditure. (See table 3-1)

Of the \$55,000 million, the Federal Government spent 1% during the Fifth Malaysia Plan and 1.7% during the Sixth Malaysia Plan on Melaka.<sup>13</sup> The expenditure of funds in each state depends on the state's wealth levels, development potential, natural resources and their ability to manage it, and the degree to which their basic infrastructure has been developed. However, the richest states, Wilayah Persekutuan and Selangor receive the largest portion because important projects have been undertaken in these states. Furthermore, these projects, for example expansion of universities, are beneficial not only to the people of Selangor but also to others.

The development allocation and estimated expenditure of the Federal Government by sector are shown in the Pie Chart 3-1. Economic and social programmes accounted for a major share of development expenditure followed by security and administrative programmes. Social programs accounted for

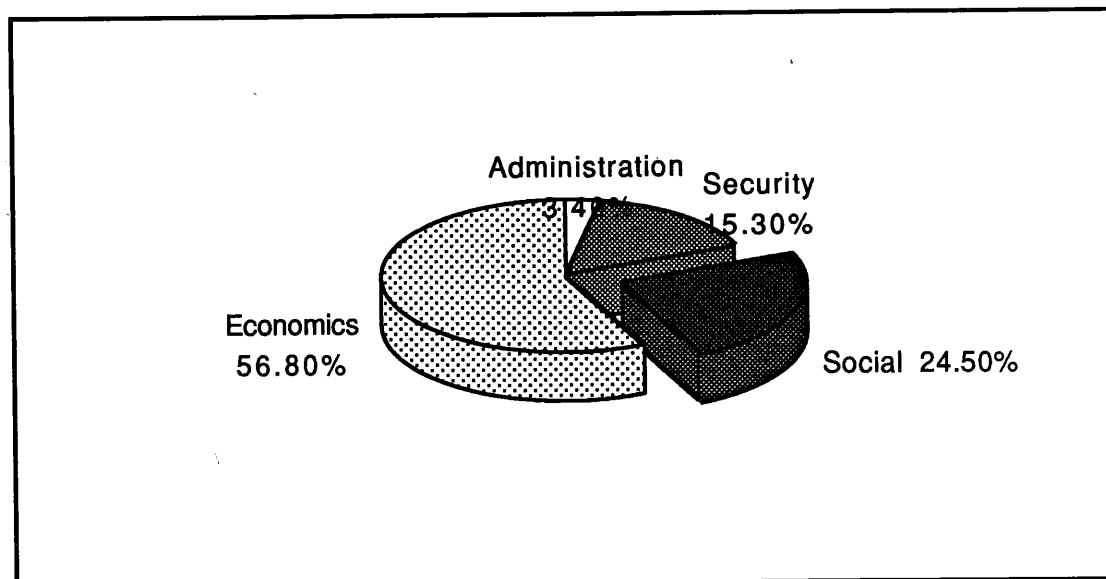
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<sup>13</sup> Ibid p 64

TABLE 3-1  
PUBLIC SECTOR DEVELOPMENT ALLOCATION AND EXPENDITURE  
(M\$ Million)

	5MP		6MP	
	Expenditure	(%)	Allocation	(%)
a. Federal Government	35,300	57.1	55,000	52.9
b. State Governments	8,850	14.3	12,000	11.5
c. Statutory Bodies & Local Governments	0	0	2,000	1.9
d. NFPEs	17,700	28.6	35,000	33.7
Total	61,950	100	104,000	100

Chart 3-1  
Federal Government Allocation & Expenditure  
by Sector, 1991-1995



Source: Sixth Malaysian Plan 1991-1995, (Kuala Lumpur, 1991)

24.5% of the total expenditure, comprising education and training, housing and other social services. In the Fifth Malaysia Plan, the budget was \$8,764 million (24.8%) but in the Sixth Malaysia Plan, it is \$13,468 million of which 63% (\$8,501 million) is assigned for education and training. This means 15.5% of the total federal expenditure is allocated for the education and training. Table 3-2 shows the allocation of the funds in different institutions. This shows the government's seriousness in 'promoting human resources development including creating a productive and disciplined labour force and developing the necessary skills to meet the challenges in industrial development'.<sup>14</sup>

#### Summary

This chapter described the approach to the skills training approaches in Malaysia. In examining the derivation of policies, the role of the federal EPU has been emphasized. The chapter then moved to the implementation of these policies, through various ministries regulated by the federal government.

Although skill training is funded as well as managed by the federal government, not all states receive the same kind of policies. Under the Macro Planning Division, all the sections especially Regional Economy, Distribution and Human

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<sup>14</sup> Ibid p 4

Resources Section collaborate in producing a projection of population, labour force, employment and manpower requirements. The results of this projection then provides the base(s) for the formulation of required development policies.

TABLE 3-2  
DEVELOPMENT ALLOCATION FOR EDUCATION  
AND TRAINING, 1986-95  
(M\$ Million)

Programme	5MP Allocation	6MP Allocation
<i>EDUCATION</i>	5,457	7,724
<b>Pre-school</b>	<b>0</b>	<b>140</b>
<b>Primary Education</b>	<b>760</b>	<b>1,020</b>
<b>Secondary Education</b>	<b>1,558</b>	<b>2,003</b>
Govn. Schools	1,041	1,472
Mara Junior Coll.	65	51
Technical and Vocational Sch.	452	480
<b>Higher Education</b>	<b>1,739</b>	<b>2,591</b>
<b>Teachers Education</b>	<b>144</b>	<b>334</b>
<b>Other Educational Support Prog.</b>	<b>1,257</b>	<b>1,636</b>
<i>TRAINING</i>	355	777
<b>Industrial Training</b>	<b>330</b>	<b>580</b>
ITI	104	112
MARA Vocational Inst.	157	266
Youth Training Centres	54	27
Pusat Giat Mara	16	45
TVEIT <sup>1</sup> Development	0	30
Attitudinal Change	0	100
<b>Non Formal Education and Training</b>	<b>0</b>	<b>30</b>
<b>Commercial Training</b>	<b>18</b>	<b>140</b>
MARA Commercial Inst.	7	21
Youth Entrepreneurship Inst.	0	6
<b>Management Training</b>	<b>18</b>	<b>140</b>
National Inst. of Public Admin.	12	130
Inst. Aminuddin Baki	6	10
<b>TOTAL</b>	<b>5,812</b>	<b>8,501</b>

Source: Sixth Malaysian Plan 1991-1995, (Kuala Lumpur, 1991)

<sup>1</sup> Technical and Vocational Education and Industrial Training.

