



***QUANTITATIVE ASSESSMENT OF INCOME DISTRIBUTION AND POVERTY
IN THE EAST COAST REGION, MALAYSIA***

NOOR AZIAN BT ASFARI

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By

NOOR AZIAN BT ASFARI

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfillment of the Requirement for the Degree of
Master of Science**

January 2012

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**TO THE LOVING MEMORY OF MY PARENTS
HJ.ASFARI BIN SURI
AND
HAJJAH. AZAINA MAT ZAIN
Who did more than I could do for to them**

ESPECIALLY

**TO MY BELOVED MENTOR
PN ZUNIKA MOHAMED
who is always there for me
for supporting and guiding**

**TO MY LOVELY FRIENDS
RUHAIDA,JANNAH,NAILI,SURIANI,NIK
ROSNIWATI,RAIHAN,FAEZAH,AIMI,AIN,HANIM,ZARINA
Thanks for always being on my side**

**TO MY BELOVED SIBLINGS
AZRINA, AZLAN AND NOOR AZIFAH
Thanks for all the assistance and understanding**

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree Master of Science

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January 2012

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Faculty: Faculty Economics and Management

This study investigated the implications of development on income distribution and poverty in the East Coast region of Malaysia. By using the data from the Household Income Survey (HIS) in 1999 and 2004, income distribution in the states of Kelantan, Terengganu and Pahang was analysed to show the extent of income inequality in the region which have the lowest percapita GDP in Malaysia. Income inequality was measured using the most popular measures namely; Lorenz curve, Gini coefficient and Atkinson's indices. Within the 5-year span, it is found that the development programs implemented by the government has successfully increased monthly income of the population and reduced income inequality in Kelantan and Terengganu. The incidence of poverty has also been reduced significantly in all states, with Kelantan showing the most improved level of poverty within those 5 years. It was also found that an increase in the age of the head of household and a female head of household negatively affect the take-home income, making them as the most crucial groups that requires government

attention in the future socio economic development programs to ensure that income inequality and poverty could be further reduced in the future.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

PENILAIAN KUANTITATIF DARIPADA PENGAGIHAN PENDAPATAN DAN KEMISKINAN DI WILAYAH PANTAI TIMUR, MALAYSIA

Oleh

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Kajian ini bertujuan untuk mengkaji kesan pembagunan ke atas agihan pendapatan dan kemiskinan di Wilayah Pantai Timur, Malaysia. Dengan menggunakan data Penyiasatan Pendapatan Isirumah bagi tahun 1999 dan 2004, agihan pendapatan di negeri-negeri seperti Kelantan, Terengganu dan Pahang di analisa untuk menunjukkan ketidaksetaraan pendapatan di wilayah yang mempunyai Keluaran Dalam Negara Kasar (KDNK) perkapita terendah di Malaysia. Ketidaksetaraan pendapatan diukur menggunakan kaedah-kaedah yang biasa digunakan iaitu ; Keluk Lorenz, Angkali Gini dan Indeks Atkinson. Dalam jangkamasa lima tahun, ia mendapati bahawa program-program pembangunan pembangunan yang dilaksanakan oleh kerajaan telah berjaya meningkatkan pendapatan bulanan masyarakat dan mengurangkan ketidaksetaraan pendapatan di Kelantan dan Terengganu. Kadar kemiskinan juga telah dikurangkan secara ketara dengan tahap pembaikan bagi tahap kemiskinan di Kelantan dalam

tempoh lima tahun tersebut .Hasil kajian juga mendapati bahawa peningkatan dalam umur ketua isirumah dan ketua isirumah wanita memberi kesan terhadap pendapatan yang diperolehi,ini menjadikan mereka sebagai kumpulan yang sasaran yang memerlukan perhatian daripada pihak kerajaan dalam program pembagunan sosio-ekonomi bagi memastikan ketidaksetaraan pendapatan dan kemiskinan seterusnya dapat dikurangkan pada masa akan datang.



