CHAPTER 3

EDUCATIONAL FUNDING, POVERTY REDUCTION AND INCOME DISTRIBUTION IN MALAYSIA, 1970 – 2000

3.1 Introduction

The two prongs of the New Economy Policy (NEP) seek to eradicate poverty and the correction of racial imbalances in Malaysia. To achieve broad-based growth resulting in effective poverty reduction, an investment in human capital has been identified as one of the high priorities. According to the Second Malaysia Plan (SMP) (Malaysia, 1969),

> "....policies and programmes will be directed at: Providing a wide range of free or subsidised social services especially designed to raises the living standards of the low-income groups. Such services include public housing projects, subsidised rates for electricity, water and transportation, health and medical services, improved educational opportunities and increased recreational and community facilities." (page 4-5, SMP)

The Government of Malaysia had increased the total government budget allocation to the social services from 11.4 percent in 1970 to 31.3 percent in 2000. And by year 2005, it will increase to 40 percent, with an emphasis on improving access to services for the poor (Malaysia, 2000). However, increasing the budget allocation is only half the battle. The systems that take the resources and produce the services must also be effective, efficient, and pro-poor, in order to make an impact on the ground.

The objectives of this chapter are to investigate the relationship between educational expenditure, its dispersion and income distribution in Malaysia. The remainder of this chapter is organized as follow: - Section 2 is devoted to the background of education, poverty and income distribution scenario in Malaysia between 1970 to 2000; while section 3 is devoted to analyzing the utilization of social expenditure especially the educational funding in eradicating poverty and ameliorate income inequality in Malaysia. Finally, section 4 concludes.

3.2 Education, Income Inequality and Poverty in Malaysia—some background

3.2.1 Overall development

Malaysia has made tremendous strides in improving the education levels of its population over the past quarter century or so. Substantial gains have been made, especially in keeping children in school and increasing access, but there are growing concerns about the educational quality and there is a move to increase the private provision of education. As Table 3.1 indicates, not much progress was made in improving gross primary enrollment rates between 1965 and 1994. Although gross primary enrollment rose until the mid-1980s, it has fallen back since then. Since gross enrollment rates measure all students in primary education, including those who have missed years, they may mask improvements in keeping school-age children in school.

That this might be the case is suggested by the increase in gross enrollment rates at the secondary level from 28 to 59 percent in 25 years (World Bank, 1998). A recent effort to extend education may also be increasing secondary enrollment rates.

According to government statistics, nearly two-thirds of children continued to upper secondary from lower secondary schools in 1995, compared to half in 1990 (Malaysia, 1999).

Apart from keeping children in school, Malaysia has managed to ensure that the poor are relatively well educated, at least compared with the poor in many other countries. The heads of poor households have an average of 6.3 years of education, compared to an average 8.2 years for all heads of household (Malaysia, 1994).

Table 3.1:
Education in East Asia

Country	Gross Enrollment Primary (%)		Gross Enrollment Secondary (%)		Public Education Expenditure (% of GNP)		Secondary Pupils (% Females)	
	1965	1994	1970	1994	1980	1995	1970	1994
Chile	124	99	34	68	4.6	2.9	57	54
Indonesia	72	114	12	48	1.7	1.3	11	44
Japan	100	103	82	99	5.8	3.8	50	50
Korea	101	101	35	98	3.7	3.7	39	47
Malaysia	**90**	**91**	**28**	**59**	**6.0**	**5.3**	**41**	**51**
Mexico	92	115	17	58	4.7	5.3	NA	48
Singapore	105	NA	45	NA	2.8	3.0	51	50
Thailand	78	91	14	48	3.4	4.2	41	50

Source: World Development Indicators, 1998

There are concerns that differences are growing between urban and rural areas, in terms of access and quality. A 1995 study found that only 20 percent of rural students received excellent grades in English, compared to 40 percent of urban students (Barro and Lee, 1993). Similarly, only 35 percent of rural students performed well in mathematics, compared to 48 percent of urban students. Rural students often have many more obstacles to overcome than urban students, such as longer travelling distances and constantly changing and inexperienced teaching staff. Although efforts have been made to remedy these problems, by building more schools in rural areas, hostels for rural students, or teachers' residences, the difficulties remain.

In term of poverty reduction, real average per capita income increased 2.5 times and poverty rate shrank from slightly over half of the population to 1.8 percent over a quarter of a century (1973-95), an impressive achievement. If poverty reduction continues at the same rate, there would be no one left below the poverty line of $2 international dollars a day by 2003 (World Bank, 2001).

This progress in poverty reduction measured in income terms is mirrored by improvement in social indicators. Malaysia's achievement in increasing life expectancy and diminishing infant mortality are particularly impressive, especially considering Malaysia's relatively low public expenditure on health of 1.4 percent of GDP in 1994 (Malaysia, 1995). Secondary school enrollment for both girls and boys also increased rapidly, from 28 percent in 1970 to 58 percent in 1996, bolstered by relatively high public investment in education (Table 3.1). In absolute terms, however, enrollment remains slightly below average of 62 percent for upper middle-income countries (World Bank, 2001). Early gains in primary school enrollment have

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also not yet resulted in universal primary enrollment, however, and the gross primary enrollment rate has remained stubbornly under 92 percent since 1980 (Table 3.1).

As poverty rates have fallen, income inequality has decreased (see Table 3.2). In fact, Malaysia was one of the few countries in East Asia where inequality fell over the past few decades. Despite this long-term reduction in poverty rates, the trend has reversed itself since 1990. This reversal largely reflects regional differences in income growth. Overall, Malaysia remains among the most unequal countries in East Asia.

Part of the explanation for the increased inequality may be that the poor are concentrated in three states. Half of all poor households are concentrated in Terengganu, Kelantan and Sabah. The poverty rates in these states are 33 percent, 27 percent, and 18.5 percent respectively (World Bank, 2001).

If the poor are to benefit from economic growth, then they need the skills that are in growing demand, and the capacity to raise their productivity as smallholder farmers and micro entrepreneurs. Educating the poor peoples spreads the benefits of growth, aside from raising human development directly. And investment in the human capital of the poor raises growth itself.