## CHAPTER 4

This chapter describes the approach to skill training as it pertains to regional development policy. One indicator of performance is human resource development and the extent to which full employment is attained. Population, labour force and employment will be briefly explained and a review of various types of skills training will be presented. Demand for labour from 1987-88 will be examined as well as the growth of employment in various sectors in the economy and an overview of the structure of the Melaka economy will be taken into consideration .

**Population, Labour Force and Employment**

Table 4-1 provides the information on the growth of population, labour force and employment during the Fifth and Sixth Malaysian Plans. In the Fifth Malaysia Plan period (1986-1990), the labour force average annual growth was 3.1%. However, in the Sixth Malaysia Plan, it is projected to grow at a rate of 2.9% per annum. In 1980, the labour force grew at an annual average rate of 3% per annum, increasing from 5.1 million in 1980 to 6.039 million in 1985. In 1995, the labour force is expected to grow to 8.1 million.<sup>1</sup> The labour force

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<sup>1</sup> Ibid p 29

TABLE 4-1  
POPULATION, LABOUR FORCE AND EMPLOYMENT, 1985-95

	1985	1990	1995	Ave.growth rate (%)	
				5MP	6MP
Population ('000)	15,864.0	18,010.2	20,262.7	2.5	2.4
Labour Force ('000)	6,039.1	7,046.5	8,114.0	3.1	2.9
Employment ('000)	5,624.6	6,621.0	7,752.3	3.3	3.2
Unemployment ('000)	414.5	425.5	361.7		
Unemployment Rate (%)	6.9	6.0	4.5		
5 Malaysian Plan Estimated (%)	7.6	10.1	-		

Source: Sixth Malaysian Plan 1991-1995, (Kuala Lumpur, 1991)

grew faster than population, due to the increase in the working age population, as well as increased female labour force participation rate.

During the Fifth Malaysia Plan (1985-90), Malaysia experienced an annual increase in real Gross Domestic Product of 6.7%, higher than the target growth of 5%. Job opportunities increased within that period. The average employment growth during the Fifth Malaysia Plan was 3.3%,



that is from approximately 5.6 million to 6.6 million workers or 996,400 new jobs. The employment situation is projected to remain favourable in the Sixth Malaysia Plan, with employment projected to grow at 3.2% per annum to reach 7.8 million in 1995 (1.1 million new jobs).<sup>2</sup>

During the Fifth Malaysia Plan period, the labour force average annual growth was 3.1% while the average annual growth of employment during the period was 3.3%. This reduced the unemployment rate from 6.9% in 1985 to 6.0% in 1990. This is better than what was anticipated (in 5MP for the year of 1990) which was 7.6%. (See table 4-1)

In the Sixth Malaysia Plan, it is forecast that the labour supply will grow at 2.9% per annum, while the employment average annual growth rate is 3.2%. The unemployment rate will decline further from 6.0% in 1990 to about 4.5% in 1995. (See table 4-1)

### **Education and Skills Training**

In total, there are nine centres for education and training. Each of these play an important role in preparing manpower.

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<sup>2</sup> Ibid p 30

### School-level Education

At this level, teachers are responsible for the early development of student interest. At lower secondary school, students are required to sit a test for Lower Certificate of Education (LCE). The result will be used to assess student aptitude. Since the implementation of KBSM, new curricula have been introduced where students are exposed to business-related and pre-vocational subjects. In this way, students may develop their interest at an early age, simultaneously acting as a promotion to skill-oriented studies.

In Melaka, there are 209 primary schools and 53 secondary (lower and higher) schools. All these schools are federal government-aided but managed by a ministry office in Melaka.

### Vocational Education

Vocational schools under MOE provide various courses at the elementary level. The graduates from government vocational schools are mainly in the field of automotive engineering, electrical electronics and metal fabrication.

Between 1987 and 1988, the number of students graduating from secondary school increased two fold.<sup>3</sup> This reflected the government commitment to promoting vocational and technical education. With the implementation of KBSM, more students are expected to enter vocational school in the future.

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<sup>3</sup> Ministry of Labour Malaysia, Labour and Manpower Report 1987/1988, (Kuala Lumpur, 1988) p 37

Melaka has two vocational schools located in Alor Gajah and Bukit Katil.

#### Technical Training

Technical schools under MOE provide a two year course leading to Malaysian Certificate of Education (MCE) and another two years of studies for High School Certificate (HSC). Technical schools provide more courses in engineering, technical, and managerial areas.

In Melaka, there is one technical school located in Bukit Piatu.

#### Tertiary Education

Admission to any university in Malaysia is controlled by the Centre Unit of Universities (UPU)<sup>4</sup>. It is the responsibility of UPU to reduce the intake of students in the area of studies where there is a substantial graduate unemployment (an increasing problem between 1986 and 1988). It should be noted that the funding of all seven universities (including one international) comes from the Federal Government. Table 4-2 shows the output of graduates from local universities.

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<sup>4</sup> This does not include the Islamic International University.