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LIST OF ABBREVIATIONS

DCI	Development Composite Index
DOS	Department of Statistic
ECER	East Coast Economic Region
EPU	Economic Planning Unit
GDP	Gross domestic product
GEMM	General Equilibrium Model for Malaysia
HES	Household Expenditure Survey
HIS	Household Income Survey
MDG	Millennium Development Goals
NVP	National Vision Policy
OLS	Ordinary Least Square
PES	Post-Enumeration Survey
PLI	Poverty Line Index
SAW	<i>Sallahu Alaihi Wassalam</i>
SME	Small Medium Enterprise
UK	United Kingdom
UNDP	United Nation Development Programme
WP	Wilayah Persekutuan
Yede	<i>Equally Distributed Equivalent Level of Income</i>

CHAPTER 1

OVERVIEW OF THE STUDY

1.0 INTRODUCTION

Overview of Regional Development

Regional development is the provision of aid or assistance to regions which are less economically developed. The progress of implementation of regional development is monitored by the government in a country. The implications and scope of regional development may vary in accordance to the definition of a region, and how the region and its boundaries are perceived internally and externally.

The regional development has emerged as one of the most central policies in Malaysia's development planning since the early seventies. This policy focus is put in place for reasons of social equity, national development and environmental management, as well as electoral considerations. Moreover, the regional development is a policy in which all government tiers have had limited success with it. The arguable issue is the regional disparities in terms of economic development. The term regional development varies according to the context, although the common concern is for economic and social improvement. Such improvements can be taken in the form of better quality infrastructure, improved community services, a greater and more diverse volume of production, lower unemployment, growing numbers of jobs, rising average wealth, improved quality of life, and so on.

1.1 REGIONAL DEVELOPMENT IN MALAYSIA

In Malaysia, the implementation of regional development strategies started during the Seventh Plan period (1996 -2000), with the introduction of new economic bases, hence, the provision of modern amenities to the respective states, with the objective of creating a more uniform economic growth throughout the nation. During this period, the major thrusts for regional development were achieving a balance in social and economic development across regions and states, thus, raising the standard of living of the people. In this regard, the economic structures of the less¹ developed states were reinforced with larger contributions from manufacturing and services sectors. As a result, there was an increase in private sector investments in the Eastern Corridor, stimulating economic activities within the region.

Meanwhile, during the Eighth Malaysia Plan period in 2001-2005, the government started to implement a more target-specific approach in reducing poverty in both the rural and urban areas. The focus of poverty eradication and quality of life improvement programs was directed at the bottom 30 per cent of household income. In the Ninth Malaysia Plan period, greater emphasis was placed on ensuring balanced in regional development by further diversifying the economic base of states to attract investments, create more job opportunities and generate higher income. In addition, measures are undertaken to reduce the development gaps between states especially between rural and urban areas. The main objective of a balanced development during the Ninth Malaysia Plan period is to narrow the development gap between regions, states as well as

¹ In Eighth Plan, Malaysia, based on the composite index of development in 2000, the States of Johor, Perak, Pulau Pinang, Melaka, Negeri Sembilan, Selangor and Wilayah Persekutuan Kuala Lumpur were categorized as more developed states, while Kedah, Kelantan, Pahang, Perlis, Sabah, Sarawak and Terengganu were categorized as less developed states.

between rural and urban areas. Measures are taken to reduce disparities in terms of per capita and household income, incidence of poverty in the less developed states and disparities in terms of infrastructure and utilities in the Peninsular, Sabah and Sarawak.

1.1.1 IMBALANCED DEVELOPMENT

The problems surrounding regional disparities in the level of economic development are almost universal but its extent may differ among countries. Most countries in the world are experiencing the problem of regional disparities including Malaysia. Based on the Development Composite Index (DCI), the central region which comprises Melaka, Negeri Sembilan, Selangor and Wilayah Persekutuan Kuala Lumpur was the most developed region in 2005. Sabah and the states in the Eastern region which comprises Kelantan, Pahang and Terengganu were the least developed regions. Wilayah Persekutuan Kuala Lumpur has the highest DCI followed by Pulau Pinang, Melaka and Selangor indicating a higher level of economic activity and quality of life. Besides DCI, the development gap between regions and states were identified by the level of gross domestic product (GDP), GDP percapita, and its growth, household income and incidence of poverty as well as attractiveness to new investment in manufacturing.