Table 3.2
Inequality in East Asia

			Gini coeficient (percentage points)	
Economy	Period	Measured variable	First year	Last year
Korea, Rep. Of	1970-88	I/H	33.3	33.6
Malaysia	1973-89	I/P	50.1	45.9
Thailand †	1975-92	E/P	36.4	46.2
Indonesia	1970-95	E/P	34.9	34.2
Philippines	1985-94	E/P	41.0	42.9

Notes:
(1) I/P is per capita income, E/P is per capita expenditure, and I/H is income per household. The numbers in this table may be marginally different than those reported in other reports based on unit record data. For the sake of consistency across countries, we only report Ginis based on grouped data, except for Korea, which is from Deininger and Squire 1996.

† Thailand is the only country for which we can present Ginis based on both expenditure and economies income distribution. The per capita income-based Gini (I/P) was 42.6 percent in 1975 and 54.6 percent in 1992.

Source: Deininger and Squire (1996), and World Bank (2001).

Although growth was the primary means of reducing the incidence of poverty, the Government of Malaysia has had a strong commitment to reducing overall poverty since the 1960s. The government launched the New Economic Policy (NEP), an action plan designed to pull poor Malays into mainstream of the country's economic system. The NEP introduced a series of government regulations, quotas, scholarships, and other privileges designed to help Malays. The results have been impressive: Malay's share of national wealth jumped to 20.6 percent in 1995 from 2.3 percent in 1970 (Malaysia, 2000). Much of the NEP's success is attributed to education as the

number of Malay doctors, lawyers, and engineers drastically increased and racial stereotypes became obsolete.

3.2.2 Income inequality

Income inequality or relative poverty is measured using two indicators. The first gives the income share by top 20 percent, middle 40 percent and bottom 40 percent of houses and the second measure is given by the Gini coefficients. The most common measure of income inequality in Malaysia is the Gini coefficient.

The overall household income distribution is given in Table 3.3. In 1970, the overall Gini coefficient was 0.513 and by 1995, the income inequality declined to 0.464. As a whole, inequality had worsened initially until the mid-1970s and after that steadily declined. The income share of the bottom 40 percent of households has increased from 11.5 percent in 1970 to 14.5 percent in 1989. On the other hand, the income share of the top 20 percent had declined from 57.7 percent in 1970 to 50.3 percent in 1989. The mean and median household income in 1976 was RM514 and RM313 respectively. In the last two decades, there has been a huge increase in household income. By 1989, the mean household income was RM1, 163 and the median income was RM808. Malaysia was thus able to achieve a significant improvement in income distribution whereby the income of the poor increased by a higher percentage compared to the incomes of the rich.

Households at the bottom of ladder were found to involved in small-scale agricultural activities, other small-scale family activities and unskilled labour (Tan, 1982). Tan's

study also found that movement into higher brackets of income is related to one's education.

Among the states in Malaysia, the lowest Gini coefficient in 1989 was recorded for Johor with 0.386. The highest coefficients were for the East Malaysian states of Sabah and Sarawak with 0.459 and 0.448 and surprisingly for the rich states of Selangor and Terengganu where the Gini coefficient were 0.448 and 0.457 respectively (Malaysia, 1989). Among the reasons for higher coefficients for these richer states (in terms of GDP) is the migration of workers to these states in search of higher paying jobs and development projects undertaken by the government did not directly benefit the poor.

Table 3.3
Distribution of Household Income
in Peninsular Malaysia, 1970-1989

Strata by income level	Income Share (in Percentage)					
	1970	1976	1979	1984	1987	1989
Top 20%	55.7	57.7	55.8	53.2	51.2	50.3
Middle 40%	32.9	31.2	32.4	34.0	35.0	35.2
Bottom 40%	11.5	11.1	11.9	12.8	13.8	14.5
Gini coefficients	0.513	0.529	0.508	0.48	0.456	0.445
Mean household income (RM)	204	514	693	1,095	1,074	1,163
Median household income (RM)	N/A	313	498	723	738	808

Source: Ishak and Ragayah (1995)

Due to the disparities in income among the ethnic groups, most of the studies that have been done were inequalities of income among the ethnic groups. Income

disparities in 1970 among the ethnic groups as measured by the Gini coefficient were 0.4553 for the Malays, 0.4542 for the Chinese and 0.5003 for the Indians (Ishak and Ragayah, 1995). Table 3.4 shows the mean income among the three major ethnic groups in Malaysia. The mean income for the Malays was half of that Chinese in 1970. By 1987, the income differential between the two ethnic groups had decreased even though the gap was still wide.

Table 3.4
Distribution of Income by Ethnic Groups, 1970-1987

	Malays				Chinese				Indians			
Share of income	'70	'73	'84	'87	'70	'73	'84	'87	'70	'73	'84	'87
Top 20 percent	52.2	52.8	53.9	52.0	52.8	53.0	51.7	49.0	56.7	51.6	50.2	50.7
Bottom 40 percent	14.8	13.8	13.1	14.0	14.3	14.7	14.4	16.0	13.7	15.8	15.9	16.2
Bottom 20 percent	5.2	4.9	4.5	5.0	5.3	5.4	5.2	6.0	5.0	6.2	5.9	6.2
Mean per capita income (current prices)	34	48	179	179	68	93	314	290	57	75	210	218
Mean per capita income (1987 prices)	77	95	183	179	154	182	321	290	129	146	215	218

Source: Bhalla and Kharas (1992)

The NEP's objective of achieving equity between ethnic groups was a success as the inequality had declined during the span of 17 years. The real growth in income for the

Malays from 1970 to 1987 was 132 percent while the corresponding figure for the Chinese was 88 percent and the Indians was 69 percent.

The rural-urban income differentials had initially decreased but again widened during the 1990s (Table 3.5). The structural transformation of the Malaysian economy has increased the rural income per capita from RM51 in 1973 to RM260 in 1995. The urban income per capita has also increased but at a lower rate compared to the increases experienced for the rural income. In 1973, the urban income per capita was RM104 and in 1995, it was RM519.