TABLE 4-2  
OUTPUT FROM LOCAL INSTITUTIONS OF HIGHER LEARNING IN 1987/1988

Institutions	87	88	87	88	87	88	87	88	87	88	87	88
	Doctorate	Masters	Post-Graduate	1st Degree	Diploma/Cert.							
University of Malaya	4	4	75	91	562	638	2166	2240	-	-	-	-
National University of Malaysia	4	4	44	50	411	413	2313	2410	-	-	-	-
University of Sains Malaysia	4	2	19	18	-	-	1313	1360	86	112		
University of Technology Malaysia	-	-	2	12	9	109	501	605	1047	1057		
University of Agriculture	3	6	21	21	-	-	987	1045	858	1077		
Islamic International University	-	-	-	-	61	12	291	104	4595	4661		
University of North Malaysia	-	-	-	-	95	142	-	-	1068	685		
MARA Institute of Technology	-	-	-	-	29	-	124	126	-	-		
Tunku Abdul Rahman College	-	-	-	-	-	-	-	274	-	-		
TOTAL	25	26	161	192	1167	1314	7865	8154	7654	7592		

Source: Ministry of Labour Malaysia, Labour and Manpower Report 1987/88, (Kuala Lumpur, 1987)

### Polytechnics Programmes

Administered by MOE, Polytechnics have gradually revised their courses to accommodate the needs of industry. From time to time, students will undergo practical work to give them more exposure to industry. At the same time, new and up-to-date equipment and machinery has been installed. Over the years, there has been an increase in collaboration between polytechnics and the private sector in designing courses and programmes. This has been reflected in an enhanced demand for graduates from polytechnics.

In 1987/88, there were insufficient graduates from polytechnics to satisfy the demand for technicians in certain industries. This was, in part, because of the country's increased rate of industrialisation.

### Vocational Training by MARA

The Ministry of Rural Development, MARA, runs vocational institutes, called IKM and PusatGiat Mara. The institutes offer programmes in fields such as electronics, automobile mechanics, welding trades, refrigeration and wood working. So far, 30,035 youths have benefitted from the scheme. The IKMs alone can accommodate about 6,000 students at each annual intake.<sup>5</sup> To date, there are nine IKMs and fifteen PusatGiat Mara centres in the country. It was planned to set up at least

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<sup>5</sup> Ministry of Labour Malaysia, Labour and Manpower Report 1987/88, (Kuala Lumpur, 1988) p 43

one IKM in each state, but due to financial constraints, the plan has been deferred. Melaka, however, has one IKM located in Jasin.

#### Skill Training (under the Ministry of Youth and Sports)

There are three skill training institutions under the supervision of the Ministry of Youth and Sports. One of the centres is an advanced training centre. These training centres conduct three types of training, namely discipline, vocational and business. Discipline training is conducted in military style while vocational training comprises courses in motor mechanics, construction, agriculture and tailoring. As for the business training, two courses are provided: general business and specialized business. The trainees are dropouts from formal education.

#### Skill Training (under the Ministry of Labour)

In 1990, there were 10 training centres teaching more than 40 skills. The training centres known as Industrial Training Institute (ITI) aimed at industrial skills offer a range of courses. First, there is a National Apprenticeship Course which is a full three year course during which half of the time is spent at the workplace supervised by the employer. Second, under ITI courses related to Trade Skills are also offered as a two year program, of which eighteen months

training is at ITI and six months in industry. Third, there are Weekend Courses which are partime courses. Fourth, there is a Centre for Instructor and Skill Training (CIAST) where instructors and supervisors are trained. Fifth, there are Hi-Tech courses for instructors, normally held overseas. Upon return, the trainees will initially conduct new courses/skills at CIAST. In total, Malaysia has 10 ITI located in several states.<sup>6</sup> Melaka has one ITI located in Bukit Katil opened in 1989.

Table 4-3 shows the output of graduates from public institutions in Malaysia between 1985 and 1990. Tables 4-4, shows the graduates skills.

#### Private Sector Skill Training Programmes

Private sector skill training has been encouraged by the government. However, due to limited capital and shortages of trained or qualified staff, the private sector's contribution to skills training programmes concentrates on middle and low level technical training. With the new twin-training programme, this sector is expected to increase its participation.

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<sup>6</sup> Ibid p 44

**TABLE 4-3**

MALAYSIA: ENROLMENT AND OUTPUT OF SKILLED AND SEMI-SKILLED MANPOWER FROM PUBLIC TRAINING INSTITUTIONS, 1985-95

Institution	Enrolment		Increase (%)		Output		
	1985	1990	1986-90	1984-85	1986	1987	1988
Vocational schools	13883	35455	155.4	32664	8062	10605	10943
Technical schools	6230	6080	-2.4	14433	2960	3040	3040
Youth Training Centres	750	1203	60.4	3792	810	837	851
Agriculture Institutes	1015	1200	18.2	1769	390	400	400
Industrial Training Institution	2843	10330	263.4	7829	3283	4225	5716
MARA Vocational Institution	4801	6647	38.5	10794	2698	3004	3340
MARA Commercial Institution	441	1100	149.4	878	292	300	500
Tunku Abdul Rahman College	1222	2358	93.0	1818	355	435	531
Polytechnics	5373	11995	123.3	3625	2003	1991	2753
<b>Total</b>	<b>36558</b>	<b>76368</b>	<b>108.9</b>	<b>76640</b>	<b>20853</b>	<b>24837</b>	<b>28074</b>

Source: Fifth Malaysian Plan, 1986-1990, (Kuala Lumpur, 1986)



**Table 4-4**

INTAKE AND OUTPUT OF SKILLED AND SEMI-SKILLED  
MANPOWER BY COURSE FROM LOCAL PUBLIC TRAINING  
INSTITUTIONS, 1985-90.

Course	Intake		Increase (%)	Output
	1985	1990		
Engineering trades	<b>12550</b>	<b>19810</b>	<b>58</b>	<b>64040</b>
Mechanical trades	6950	11020	59	28240
Electrical trades	3930	6020	53	21110
Civil Engin. trades	1610	1410	-12	13440
Other Engin. trades	60	1360	na	1250
Building trades	2460	4180	70	12850
Printing trades	130	30	-77	170
Commerce	1800	2990	66	8890
Agriculture	510	880	73	4470
Home science	930	1420	53	4690
Others	520	1300	150	11190
Skill-upgrading	340	990	191	4730
<b>Total</b>	<b>19240</b>	<b>31600</b>	<b>64</b>	<b>111030</b>

Source: Sixth Malaysia Plan, 1991-1995, (Kuala Lumpur, 1991)

The private sector may also seek help in public training centres as in the case of ITI in Melaka. Some of the private sector firms send their employees to be trained at ITI with a small charge to the employer by ITI. The fees provide extra income to the instructor rather than for the institution. The output from private sector skill training with various courses is provided in Table 4-5.