The states in Malaysia are characterized by their asymmetrical development way back during British colonialism. Specifically, Sabah, Sarawak and the eastern states namely Kelantan, Pahang and Terengganu were categorized as the least developed regions (Karimi, 2010). In contrast, Johor, Melaka, Negeri Sembilan, Perak, Pulau Pinang, Selangor and Wilayah Persekutuan Kuala Lumpur are the most developed states. The

per capita GDP by state is shown in table 1.1. According to table 1.1, all states recorded an increase in GDP per capita in the year 2000 compared to 5 years earlier. However, the most developed states consistently achieved higher GDP per capita compared to the less developed states, except for Terengganu. However, Pahang began to record higher GDP per capita exceeding Johor since 2006. According to table 1.1, Wilayah Persekutuan and Selangor successfully recorded higher per capita GDP compared to the national average annually since 2000, perhaps even earlier. The per capita GDP of least developed states also showed a steady increase albeit still lower than the national average. Of the least developed states, Kelantan had the lowest GDP and inconsistent growth of all.

Table 1.1 Malaysia's Gross Domestic Percapita by State in 1995 – 2010

States	RM million							
	1995	2000	2005	2006	2007	2008	2009	2010
Northern Region								
Kedah	6,391	8,918	12,132	10,525	11,901	13,225	12,630	13,294
Perak	9,290	13,183	18,616	12,521	14,010	15,599	14,769	16,088
Perlis	7,634	10,802	15,166	14,125	13,561	14,510	14,457	15,296
Pulau Pinang	15,054	21,469	28,581	29,748	31,039	33,257	29,569	33,456
Central Region								
Melaka	11,305	15,723	21,410	20,472	22,174	24,619	22,761	24,697
Negeri Sembilan	9,034	12,791	17,555	22,757	23,704	26,803	23,600	27,485
Selangor	14,168	17,363	21,286	23,377	25,481	28,544	27,609	31,363
W/P Kuala Lumpur	22,799	30,727	39,283	40,868	44,801	49,996	51,197	55,951
Southern Region								
Johor	10,007	13,954	18,773	16,181	18,726	19,930	18,458	20,911
Eastern Region								
Kelantan	4,484	6,241	8,638	5,919	6,943	7,662	7,585	8,273
Pahang	7,548	10,370	14,549	17,319	18,930	21,793	19,974	22,743
Terengganu	16,553	22,994	29,516	15,241	17,284	19,194	16,994	19,255
Sabah	7,206	9,123	11,323	10,645	13,067	16,843	14,830	17,424
Sarawak	9,287	12,755	16,861	26,984	29,562	34,855	30,318	33,307
Malaysia	10,756	14,584	19,189	21,411	23,617	26,902	24,366	27,113

Source: Department of Statistics Malaysia
Eighth Malaysia Plan

Notes: ¹Includes Wilayah Persekutuan Putrajaya
² Includes Wilayah Persekutuan Labuan
Constant prices- (1978 prices) in 1995-2005
(2000=100) in 2006-2010

a) State Economic Activities

The existence of regional disparities can be illustrated through economic structure of the states. The richer states such as Selangor, Penang and the Federal Territory of Kuala Lumpur tend to have a higher percentage of GDP in the secondary sector and a lower percentage in the primary sector. The rapid expansion of industrial and service activities contribute to a higher per capita growth in these states. The least developed states' GDP

however depend on the primary activities, which happens to be the predominant economic activity in the states. This explains why Terengganu, which has an abundance of offshore oil, enjoys a higher GDP compared to its neighbouring counterpart. Service form the highest component of GDP for all states, which reflects the overall economic state. The share of population in “rich” states is also higher than that in the “poor” states. On top of that, the depth of disparities exists not only in the form of income but also in social welfare which reflects the prevalence of poverty in the poorer states of Malaysia.