Table 3.5
Rural-urban Inequality 1973-1995

	Rural				Urban			
Share of income	1973	1984	1987	1995	1973	1984	1987	1995
Top 20 percent	51.4	50.7	49.2	-	55.2	52.4	51.2	-
Bottom 40 percent	14.3	14.4	15.5	-	13.4	13.9	14.6	-
Bottom 20 percent	5.0	5.0	5.5	-	4.8	5.0	5.2	-
Mean per capita income (current prices)	51	166	169	260	104	327	314	519
	1973		1984		1987		1995	
Rural/Urban mean per capita income ratio	0.498		0.509		0.538		0.500	

Source: Bhalla and Kharas (1992) and Malaysia (1996)

Overall, the income differential between rural and urban was large whereby in 1995, the mean capita income of the rural sector was only 50 percent of that in the urban sector.

3.2.3 Poverty and measurement of poverty

The frequently used measure of poverty in Malaysia is the poverty line income or PLI. The PLI is a monetary equivalent of expenditure sufficient to meet a decent standard of living to cover basic needs of shelter, food, clothing, fuel, energy, transportation, communication, education, health and recreation. Hence, PLI is average monthly household income per capita.

The poverty line has been changed over the years where RM33 per capita was used in 1973 and by 1990 the poverty line was RM92 per capita. Table 3.6 gives the poverty line used from 1970 to 1999. Households having incomes less than the poverty lines are considered "poor" while those having income less than half the poverty line is considered to be "hardcore poor". Based on the figures, the poverty line has increased by 136 percent from the year 1970 to the year 1995.

Table 3.6
Poverty Line Income (PLI) for 1970-1999

	Peninsular		Sabah		Sarawak	
Year	Household size	RM	Household size	RM	Household size	RM
1970	5.40	180	-	-	-	-
1976	5.40	243	5.4	377	5.60	307
1979	5.14	274	5.4	410	5.60	347
1984	5.14	349	5.36	540	5.24	428
1987	5.14	350	5.36	533	5.24	429
1989	5.14	370	5.36	544	5.24	452
1990	5.14	384	5.36	656	5.24	469
1993	4.80	405	5.10	582	5.10	495
1995	4.60	425	4.90	601	4.80	516
1997	4.60	460	4.90	633	4.80	543
1999	4.60	510	4.90	685	4.80	584

Source: Malaysia Plan (various years)

Another measure of poverty is the "poverty gap" which measures the extent to which incomes fall below poverty line. Anand (1991) showed that the poverty gap was 4.8 percent of GDP in 1976 while Bhalla and Kharas (1992) suggested a decline in the poverty gap from 4.3 percent of GDP in 1973 to 0.9 percent of GDP in 1987.

Studies on poverty in Malaysia have identified some of its causes. A study by Aziz (1964) found that the main causes of poverty among the Malays who formed the majority in Malaysia were due to low paying jobs in the rural areas especially in the agricultural sector and the exploitation of peasants by middlemen. Salleh (1977) however postulated that Malay poverty is due to unequal access and opportunity. The access to education resources, credit and housing are limited as the Malays usually reside in rural areas.

Education was found to be the most important explanatory variable in the determination of poverty in Malaysia (Visaria 1981). The study also found that the poor households consist of agricultural workers, self-employed and family helpers, paddy farmers, fishermen, and workers involved in traditional manufacturing activities. In Table 3.7, the incidence of poverty between the years 1970 and 1999 is given.

Table 3.7
Incidence of poverty and number of poor households, 1970-1999

	1970	1975	1980	1985	1990	1993	1995	1997	1999
Incidence of poverty (%)	49.3	43.9	29.2	20.7	17.1	13.5	8.7	6.1	7.5
Number of poor households ('000)	1606	835.1	666.1	649.4	619.4	517.2	365.6	274.2	351.1
Incidence of hardcore poverty (%)	N/A.	N/A.	N/A.	6.9	4.0	3.0	2.1	1.4	1.4
Number of hardcore poor household ('000)	N/A.	N/A.	N/A.	261.1	143.1	116.4	88.4	62.4	64.1

Source: Malaysia Plan (various years)

As indicated above, the income inequality between the rural and urban sectors were fairly large. This is also true for poverty as the rural-urban poverty comparison showed large but declining incidence of poverty for the two sectors between the years 1970-1999. Most of the ethnic Malays live in the rural sector and were engaged in agriculture-based occupations while the ethnic Chinese who mainly live in the urban sectors were mainly employed in commercial and industrial based occupations.

Table 3.8 shows the incidence of poverty for households grouped according to rural-urban sectors and also gives the households' occupations. In 1970, the incidence of poverty of paddy farmers is the highest with bout 88 percent living in poverty. During the same year, 73 percent of fishermen and 65 percent rubber smallholders live in poverty. It is interesting to note that that estate workers fared better as the incidence of poverty for this group is 40 percent in 1970. In 1984, the incidence of poverty was reduced for all categories of workers with marked declines of poverty for paddy farmers (57.7 percent), fishermen (26.1 percent) and estate workers (19.6 percent).

Table 3.8
Rural-Urban comparison in incidence of poverty (%), 1970-1995

	1970	1976	1984	1987	1995
Rural	58.7	47.8	24.7	19.3	14.1
Rubber Smallholders	64.7	58.2	42.7	-	-
Paddy Farmers	88.1	80.3	57.7	-	-
Estate Workers	40.0	-	19.6	-	-
Fishermen	73.2	62.7	26.1	-	-
Coconut Smallholders	52.8	64.0	46.2	-	-
Urban	21.9	17.9	8.2	7.3	4.1
Total	49.3	39.6	18.4	15.0	9.1

Source: Malaysia Plan (various years)

As a whole, poverty is primarily a rural problem and as the majority of rural households were Malays, there is a correspondence between rural-urban poverty and poverty among ethnic groups.

In Malaysia, there was a concerned effort by the government to reduce this income disparity through the New Economic Policy. Table 3.9 gives the poverty incidence by ethnic group. The incidence of Malay poverty (65 percent) is more than twice that of the Chinese poverty (26 percent) in 1970. Even though there was a marked decline in the incidence of poverty among the Malays (21 percent) by 1990, their incidence of poverty is still more than three times higher than the incidence of poverty for the Chinese (6 percent). Even in the urban areas, the incidence of poverty was found to be highest among the Malays and lowest for the Chinese (Fong, 1984). Another group of people is the indigenous people (the so called "orang asli") in the other categories, which still registered a high incidence of poverty of 18.0 percent in 1990.