#### Others

Apart from institutional training sponsored by the four main ministries, on-site-training and in-service training also contribute to the pool of skilled workers. On-site training for construction workers is administered by agencies like the Urban Development Authority (UDA) and the Public Work Department (PWD). In-service training is carried on by public sector agencies such as the National Electric Board, PWD and the Postal Services Department to meet their own requirement for specialized manpower. This type of training is like apprenticeship but used only in public sector agencies rather than in the private sector.

**Table 4-5**  
**OUTPUT FROM PRIVATE SECTOR SKILL TRAINING INSTITUTES**  
**1987/1988**

COURSES	1987	1988
Architectural Technician	161	119
Draughtsman	216	15
Building	145	45
Furniture Maker	18	9
Civil Engineering	453	540
Motor Engineering	225	62
Mechanical Engineer	270	154
Diesel Engineer	5	-
General Mechanic	23	41
Machining and Crafting	19	12
Craftsman	19	2
Motor Vehicle Mechanic	125	206
Diesel Technician	3	1
Gas Welder	17	17
Arch Welder	21	17
General Welder	8	5
Electrical Engineer	402	422
Electrical Technician	17	71
General Electrician	19	13
Electrical Wiremen	19	62
Electronic Engineer	398	194
Electronic Technician	44	196
Radio & TV Technician	466	549
Printing Machine Worker	13	13
Others	392	292
<b>TOTAL</b>	<b>3,556</b>	<b>3,113</b>

Source: Ministry of Labour Malaysia, Manpower and Labour Report 1987/88, (Kuala Lumpur, 1988)

### Employment Growth by Sector

The major sectors which have contributed to growth in employment are: manufacturing; wholesale, retail trade, hotel and restaurant; and agriculture, forestry and fishing. Other sectors were construction; transportation, storage and communication; finance and business sectors and; government sectors. Table 4-6 gives the growth of employment in each sector in 1985, 1990 and prediction in 1995. Table 4-7 specifically narrowed down the employment growth by sector to 1987/88.

TABLE 4-6  
MALAYSIA: EMPLOYMENT GROWTH AND ESTIMATES  
BY SECTOR, 1985-95

Sector	1985		1990		1995	
	'000	%	'000	%	'000	%
Agriculture & Forestry	1759.6	31.3	1837.6	27.8	1821.9	23.5
Mining & Quarrying	44.4	0.8	39.1	0.6	40.7	0.5
Manufacturing	855.4	15.2	1290.2	19.5	1699.1	21.9
Construction	429.4	7.6	426.9	6.4	547.5	7.1
Non-Government Services	1716.3	30.5	2177.0	32.9	2770.9	35.7
Government Services	819.5	14.6	850.2	12.8	872.2	11.3
Employment	5624.6	100.0	6621.0	100.0	7752.3	100.0

Source: Sixth Malaysian Plan 1991-1995, (Kuala Lumpur, 1991)

**Table 4-7**  
EMPLOYMENT BY SECTOR (1987/88)

INDUSTRY	1987	1988	Average Annual Growth Rate (%)	
			1987	1988
Agriculture, Forestry, Livestock and Fishing	1,876	1,908	3.8	1.7
Mining and Quarrying	37	32	0.5	1.4
Manufacturing	921	1,013	7.0	10.0
Construction	355	356	-7.2	0.5
Electrical, Gas and Water Supply	44	45	2.1	1.8
Transport, Storage and Communication	254	261	2.2	2.8
Wholesale and Retail Trade & Hotel and Restaurant	1,017	1,070	4.6	5.2
Finance, Insurance, Real Estate and Business Services	205	212	1.1	3.0
Government Services	836	844	0.9	1.0
Other Services	336	341	3.5	1.4
Labour Force	6,409	6,622	3.0	3.3
Unemployment	528.1	534.7	2.4	1.2
Unemployment Rate (%)	8.2	8.1		

Source: Ministry of Labour Malaysia, Labour and Manpower Report 1987/88, (Kuala Lumpur, 1988)

### Manufacturing Sector

According to the Fifth Malaysia Plan, the manufacturing sector showed an employment growth of 8.5% per annum from 1985 to 1990. Out of the total number of jobs created in 1985, 15.2% were accounted for by the manufacturing sector.<sup>7</sup> In 1990, this sector generated the largest number of new jobs. This will continue to happen as predicted in the Sixth Malaysia Plan, until the manufacturing sector will become the largest sector contributing to employment pool in the labour market.

This phenomenon, together with the increasing adoption of modern manufacturing technologies and production processes will create a greater demand for skilled labour to complement capital intensive operations.

### Wholesale, Retail Trade, Hotel and Restaurant Sector

The wholesale, retail trade, hotel and restaurant sector accounted for 17.3% of the total employment in 1987 and increased to 17.6% in 1988. The 52,900 new jobs were created, representing an increase of 5.2 % in 1988. Due to the Visit Malaysia Year in 1990, this sector was expected to further contribute to employment creation.

In 1990, there were 124,121 wholesale and retail trade establishments in Malaysia, of which 91% were retailers. The

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<sup>7</sup> Ibid p 25

number of retail establishments grew by 15% per annum during the 1980's.<sup>8</sup>

#### Finance and Business Sector

The finance, insurance, real estate and business sector reported an increase in employment by 3% (6,100 new jobs) in 1987-88. Its share of the total employment was 3.4% in 1987 and remained the same in 1988.<sup>9</sup>

#### Transportation, Storage and Communication Sector

The transportation, storage and communication sector contributed 261.1 thousand jobs in 1988 showing an increase of 2.8% from 1987. The total share of employment was 4.3%, unchanged from 1987 to 1988.<sup>10</sup>

#### Agriculture, Forestry and Fishing Sector

The agriculture, forestry and fishing sector increased its employment 1.7%, that is from 1,878 thousand jobs in 1987 to 1,908.3 thousand in 1988. However, in the Fifth Malaysia Plan period, the average annual growth was only 0.9%. The increment was smaller compared with other sectors. The share of employment in this sector declined from 31.3% in 1985 to

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<sup>8</sup> Sixth Malaysia Plan 1991-1995, (Kuala Lumpur, 1991) p 215

<sup>9</sup> Ibid p 256

<sup>10</sup> Ibid p 276

27.8% in 1990.<sup>11</sup> However, it remains as the largest share in the total employment.

#### Construction Sector

According to the Sixth Malaysia Plan, the construction sector showed a decline in growth (-0.1%) during Fifth Malaysia Plan period. In 1985, this sector had 429,400 employees but in 1990, it was only 426,900. This sector's share declined from 7.6% to 6.4%. The decline was mainly due to the sluggish growth of economy during the period. The Plan also predicted that this sector will indeed expand and create 120,600 new jobs between 1991 and 1995. This means an annual growth of 5.1%.<sup>12</sup> This is in line with the development expectations. As the economy becomes more industrialized and broad-based, more employment will be created in the construction sectors while employment contribution of the primary sectors will decline.

#### Government Services Sector

In the Fifth Malaysian Plan, government services provided 30,700 new jobs, for a growth of 0.7%. Between 1987 and 1988, the increase was 1%. The increase was mainly due to cater for additional manpower requirements in health and educational

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<sup>11</sup> Ministry of Labour Malaysia, Labour and Manpower Report 1987/88, (Kuala Lumpur, 1988) p 20

<sup>12</sup> Sixth Malaysia Plan 1991-1995, (Kuala Lumpur, 1991) p 30



services. In the Sixth Malaysia Plan, the government sector is expected to increase 0.5%, generating 22,000 new jobs.<sup>13</sup>

#### Mining and Quarrying Sector

Two mineral resources play a major role in the Malaysian economy, namely tin and petroleum. Other minerals include copper, gold, bauxite, iron-ore and coal. The average annual growth declined 2.5%, which translated into a labour force reduction of 5,300 employees.<sup>14</sup> This is largely due to the fall in employment in tin mining, which is the main component of mining employment, following the world tin market crisis in 1986. However, in future, according to the Plan, this sector will recover for a growth 0.8% annually (1991-1995). This mainly comes from the increasing importance of petroleum and natural gas.

#### **The Economy of Melaka**

Broadly, the sectoral contributions to GDP reflects the employment share for the Melaka economy as in Table 4-8. Initially, agriculture sector was seen as the main economic force in Melaka. However, in recent years, the Melaka economic planning unit has channelled the economic activities towards an industrialization.

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<sup>13</sup> Ibid p 32

<sup>14</sup> Ibid p 30

**Table 4-8**GROSS DOMESTIC PRODUCT IN MELAKA BY SECTOR (1982/87)

INDUSTRY	1987	1988
Agriculture, Forestry, Livestock and Fishing	23.2	24.0
Mining and Quarrying	0.1	0.1
Manufacturing	18.7	18.9
Construction	7.1	5.0
Electrical, Gas and Water Supply	0.9	1.1
Transport, Storage and Communication	4.4	3.2
Wholesale and Retail Trade & Hotel and Restaurant	18.1	20.8
Finance, Insurance, Real Estate and Business Services	4.3	3.0
Government Services	23.0	23.9
Total	100	100

Source: Unpublished paper from State Economic Development Corporation

The Chief Minister of Melaka is reported as declaring an intention to turn Melaka into a fully industrialized State by the year of 2000.<sup>15</sup> At present, the industrial sector has become the main sector contributing to employment as well as GDP. In 1991, 32% of the GDP was contributed by the industrial sector. According to 'Operation Master Plan'

<sup>15</sup> The Straits Times, 'Melaka aims to be fully industrialised by year 2000', Jan 3, 1991.

(OMP), an agency that is handling heavy industrial projects, 50% of Melaka's GDP will be contributed by the sector by the end of 2000.

It is expected that spill over development from Klang Valley and Johor will help the economy of Melaka to grow. This is because Wilayah Persekutuan Kuala Lumpur and Selangor are beginning to experience excess pressure on capital resources.

The second sector that has a potential growth is Wholesale, Retail Trade, Hotel and Restaurant and other businesses that are related to tourism. Melaka is well known for its historical resources and has a potential to be the main tourist destination in Malaysia. On this basis, several plans have been made by the State government to improve the Tourism sector. In 1992, Malaysia has launched a visit ASEAN year where tourists from neighbouring countries are encouraged to visit Malaysia. This will further strengthen tourism as the second largest employment generating sector.

Melaka experienced significant growth in the number of retailers. In 1980, Melaka had 3,249 units of retail trade and in 1990, it increased to 4,465 units. In 1990, the number of wholesalers had declined significantly in Malaysia except for the state of Melaka where they increased from 762 units to 1,114 units.<sup>16</sup> This sector is expected to further contribute

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<sup>16</sup> Sixth Malaysia Plan 1991-1995, (Kuala Lumpur, 1991) p 216

to employment creation, especially with the current focus on tourism as an important revenue-earner.

## CHAPTER 5

This chapter identifies the advantages and disadvantages of a centralized approach to education and skills training versus a more decentralized approach. In this regard, the decentralized approach in Canada can be contrasted with the centralized Malaysian system. It is useful to consider the issue from the perspective of Nova Scotia and Melaka. Both are small communities within larger federal systems. However, in Nova Scotia, in contrast to Melaka, the provincial government has constitutional jurisdiction over education. There is, however, significant federal involvement in funding skills training and, in certain areas, establishing national standards.