Although the absolute poverty for each group has declined, the ethnic disparity between the two ethnic groups (Malays and Chinese) has in fact increased over the years. There was also a marked decline in poverty among the Indians whereby the incidence of poverty in 1970 was 39 percent and in 1990 it was reduced to 8 percent.

Table 3.9
Poverty incidence by ethnic group (%), 1970-1990

	1970	1976	1984	1987	1990
Malay	64.8	56.4	25.8	23.8	20.8
Chinese	26.0	19.2	7.8	7.1	5.7
Indian	39.2	28.5	10.1	9.7	8.0
Others	44.8	44.6	22.0	24.3	18.0
Average	49.3	35.1	18.4	17.3	15.0

Source: Malaysia Plan (various years)

3.3 Public Expenditure on Education

As stated above, the government's policy was that only with equitable distribution among the different ethnic groups would growth be sustainable. Initial efforts by the government to reduce poverty were through a package of rural development programmes as stated in the First Malaysia Plan (1966-1970). However, these programmes were not successful as racial riots erupted in 1970. The riot was attributed to the increasing income disparity between the ethnic groups.

As a result, the New Economic Policy (1970-1990) or NEP was formulated in the Second Malaysia Plan with a specific goal of eradicating absolute poverty. This explicit objective of poverty reduction was to achieved through economic growth as stated in the Mid-Term review of the Second Malaysia Plan.[13]

The implementation of NEP continued through until the Fifth Malaysia Plan. As given in the Appendix 3.1, among the main poverty eradication strategies were employment generation, increase in income and productivity, modernization of rural life, improvement of living conditions among the urban poor, expansion of education and training facilities and creation of commercial and individual community for the Malays.

[13] Mid-Term Review of the Second Malaysia Plan (1973, p.63)

Most of these programmes were designed for the rural sector and for the ethnic Malays who formed the majority of the poor and hardcore poor. After the NEP, the National Development Policy (NDP) was introduced in 1991. Similar to NEP, the NDP too focused on eradicating hardcore poverty and reducing the relative poverty. Among the principal strategies of NDP were human resource development programmes, rural urbanisation and non-farm employment development programmes.

Government expenditure for the eradication of poverty increased throughout the years until the Third Malaysia Plan (Table 3.10). The NEP in the Second Malaysia Plan saw the biggest allocation where 31 percent of the total development expenditure was for alleviating poverty. By the Seventh Malaysia Plan (1996-2000), the share of expenditure for anti poverty programmes was 22 percent of the development expenditure.

Table 3.10
Share of poverty eradication as a percentage of development expenditure (%)

[illegible]	[illegible]
First Malaysia Plan (1966-1970)	27
Second Malaysia Plan (1971-1975)	31
Third Malaysia Plan (1976-1980)	30
Fourth Malaysia Plan (1981-1985)	24
Fifth Malaysia Plan (1986-1990)	26
Sixth Malaysia Plan (1991-1995)	27
Seventh Malaysia Plan (1996-2000)	22

Source: Malaysia Plan (various years)

Through the NEP programmes, the incidence of poverty was reduced from a high of 49.3 percent in 1970 to 17.1 percent in 1990. The significant reduction in the incidence of poverty is an indicator of the successful implementation of the NEP strategies (Bhalla and Kharas, 1992).

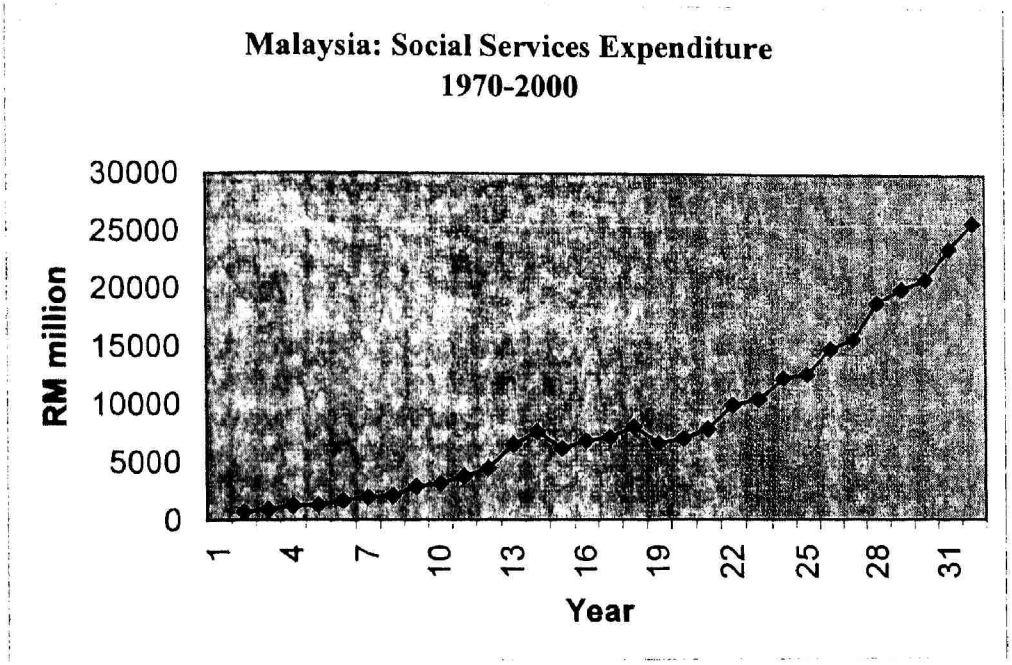
In about two decades, Malaysia was able to reduce inequality and poverty and this has been achieved mainly through the New Economic Policy (1970-1990). The two-pronged objectives of NEP of reducing poverty and inequality and restructuring the society had occurred at the same time as the country undergoes trade liberalisation and globalisation. The larger role played by the government was a factor in ensuring a more equitable economic growth (Bhalla and Kharas, 1992). Development of infrastructure, education and health were emphasized during the NEP period. Education was given special focus especially for the poor and women.