Education in Canada is an area of provincial jurisdiction. Nevertheless, post-secondary education is assisted by federal funding. Manpower policy is an area of federal jurisdiction. This leaves responsibility for skill training somewhat ambiguous.

Prior to 1985, skill training in Nova Scotia was cooperatively supervised by the Department of Education and the Department of Labour and Manpower in the province. Each department had a subdepartment to handle vocational and technical training. Eventually, problems were identified, including the fact that each subdepartment had to go through its own department before it could communicate with the

other.<sup>1</sup> This created a lag leading to a mismatch in occupation needs with training. Subsequently, both subdepartments combined as the Department of Vocational and Job Training. Later, the department was renamed the Department of Advanced Education and Job Training to enable a coordination between university and occupational training institutions.

### **Funding**

Funding for occupational training in Nova Scotia is fundamentally different from that in a state such as Melaka. Primary and Secondary education, that is grade 12 and lower, are funded jointly by the province and municipalities. Post secondary education is funded by the province and federal government in addition to students fees. However, some grade 12 courses in vocational schools are funded by federal transfers. Funding is also available through the Canada Employment and Immigration Commission (CEIC) for manpower training.

Until 1977, federal financial contributions were in the form of conditional cost sharing arrangements with the provinces. In 1977, the Federal-Provincial Fiscal

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<sup>1</sup> Nova Scotia, Report of The Royal Commission on Post-Secondary Education (Nova Scotia, 1985), pp 5-56.

Arrangements and Established Program Act introduced a block funding approach to hospital insurance, medical insurance, and post-secondary education on an equal per capita basis.<sup>2</sup> The block funding comes in two components of Established Program Financing: a tax point transfer, and cash grants.

Besides the funds from EPF, the CEIC under the Employment and Immigration Reorganization Act of 1977 also plays an active part in funding of occupational training. CEIC was made responsible for the development and utilization of labour market resources in Canada, for employment and unemployment services, and immigration. CEIC finances adult training by buying training blocks from the province for adult trainees.

The National Training Act, 1982 replaced the Adult Occupational Training Act, 1967. The Act is an attempt to achieve more federal-provincial cooperation regarding training which is reflected in the establishment of joint federal-provincial committees. Under this Act, the federal government pays all the costs associated with adult training as well as providing income support to trainees during their training.<sup>3</sup> Course content, training methods, and the delivery of training is left in the control of the province.

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<sup>2</sup> Malcolm C. Brown, Established Program Financing: Evolution or Regression in Fiscal Federalism? (Canberra, 1984), pp 11-13

<sup>3</sup> Shannon Shanford, Thesis on Occupational Training in Nova Scotia, (Economics Department, Acadia University, 1988) p 16

Table 5-1 gives the expenditure on the occupational training collectively from different sources in 1985 to 1988.

**TABLE 5-1**  
EXPENDITURE ON OCCUPATIONAL TRAINING, 1985-88

Years	1985-86	86-87	87-88
Federal	86,352	88,362	85,168
Provincial	25,361	31,916	38,934
Municipal	-	-	-
Fees	1,567	1,762	1,819
Other	378	459	2,119
<b>Total</b>	<b>113,658</b>	<b>122,499</b>	<b>128,040</b>

Source: Statistic Canada Financial Statistic of Education  
(Ottawa: Supply and Services)

### **Occupational Training Institutes**

Occupational Training Institutes in Nova Scotia can be separated into seven different categories, discussed below.

#### **Secondary Schools**

Secondary school students are exposed to the introductory level of occupational training. These courses prepare the students for further training in a particular trade.



### Vocational Training

In Nova Scotia, there are 14 vocational schools, 11 of which are operated by the Department of Advanced Education and Job Training and the other three are district vocational schools operated by amalgamated school boards. All 14 vocational schools operate independently in determining their courses and standards. Course lengths and admission qualifications vary by school. Normally, the school operates from September to June.<sup>4</sup> Students are given the privilege of transportation with some financial allowance. These schools are required to submit course outlines to the department.

### Technical Training

Technical schools are considered post-secondary institutions. They provide higher level training than vocational or apprenticeship programs. Technical schools involve mastering high technical skills. Qualification for admission is completion of grade 11 or 12 with high school courses in Maths and Sciences.

In Nova Scotia, there are three technical schools; the Institute of Technology, the Land Survey Institute and the Nautical Institute.<sup>5</sup> In addition, technical programs are also

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<sup>4</sup> Ibid p 9

<sup>5</sup> Ibid p 18

offered at University College of Cape Breton (UCCB) and at Nova Scotia Agriculture College.

#### Apprenticeship Program

An Apprenticeship Program is a combination of on-the-job training with institutional training. Most of the courses of apprenticeship programs are at the vocational level. Apprenticeship is concerned with trades that require skill and a diversified knowledge of the particulars of a craft. This is different from other trades because it requires much more comprehensive knowledge and experience in a trade. There are four different levels of entry into this program. A prominent aspect of the apprenticeship program is the block release method of entry. Through this method, the federal government pays the cost of the entrant who already holds a job. The entrant will take leave from his or her trade-related employment and take block release training at one of the occupational training institutes. The federal government pays the training costs as well as unemployment insurance benefits for the trainee. Examples of apprenticeship trades in Nova Scotia are Carpentry, Cooking, Electrical Construction, Industrial Electrical, Plumbing and others. This program is the responsibility of the Provincial Apprenticeship Board which is under the Department of Advanced Education and Job Training. Unlike other occupational training programs, a

graduate from a 'Red Seal Program' can practice his or her specified trade in any other provinces in Canada.<sup>6</sup> This program is funded more by the federal than the provincial government because the share is justified on the grounds that the individual's productivity contribution is national in scope.

#### Universities

Some university programs are considered technical education. The principal programs are the technician and technology programs at the Agriculture College and the technical program in UCCB.