Table 3.11
Federal Government Social Services Expenditure (RM million)
1970-2000

Year	Total Government Expenditure			Social Service			
	Operating	Development	Total	Operating	Development	Total	% of Total
1970	2161	725	2886	672	81	753	26.09
1971	2398	1085	3483	778	146	924	26.52
1972	3068	1242	4310	1080	171	1251	29.02
1973	3341	1128	4469	1109	200	1309	29.29
1974	4315	1878	6193	1413	280	1693	27.33
1975	4900	2157	7057	1645	328	1973	27.95
1976	5828	2378	8206	1784	316	2100	25.59
1977	7398	3217	10615	2467	452	2919	27.49
1978	8041	3782	11823	2533	614	3147	26.61
1979	10040	4282	14322	2814	962	3776	26.36
1980	13617	7463	21080	3292	1185	4477	21.23
1981	15686	11358	27044	4067	2456	6523	24.11
1982	16671	11485	28156	4404	3249	7653	27.18
1983	18374	9669	28043	4217	1997	6214	22.15
1984	19806	8407	28213	4645	2223	6868	24.34
1985	20066	7142	27208	5038	2093	7131	26.20
1986	20075	7559	27634	5640	2427	8067	29.19
1987	20185	4741	24926	5612	1031	6643	26.65
1988	21812	5231	27043	5871	1165	7036	26.01
1989	23634	6673	30307	6357	1545	7902	26.07
1990	25026	10689	35715	7296	2617	9913	27.75
1991	28296	9565	37861	8001	2426	10427	27.54
1992	32075	9688	41763	9608	2653	12261	29.35
1993	32217	10124	42341	10381	2220	12601	29.76
1994	35064	11277	46341	11541	3285	14826	31.99
1995	36573	14051	50624	12141	3513	15654	30.92
1996	43865	14628	58493	14824	3984	18808	32.15
1997	44666	15749	60415	15051	4919	19970	33.05
1998	44585	18103	62688	15062	5783	20845	33.25
1999	46699	22614	69313	16612	6936	23548	33.97
2000	58206	25286	83492	17896	7909	25805	30.90

Source: Economic Reports, Malaysia (various years)

Figure 3.1



Source: Table 4.11

Since Malaysia's independence in 1957, education has always figured prominently as an integral part of the government's developmental policy. The education sector has undergone tremendous changes and developments over the years. The past thirty years were spent on nation building and on enhancing national unity through the development of a unified education system, a national curriculum, and the use of Bahasa Melayu, the national language, as the medium of instruction and communication. There has been a considerable increase in enrolment, and universal education at the primary and lower secondary levels have been achieved.

Curriculum reforms and increasing use of educational technology have also enhanced the quality of education. Various measures have been taken to ensure the effectiveness and efficiency of the delivery and management system. This mainly

involves the teaching-learning process in the classroom, the management and administrative aspects of the education system as well as teacher support services.

Malaysia's national ideology Rukunegara (1969) has provided the direction for all political, economic, social and cultural policies including those concerning education. The aspirations and principles of Rukunegara are national unity, democracy, justice, equity, liberty, diversity and progress. The major instruments towards achieving national unity are the National Economic Policy and the New Development Policy (NDP) of 1991. The NDP seeks "to attain a balanced development in order to create a more united and just society. The NDP, which emphasizes growth with equity, will enable Malaysians to participate in the mainstream of economic activities, thereby ensuring political stability and national unity." (Malaysia, 1990) All aspects of national development strategies contribute towards the achievement of this goal, of which the educational programme is the leading factor.

The Sixth Malaysia Plan (1990-95) focused on expanding educational opportunities and increasing access to all levels of education, and on strengthening and improving the quality of education. The Seventh Malaysia Plan (1996-2000) seeks to improve upon the previous initiatives to meet the manpower needs of the nation, particularly in the fields of science and technology (Appendix 3.1). Continued emphasis is also given to expand and make available educational opportunities to those in the rural and remote areas as well as the urban poor.

The basis of the education system is formulated in several policy documents. In particular, the recommendations contained in two Reports (the Razak Report of 1956

and the Rahman Talib Report of 1960) became the integral component of the Education Act of 1961 and then of the Education Act of 1996. The Education Act (1996), which repealed the Education Act (1961), covers all educational levels although the focus is on pre-primary, primary, secondary and post-secondary education. Although it is not compulsory, education is provided free to all children.

3.3.1 Administration and management of the education system

The Ministry of Education is organized into four distinct levels: federal, state, district and school. The education districts do not correspond to the administrative districts because they are based on educational rather than administrative needs.

At the federal level, the Ministry of Education translates the National Education Policy into educational plans, programmes and projects in accordance with national aspirations and objectives. It also sets guidelines for the implementation and management of the educational programmes.

The decision-making process at the national level is performed through a system of committees. The Educational Planning Committee (EPC) is the highest decision-making body in the Ministry of Education and is concerned with the formulation, co-ordination and implementation of general policy guidelines. There are also other committees with specific terms of reference. The Minister of Education chairs the EPC and the secretariat to this Committee is the Educational Planning and Research Division (EPRD). As the main planning agency of the Ministry of Education, the

EPRD is responsible for educational planning, research, evaluation, policy analysis and co-ordination in matters relating to educational policy and its implementation.

There is a State Education Department in each of the fourteen states. The main administrative functions of the Departments are as follows:

(a) to organize and co-ordinate the administration of schools in the state with respect to staff and personnel establishment, finance and physical development;

(b) to supervise educational programmes;

(c) to formulate and implement state educational development plans;

(d) to provide regular feedback information to the Ministry, where necessary, on the implementation of the National Education Policy.

In all states except Perlis, Malacca and the Federal Territories, there are additional administrative units at the district level. The District Education Office is an extension of the State Education Department and forms the linkage between the school and the Department. It helps the Department in supervising the implementation of educational programmes, projects and activities in the schools of the district. The states of Sabah and Sarawak have additional administrative units, known as Residency Education Offices in Sabah and Division Education Offices in Sarawak.

There are other agencies with parallel programmes that help to supplement the Ministry's efforts in providing education and training to meet the national development and manpower needs. Teacher training for pre-school (kindergarten) teachers is also provided by the Ministry of National and Rural Development. Various ministries and government agencies also provide formal and non-formal training to

both youth and adults to acquire specific skills and vocational trades: the Ministry of Labour (industrial training on a sponsorship basis), the Ministry of Youth and Sports (technical and business training programmes and on-the-job youth training), the Ministry of Agriculture (training and extension programmes), the National Electricity Board (electrical and mechanical engineering training), and the Majlis Amanah Rakyat (MARA), established to give motivation, guidance and vocational training opportunities to bumiputeras (indigenous people).

Economically, Malaysia has the second highest GNP per capita among the ASEAN countries. Its pre-tertiary indicators are on par with its economic development level, but the tertiary reduction indicator lags behind. Table 3.12 shows the average gross enrollment ratio (for both sexes) of primary, secondary, and tertiary education. In addition, it shows the ratio of female to male enrollments for pre-tertiary education, which we use to indicate the gender gap. The closer the female-to-male ratio to 100 (which indicates no gender gap), the smaller the genders gap.

Among the selected Asian countries, Malaysia has the second lowest primary but the fourth highest secondary enrollment ratio, and the smallest gender gap. However, the enrollment of tertiary education in Malaysia is one of the lowest compare to Philippines, Thailand, and the NIEs according to UNESCO statistics. The relatively high enrollment ratios in pre-tertiary education yield a relatively high literacy ratio-at 86 percent. Years of effort in promoting basic education by the Government of Malaysia have resulted in improving the general literacy of the population. The low enrollment in the tertiary education, however, is worrisome given today's economic development needs for technical professionals.

Table 3.12:
An International Comparison for Education Indicators.

	Gross Enrollment Ratios							Literacy rate (population aged 15 and above)	
	Primary			Secondary			Tertiary		
	Year	GER	F/M ratio	Year	GER	F/M ratio	1996	1998	F/M ratio
Selected Developed Countries									
Germany	1995	104	99	1996	104	98	47	99	-
Japan	1997	104	100	1995	103	101	41	99	-
United Kingdom	1996	116	101	1996	129	115	52	99	-
United States	1996	102	98	1995	97	99	81	99	-
NIEs									
Hong Kong	1995	94	102	1995	73	107	22	93	85
Singapore	1996	94	97	1996	74	-	39	92	91
South Korea	1997	94	101	1996	-	-	68	98	97
ASEAN									
Brunei	1996	106	96	1996	77	113	6.6	91	92
Cambodia	1997	113	84	1997	24	54	1.2	-	-
Indonesia	1996	113	96	1996	56	87	11.3	86	88
Lao	1996	112	82	1996	29	67	2.8	-	-
Malaysia	***1997***	***101***	***100***	***1997***	***64***	***117***	***11.7***	***86***	***90***
Myanmar	1995	121	-	1994	30	103	5.4	84	90
Philippines	1997	117	98	1997	78	101	29.0	95	99
Thailand	1997	89	-	1997	59	-	22.1	95	96
Vietnam	1997	114	96	1997	57	96	6.9	93	95
China	1997	123	100	1997	70	89	6.1	83	82

Source: UNESCO Statistical Yearbook, various years.

3.3.2 The financing of education

Education is a federal matter and is the responsibility of the Federal Government. It has been a major item of public expenditure and its provision has been increasing steadily as a trained and educated workforce is essential to economic growth.

Equal educational opportunities are provided for all, both in terms of access and achievement. Children who are disadvantaged in terms of economic status, location, and disability are the focus of intervention measures to provide educational opportunities and thereby improve their chances of educational achievement. Several programmes are introduced, including scholarships to needy students in schools and institutions of higher learning. Selected students are given scholarships to enable them to pursue higher education overseas, especially in the United Kingdom, the United States of America, Canada, New Zealand, Egypt, Australia, Indonesia, Japan, India, Pakistan and South Korea. Students are awarded scholarships based on merits. State governments through their respective Education Foundations also provide loans and scholarships to students of their state at the tertiary level.

Malaysia receives external aid for education and training in the form of technical assistance and investment programmes. The United Nations Development Programme (UNDP) constitutes the major source of multilateral technical assistance while UNICEF and UNESCO also provide support in smaller amounts. The other principal sources of bilateral assistance are Australia, Canada, Japan and the United Kingdom. Their focus is on industrial and vocational training, human resources planning and research, and higher education. The on-going education and training projects which concentrate on skills training, higher education and teacher training are financed by the Asia Development Bank (ADB) and the World Bank, which remains the major source of external assistance. The financial assistance from these agencies is mainly used for accelerating the implementation of policy reforms and institutional changes aimed at improving the quality of education. For instance, the World Bank has agreed to loan the amount of US$141 million to develop and improve primary and secondary

education over a ten-year program (Malaysia, 1999). This includes funding of studies directed towards upgrading the efficiency and effectiveness of education programmes, as well as identifying educational problems and issues which will provide the basis to structure effective intervention measures for further development.

The educational finance system is based on a modified Programme Performance Budgeting where the budget allocation by objects of expenditure is translated into various programmes, activities and sub-activities. Levels of education and specific activities, which facilitate the periodic measurement of performance and final outcomes, arrange the Programme and Activity structure. Programme Agreements are signed to monitor achievement targets through quarterly reports on physical and financial status.

Through the National Education Policy, the government plays a dominant role in financing education. Annual allocation warrants are distributed based on the Programme and Activity structure to all levels of educational institution and the financial monitoring cascades to state and regional education authorities. Generally, schools and educational institutions up to the second level are almost entirely dependent on government financing. All schools are financed through per capita grants to meet the annual personnel compensation and operational requirements. Individual schools maintain complete financial records on expenditure and are audited by government auditors.

3.3.3 Trend in Malaysia real educational expenditures

Between 1990 and 1998, the share of public education expenditures as a percentage of GNP has remained roughly 5 percent, which is on par with most other ASEAN countries. Education expenditures as a percentage of total government expenditures decreased from 21.2 to 13.9 percent between 1973 and 1983, although the total spending level maintained a 6 percent annual growth rate due to the rapid expansion of total government expenditures. However, the share of education expenditures relative to total government expenditures has increased to 19.1 percent in 2000 (Table 3.13).

Table 3.14 presents the real expenditure comparisons by education level from 1980 to 1997. In order to calculate the per pupil subsidy, Table 3.15 presents the total enrollment by education level in public schools. Dividing Table 3.14 by Table 2.15, Table 3.16 presents the trend in real expenditure per pupil by educational level. Table 3.14 shows the real expenditures have increased for most education levels, overall education expenditures have increased by 7 percent annually between 1980 and 1997.