#### Private Sector Institution and Workplace Training

Examples of the courses include business practices, Secretarial studies, foreign languages, and computer programming. Nova Scotia firms consider industrial training more a liability than an investment.<sup>7</sup> Therefore, the private sectors does not play an active role in industrial training but relies mostly on government for training labour.

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<sup>6</sup> Nova Scotia, Report of The Royal Commission on Post-Secondary Education (Nova Scotia, 1985), pp 5-56. The 'Red Seal Program' is one of the types in the apprenticeship program.

<sup>7</sup> Kilmorack Consultants, Canada/Nova Scotia Apprenticeship Study (Unpublished paper, 1987) p 12

### Institutional Adult Training

This program offers an opportunity to upgrade skills for workers who already have employment. This is important because as technology changes, these labourers need to be upgraded or retrained. Adult training is provided by the Department of Advanced Education and Job Training through one of the Adult Vocational Training Centres in Cape Breton or Dartmouth. These institutions offer a broader range of courses than the vocational schools.

Table 5-2 features the enrolment figures in various occupational training institutes from 1977 to 1985. The table separates the occupational institutions into four subsets; High schools, Vocational schools, Adult Trainings and Technical Institutes. It shows that high school and adult training has had a declining enrolment throughout the years. Enrolment in Vocational schools remained steady with the exception of the decline in 1984-85. Technical institutes reported an increasing enrolment. However, overall, the enrolment in occupational training has been declining.

**TABLE 5-2**

ENROLMENTS IN OCCUPATIONAL TRAINING INSTITUTIONS

Institutions	1980-81	1981-82	1982-83	1983-84	1984-85
High Schools	367	406	222	271	256
Vocational School	6310	6366	6558	6224	5826
AVTCs and Modules	4197	4344	3812	3511	na
Technological Institutes	1481	1613	1651	1690	1690
Total	12,355	12,729	12,243	11,696	na

Sources: MacLennan, Rod J. (chairman) (1985) Report of the Nova Scotia Royal Commission on Post-Secondary Education 1985 (Halifax)

### **Canadian Job Strategy (CJS)**

CJS is central to manpower training in Canada. It was established in 28 June, 1985 under the CEIC. The main purpose of CJS is to induce economic growth so as to create more employment opportunity within the Canadian economy.<sup>8</sup> In this program, the federal government shares the cost with the employer. This program acted as an incentive for firms to participate in on-the-job training. As the result, trainees can keep up with the pace of technological change more closely and to increase their work efficiency.

The skills shortages program focuses on training individual in skill that are in short supply. The job entry (re-entry) program is to assist workers in making the transition from home or school into workforce. The program provides financial assistance for employers to hire these people. The summer employment program helps to solve the cyclical employment problem that exists four months of the year. Job creation projects are available to assist business in completing a project and for unemployed individuals who may wish to utilize their skills and experience while unemployed. The work sharing program is aimed at maintaining business workforce during a temporary slow-down caused by short term adverse economic conditions. This will stabilize the

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<sup>8</sup> Gunderson/ Riddle, Morley/ Craig, Labour Market Economics, (Toronto , 1988)

unemployment rate (frictional unemployment). In this program, employees will share the work (to avoid lay offs) and the federal government compensates them for the costs incurred. The last program of the CJS is the industrial adjustment service. It provides a forum for employees to get together and discuss the implementation of new employment measures. The interaction between employer and employees is presumed to bring higher productivity with employees adjusted to technological change.

This strategy is a cohesive approach to the needs of the labour market. However, conflict may arise with provincial manpower policies and this may cause further labour market imbalances.

#### **Canadian Occupation Projection System (COPS)**

Whether in Canada or Malaysia a labour supply programme requires a demand forecasting mechanism. An effective mechanism must be able to identify skills that will be in shortage or in surplus, before the event occurs. The projection of future labour demand and supply is vital for evaluating and improving any occupational training system. The job of such projections is undertaken by Canadian Occupational Projection System (COPS) which was developed by

CEIC. The system was then adopted by the Nova Scotia Department of Advanced Education and Job Training.

COPS has the role of influencing the behaviour of governments, employers and individuals to help prevent medium to Long Term labour imbalances. Information is made available on the supply and demand for workers by region and occupation. The information obtained should allow for better planning of government policies, industrial strategies, and individual careers.

On the demand side, government and industry cooperate with one another to provide information on the future growth of industry. The outcome of the interaction will then be analyzed to determine any problem in the future. Given the current trend available on labour supply, appropriate action will be then taken to rectify the potential problems.

Projections depend on the current and past structure of industries, technical change, environmental factors, and occupational concentration in industries. These make the process complicated. COPS may very well project annual growth in employment by occupation, but projections on opening an imbalance are not totally reliable. This has been evident in the failure of COPS to project the strong surplus in trades like chefs and cooks, auto mechanics, boilermakers, welding and construction.



### **Centralization versus Decentralization**

Having described occupational training in Nova Scotia and with the knowledge of skill training in Melaka from Chapter three, a comparison of the two approaches can be undertaken. Both Nova Scotia and Melaka are small components in larger federations. However, both have very different underlying approaches to skills training and socio-economic circumstances.

In Malaysia, labour migration between states is extensive. For example, in 1980, 58,100 people migrated into Melaka while 149,800 migrated from Melaka to other high-income states.<sup>9</sup> The majority of the people migrating are at the working age. Table 5-3 shows the net internal migration and the distribution of population among the states in Malaysia. Graduates from any training institutes in Melaka can serve an industrial needs in any states in Malaysia. The same goes for other states' graduates from training institutes. The certificate received from the training centres are standardized throughout Malaysia. Because of this, the state government of Melaka does not have to contribute any funds to any training institute. However, this could be the effect of having centralized planning in skill training.

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<sup>9</sup> State Economic Development Corporation of Melaka, Paper on Population of Melaka, Unpublished paper, 1980)

TABLE 5-3  
NET INTERNAL MIGRATION ('000) IN 1986-90  
AND THE DISTRIBUTION OF POPULATION AMONG THE STATES

States	Net Migration	Population
Kedah	-54.1	1,077.81
Perak	-98.1	1,743.65
Perlis	-0.5	144.78
Pulau Pinang	-3.0	900.77
Melaka	-29.5	446.77
Negeri Sembilan	-20.1	551.44
Selangor	127.8	1,426.25
Federal Territory of Kuala Lumpur	34.8	919.61
Kelantan	-29	859.27
Pahang	98	768.80
Trengganu	-2.5	525.25
Johor	-13.6	1,580.42

Source: Fourth Malaysia Plan 1980-1985, (Kuala Lumpur, 1980)

It was revealed in chapter four that problems with unemployment and shortages are minor. On the other hand, the problems may not appear directly because of the ineffectiveness of public training centres. Unemployment arises because of many factors. Although inability of public training centres to provide appropriate trades may be one of the reasons, it is impossible to prove this as unemployment from others factors such as frictional and cyclical unemployment occurred simultaneously.

In line with the goals of the NEP to reduce the disparities in economic development between states, having centralized skills training and education is a reasonable thing to do. Some states are more wealthy than others due to their natural resources, such as oil in Trengganu or timber in Sabah. Other states may be wealthier due to the concentration of investment in the area, such as Selangor being close to Federal Territory of Kuala Lumpur and the main port in the country, Port Klang. If skill training centres were to be under state government jurisdiction, some states would be able to provide far better equipment as well as institutions than would low income states such as Kedah and Kelantan. If this is the case, not all states would have the same kind of training centres. This would widen the disparities in economic development between states. However, in comparison with Nova Scotia, a federal equalization or education grants could be used to permit decentralization. (see below for further discussion)

A major disadvantage of having centralized economy is with the issue of political power. The state government of Melaka has no power of intervention in the management of education and skill training. Any development planned in Melaka made by SEDC may not reflect the education or skill training policy. This is because skill training and education policies as clarified, are made by the EPU in the federal

government through a five-year-plan. Any sudden changes in economic development in Melaka may not reflect the policies undertaken by the ministries in Melaka that are related to education and skill training. This may lead to a gap in the projection of employment requirement. The state, if given the power, may very well enjoy it and to the extreme may manipulate the power of managing the training centres. Since not all the states have skill training centres, some states are required to admit trainees from other states. This situation could lead to discrimination. For example, the admission for an institution in Melaka is limited and if it were managed by the state government, priority would be given to Melakans.

Having decentralization in decision-making for skill training may not widen the disparities in economic development between states. As in Nova Scotia, Melaka may not have enough money to keep the system going. However, as in Nova Scotia, fiscal equalization or grants for education could be used to promote decentralization. Using this method, states with lower incomes receive grants from the federal government to equalize their expenditure on skill training or education to the level of the higher-income states.

Melaka would benefit from having the power to manage its skill training as mentioned in the disadvantages of

centralized skill training policy. However, the system would not work if the restructure only concerns skill training and not the economic system as a whole. For example, the ministries that handle skill training issues are not only the Manpower Department and Ministry of Education, as in Nova Scotia, but also a few other ministries. If Melaka were to have decentralization, all these ministries would have to be reoriented to incorporate the state perspective.

Having the ability to manage skills training also requires having the facilities. At present, the state of Melaka is not equipped with the facilities needed to conduct the whole system. Furthermore, some of the costly tasks will then have to be undertaken by the state, for example, the projection of employment and sending instructors abroad for training. The administration cost will increase drastically due to such changes and in Nova Scotia, it would reflect in higher fees paid by the trainees.

Melaka is fairly small in comparison with other states in Malaysia. The cost of having dependent skill training may be reduced if it is managed regionally rather than by state. The Fourth and Fifth Malaysia Plan were designed to reflect regional development. However, this approach is not emphasized as much in the Sixth Malaysia Plan. Planning and programming in the regional basis may capture the benefits of any large-scale project such as a training institution.

Furthermore, planning on the regional level can lead to a reduction in overlapping investment and duplication of projects.<sup>10</sup> The central region of Malaysia consists of Selangor, Federal Territory of Kuala Lumpur, Melaka and Negeri Sembilan. Having the state of Selangor in the region may guarantee success because Selangor is one of the high-income states in Malaysia. Having the plan on a regional basis promised a spill-over of the Selangor economy's advantages to Melaka whenever the development in Selangor becomes over extended.

This is an issue of major reform that should be taken seriously. If the reform leads to greater efficiency and productivity, the Malaysian economy would be better off. A cost and benefit analysis should be taken to confirm the success of this suggestion.

Skill training in Melaka, however, if not reformed could be modified to upgrade the performances. From the appraisal of Nova Scotia occupational training approach, a few recommendations can be taken into consideration. In Malaysian skill training as a whole, there is no mention of the apprenticeship programmes. On-the-job training exists as one of the requirements made by certain institutions and by public sector in training potential employees. The apprenticeship program as in Nova Scotia may be used to upgrade the skills of

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<sup>10</sup> Fourth Malaysia Plan 1980-1985, (Kuala Lumpur, 1980) p 145

employees who have not had the opportunity to do so because of their existing jobs.

Melaka could also apply the Canada Job Strategy procedure to present its function as an organization to eradicate unemployment. However, the implementation of this must be accompanied with some modification of the existing system to avoid conflict.

Another issue that has been forgotten is private service skill training. Recently, the federal government became concerned with the participation of the private sector in skill training. Nevertheless, even with private skill training institutions, government will make sure that some kind of subsidies will be paid. This is to reduce the tuition fees required of entrants. At present, some public institutions even provide the trainees with allowances rather than having them pay for the course. The aim of the NEP is to eradicate poverty and restructure society. Education is a rational and a long term means to solving the problem. It may be helpful to remember that whenever an economic slow-down occurs, the first level of society that is going to hurt the most are the blue-collar workers. Those without skill are among the first to lose their jobs.

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