Table 3.13
Current and capital expenditure on education (RM million)

	Total Govern. Expenditure	Total Education	Current	Capital	As % of Total Government Exp.
965	2122	401	334	67	18.9
966	2274	423	360	63	18.6
967	2420	455	403	52	18.8
968	2418	457	404	53	18.9
969	2550	482	439	43	18.9
970	2878	521	477	44	18.1
971	3475	622	536	86	17.9
972	4310	910	798	112	21.1
973	4469	947	805	142	21.2
974	6193	1238	1051	187	20.0
975	7051	1370	1158	212	19.4
976	8206	1488	1261	227	18.1
977	10615	2024	1750	274	19.1
978	11823	2043	1791	252	17.3
979	14322	2257	1918	339	15.8
980	21080	2816	2258	558	13.4
981	27044	3587	2796	791	13.3
982	28156	4073	2991	1082	14.5
983	28043	3903	2915	988	13.9
984	28213	4410	3401	1009	15.6
985	27208	4345	3473	872	16.0
986	27634	4807	3743	1064	17.4
987	24926	4672	3862	810	18.7
988	27043	4980	4115	865	18.4
989	32528	5649	4407	1242	17.4
990	37794	6596	4962	1634	17.5
991	37861	7067	5782	1285	18.7
992	41763	8059	6854	1205	19.3
993	42341	8478	7361	1117	20.0
994	46341	10108	8098	2010	21.8
995	50624	10603	8559	2044	20.9
996	56732	12489	10398	2091	22.0
997	59293	13020	10360	2521	21.9
998	62688	13443	10528	2915	21.4
999	69313	15323	11458	3865	22.1
2000	83492	15943	12036	3907	19.1

Source: Malaysia: Economics Report (various years)

Table 3.14
Real Public Expenditure by level of education 1980-1997
(Constant 1990 RM '000)

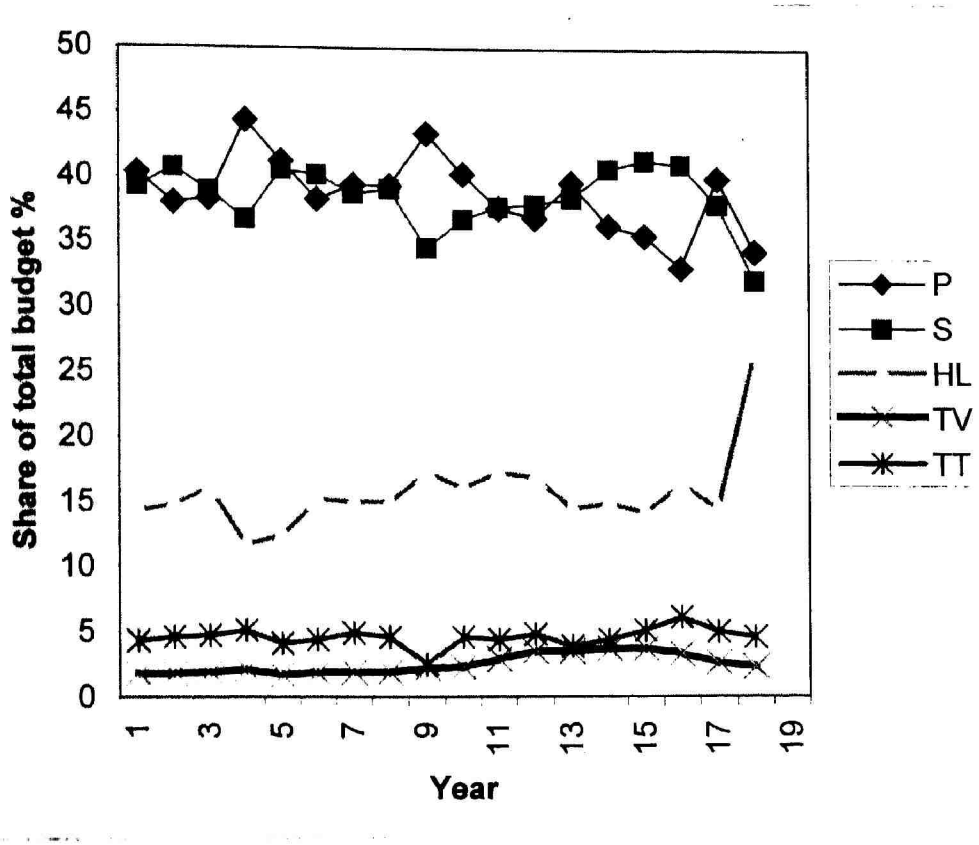
	Primary (P)	Secondary (S)	(P) + (S)	Higher learning (HL)	Technical/ Vocational (TV)	Teacher training (TT)	Total
980	989035	961513	1950548	351425	43826	104751	2450552
981	1121776	1198943	2320719	436469	54461	134310	2945961
982	1208187	1225699	2213611	505826	59924	149116	3148753
983	1217721	1007085	2224806	319629	57274	140264	2741974
984	1468612	1445473	2914085	441538	60602	147140	3563366
985	1445766	1517944	3064617	574719	73068	165316	3776815
986	1686190	1656855	3343145	643752	80610	213154	4280561
987	1751179	1740821	3492000	669914	86221	205286	4453423
988	1720370	1369136	3089506	683707	87513	100617	3961345
989	1689433	1541495	3230928	675007	97585	191975	4195496
990	1602000	1606000	3208000	738134	122316	187546	4255996
991	1798664	1848282	3646947	822676	171610	231487	4872721
992	2299910	2229185	4529096	842634	202723	230430	5804885
993	2140105	2400175	4540280	876186	218719	261010	5896197
994	2300914	2676642	4977556	916399	248340	332665	6474962
995	2003962	2487322	4491284	995562	202597	373972	6063416
996	2833708	2690637	5524345	1028399	183477	354490	7090712
997	2537410	2371942	4909353	1973381	168817	341395	7392947

Average annual growth rate
1980-1997

P	S	P + S	HL	TV	TT	Total
6.19	6.19	5.93	12.45	8.66	10.02	6.87

Source: Ministry of Finance, Malaysia: Economic Report, various years.
*This is the summation of all the items listed in this table, which account of 90 percent of total government education expenditure. Expenditures on special education and other subventions are not included here.

Figure 3.2
Budget Share by Education Level



Source: Table 3.14

In addition to the increase in the real total budget, there have been changes with regard to the shares of different levels of education within the total education budget. Figure 3.2 shows that the share of basic education declined between 1980 and 1997. The largest increases are Higher Learning and Teacher Training budget. The most noticeable changes is that about 90 percent of the total budget has been devoted to primary, secondary, and tertiary education, and very little has been earmarked for technical and vocational schools. In order to acquire the technical skills necessary for today's economic development in a relatively short period, the allocation for technical and vocational schools is probably an area that needs to be re-evaluated. Malaysia

needs to explore options for alternative financing -- private provision, user fees etc. -- of vocational education.

Ironically, the distribution of public education expenditures does not correspond to the changes in enrollment. While primary and secondary enrollment increased above the 1980 level, its share of budget had been decreased. However, the tertiary enrollment doubled between 1980 and 1997, as well as the share of its budget. Based on the data, pre-tertiary total enrollment has been stagnant. Between 1980 and 1997, there was a less than 3 percent annual increase for basic education enrollment. Given a four percent population growth rate, this implies a decline in basic education enrollment.

It should come as no surprise that unit subsidy for most education levels increased between 1980 and 1997. Table 3.16 shows that during this period, per pupil subsidies for primary and secondary education has been increased by a total of 50 percent and for higher learning by a total of 65 percent. Despite the decrease in total expenditure on technical and vocational institutions, the unit subsidy has been steadied solely due to the corresponding decrease in student enrollment.

Table 3.15
Total School Enrollment in Public Schools, 1980-1997

	Primary	Secondary	Higher Learning	Technical/Vocational
1980	2008973	1065301	57718	18517
1981	2033698	1133366	62890	18033
1982	2071802	1158559	68729	18042
1983	2120050	1195949	77666	19915
1984	2146299	1251881	85235	19620
1985	2192528	1273111	96212	20088
1986	2232575	1300196	109549	21337
1987	2325462	1316193	119591	23129
1988	2328400	1320636	121346	25240
1989	2390110	1325641	108845	27284
1990	2447206	1335377	124346	30691
1991	2530815	1343634	137826	32219
1992	2641020	1391497	160566	33203
1993	2675856	1450706	170145	41254
1994	2762166	1520069	187989	46904
1995	2827634	1603322	207072	48362
1996	2847119	1690033	225972	45723
1997	2878852	1781501	249086	37535
Annual growth rate 1980-1997				
	2.02	2.92	8.64	4.38

Source: Educational Statistics of Malaysia (various years)

Table 3.16
Unit Subsidy by Educational Level, 1980-1997

	Primary	Secondary	Higher Learning	Technical/Vocational
1980	492.3	902.6	6088.7	2668.2
1981	551.5	1057.9	6940.2	3020.1
1982	583.2	1058.0	7359.7	3321.4
1983	574.4	842.1	4115.4	2875.9
1984	684.9	1154.6	5180.2	3082.2
1985	659.4	1192.3	5973.4	3637.4
1986	755.3	1274.3	5876.4	3777.9
1987	753.0	1322.6	5601.7	3727.8
1988	738.9	1036.7	5634.4	3467.2
1989	706.9	1162.8	6201.5	3576.7
1990	654.6	1202.7	5936.1	3985.4
1991	710.7	1375.6	5968.9	5326.4
1992	870.0	1602.0	5247.9	6105.6
1993	799.7	1654.5	5149.6	5301.8
1994	833.0	1760.9	4874.7	5294.7
1995	708.7	1551.3	4807.8	4189.2
1996	995.0	1592.1	4551.2	4012.8
1997	881.4	1331.1	7922.4	4497.6
Average annual growth rate 1980-1997				
	4.33	3.33	3.87	3.95

Source: Table 4.14 and 4.15

Given that teachers' salaries account for more than 75 percent of total education recurrent expenditures (UNESCO, 1997), the change in the pupil/teacher ratio (PTR) is the main factor driving the changes in unit subsidies. This implies a lower PTR corresponding to higher unit subsidies, and vice versa. Based on UNESCO's data, between 1980 and 1997 the primary PTR decreased from 27 to 19, while the secondary PTR decreased from 23 to 19. These changes correspond to the increase in per unit subsidy in primary and secondary education respectively. Compared with other South East Asia countries, the PTR for Malaysia is relatively low. Most ASEAN countries have a PTR greater than 25 for primary schools, and for secondary schools the PTRs are mostly in the upper 20s. However, Malaysia's PTR are comparable with other more developed countries, such as South Korea and Swaziland. In spite of a favorable PTR, public school enrollment has been stagnant over the last decade.

Table 3.17
Pupil/teacher ratio by educational level 1980-1997

Year	Primary	Secondary
1980	27	23
1981	26	22
1982	26	21
1983	26	22
1984	26	23
1985	24	22
1986	23	22
1987	22	21
1988	21	21
1989	21	20
1990	20	19
1991	20	19
1992	20	18
1993	20	19
1994	20	19
1995	19	19
1996	19	19
1997	19	19

Source: UNESCO's Statistical Yearbook, 1997

Before we proceed to the empirical analysis, let us look at some of the main findings of this chapter, it include the following:

1. In the last two decades, there has been a huge increase in household income. Malaysia was thus able to achieve a significant improvement in income distribution whereby the income of the poor increased by a higher percentage compared to the incomes of the rich.
2. The NEP's objective of achieving equity between ethnic groups was a success as the inequality had declined during the span of 17 years.
3. The rural-urban income differentials had initially decreased but again widened during the 1990s
4. Among the South East Asian countries, the quality of education output (enrollment ratio) of Malaysia is on par with its economic development level, and the gender gap is low.
5. Total public spending in the education sector increased significantly – at an annual rate of 7 percent per annum – between 1980 and 1997.
6. Less than 5 percent of total public education expenditures have been devoted to technical and vocational training, which is a very essential sector in raising the income of the poor and reduce inequality.