1.1.2 INCOME DISTRIBUTION AND POVERTY

a) Inequality of Income

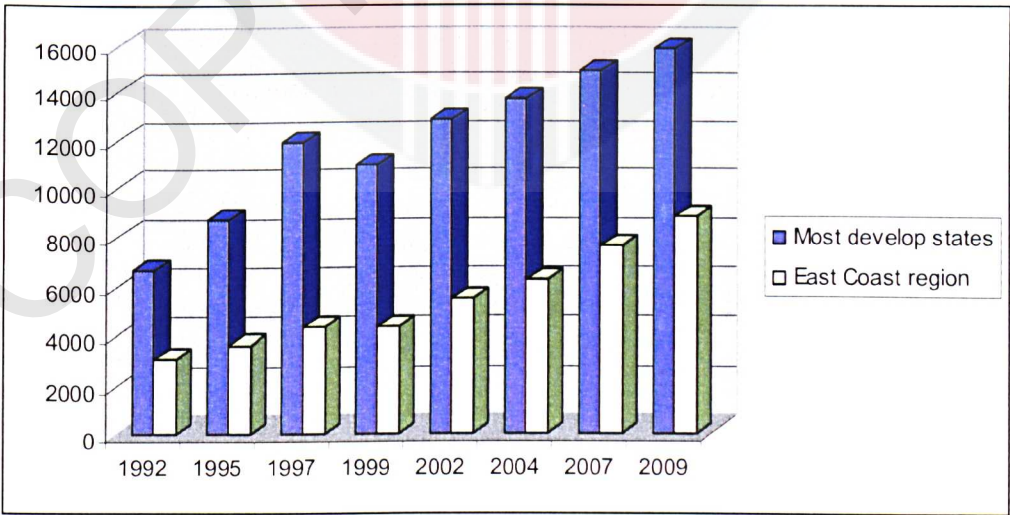
During the (1999-2009), the mean monthly household income in all states increased. Refer to table 1.2; the highest mean of monthly income was recorded in WP Putrajaya at RM6, 747 while the lowest was recorded in Kelantan at RM2,536 in 2009. Figure 1.1 illustrates a comparison between states in the East Coast and the most developed states namely WP Kuala Lumpur, Selangor and Pulau Pinang. From the bar chart, the mean monthly household income for the East Coast states was 50 percent less than that in the most developed states. Despite the improvement in income, the chart clearly demonstrates persistence in income inequality despite the development strategies proposed in the Malaysia Plans (Eighth and Ninth) throughout the years.

Table 1.2: Mean Monthly Gross Household Income by states, 1999-2009

State	1992	1995	1997	1999	2002	2004	2007	2009
Johor	1,708	2,138	2,772	2,646	2,963	3,076	3,457	3,835
Kedah	1,049	1,295	1,590	1,612	1,966	2,126	2,408	2,667
Kelantan	901	1,091	1,249	1,314	1,674	1,829	2,143	2,536
Melaka	1,466	1,843	2,276	2,260	2,650	2,791	3,421	4,184
N.Sembilan	1,378	1,767	2,378	2,335	2,739	2,886	3,336	3,540
Pahang	1,253	1,436	1,632	1,482	1,991	2,410	2,995	3,279
P.Pinang	1,845	2,225	3,130	3,128	3,496	3,531	4,004	4,407
Perak	1,276	1,436	1,632	1,482	1,991	2,410	2,995	3,279
Perlis	1,038	1,158	1,507	1,431	2,006	2,046	2,541	2,617
Selangor	2,275	3,162	4,006	3,702	4,406	5,175	5,580	5,962
Terengganu	948	1,117	1,497	1,600	1,837	1,984	2,463	3,017
Sabah/W.P.Labuan	1,286	1,647	2,057	1,905	2,406	2,487	2,866	3,144
Sarawak	1,524	1,886	2,242	2,276	2,515	2,725	3,349	3,581
W.P Kuala Lumpur	2,567	3,371	4,768	4,105	4,930	5,011	5,322	5,488
W.P Putrajaya							5,294	6,747

Sources:1) Post Enumeration Survey of 1970 Population and Housing Census (reference 1970)
2) Agriculture Census 1977(reference 1976)
3) Household Income Survey

Figure 1.1: Mean Gross Monthly Household Income; comparison between Most Develop states and the East Coast region,1992-2009



Note: Most develop states; Selangor, W.P. Kuala Lumpur and Pulau Pinang
East Coast region: Pahang, Terengganu and Kelantan

b) Poverty

Poverty is defined in relation to the society or country in which it is found. The two normally used broad concepts of poverty are absolute poverty, which is a subsistence concept, and relative poverty, which is an inequality concept. The most widely used absolute measure is the incidence of poverty, which is the proportion of the population or households whose level of income falls below the poverty line.

i) Absolute Poverty

Absolute poverty is defined as a condition in which the gross monthly income of a household is insufficient to purchase certain minimum necessities of life. This minimum necessity are measured based on a minimum expenditure level or the poverty line income (PLI). PLI is defined as an income sufficient to purchase a minimum food basket to maintain household members in good nutritional health and their other basic needs such as clothing and footwear, rent, fuel and power, transport and communications, healthcare, education and recreation. The PLI is updated annually on the basis of the Consumer Price Index. The PLI for 1995 - 2005 for Peninsular Malaysia, Sabah and Sarawak are shown in table below:

Table 1.3 Poverty Line Income, 1995-2005
(RM per month per household)

	1995 ²	1997 ²	1998 ²	1999 ²	2005 ¹
Semenanjung Malaysia	425	460	493	510	661
Sabah	601	633	667	685	888
Sarawak	516	543	572	584	765

Source: Eighth Malaysia Plan
Ninth Malaysia Plan

Notes:¹ based on 2005 Methodology

²Adjusted based on an average household size of 4.6 in Semenanjung Malaysia, 4.9 in Sabah and 4.8 in Sarawak.

ii) Relative Poverty

It is defined in relation to inequality between groups. It is measured by using income disparity ratios of income groups, ethnic groups and urban and rural dwellers. Another common relative poverty measurement is the proportion of households with incomes, for example, less than half of the median or mean income. The most extreme of poverty, known as hardcore poverty, is defined as a condition in which the gross monthly income of households is less than half of the PLI.

iii) Malaysia's Poverty Line

The Poverty Line Income (PLI) was substantially revised in 2005². The PLI is made up of two components, that is the food PLI and the non-food PLI. The PLI is defined separately for each household in the household income survey (HIS) based on its size, demographic composition and its location (state and stratum). A household is considered poor if its income is less than its own PLI, that is, it lacks the resources to meet the basic needs of its individual members. A household is considered hardcore poor if its monthly household income is less than the food PLI. As food requirement is based on a nutritionally adequate diet, the hardcore poverty income threshold is now much higher than the old definition of less than half of the PLI.

iv) the Food PLI

The food component of the revised PLI is based on the advice of nutritionists, dieticians and medical professionals. Individual daily kilocalorie requirements are met through a balanced diet, which include: grains and grain products (uncooked rice, wheat flour);

² Ninth Malaysia Plan (2006-2010)

chicken, eggs and fish; milk; oil and fats; sugar; vegetables and fruits; and pulses (dhal, green peas).

v) The Non-Food PLI

The expenditure pattern of non-food components of the PLI are based on the actual expenditure of the bottom 20 per cent expenditure group derived from the household expenditure survey (HES). Non-food components comprise clothing, housing, transport and other items.

The situation of poverty in the states such as Kelantan, Terengganu, Kedah and Perlis was higher than in the richer states (eg. Selangor, Penang and the Federal Territory of Kuala Lumpur) as shown in table 1.4.

Table 1.4: Incidence of Poverty by State in Malaysia from 1995 - 2009

State	Incidence of Poverty (%)			
	1995	1999	2004	2009
Malaysia	8.7	8.5	5.7	3.8
Johor	4.2	3.1	2.0	1.3
Kedah	12.2	14.2	7.0	5.3
Kelantan	22.9	25.2	10.6	4.8
Melaka	5.3	2.9	1.8	0.5
N.Sembilan	4.9	4.1	1.4	0.7
Pahang	6.8	9.8	4.0	2.1
Perak	9.1	6.8	4.9	3.5
Perlis	11.8	13.6	6.3	6.0
Pulau Pinang	4.0	0.7	0.3	1.2
Sabah	22.4	23.4	24.2	19.7
Sarawak	10.0	10.9	7.5	5.3
Selangor	2.2	1.9	1.0	0.7
Terengganu	23.4	22.7	15.4	4.0
WP Kuala Lumpur	0.5	0.4	1.5	0.7
WP Labuan			2.7	4.3

Source: Department of Statistics Malaysia
Eighth Malaysia Plan
Ninth Malaysia Plan

The table shows that all states except Wilayah Persekutuan Kuala Lumpur recorded a decline in the incidence of poverty in 2004, based on the new poverty line income. Nevertheless, the incidence of poverty remained high in the poorer states namely Sabah, Terengganu and Kelantan. Nevertheless, the incidences of poverty in Kelantan and Terengganu have been declining since 2004.

1.1.3 Regional Development Initiative

The development of any country will not be sustainable if the growth process does not contribute to poverty reduction. The growth in development for that country is deemed

unsustainable when a country achieves higher growth rate in Gross Domestic Product (GDP) while at the same time having higher incidence of poverty. The unsustainable is also related to the issues of income distribution. For Malaysia to ensure higher economic growth among its states, measures should be taken to focus on development efforts in growth centres of the respective states as well as in trans-border areas involving two or more states. With regard to the trans-border areas, the Northern Terengganu-Southern Kelantan-Western Pahang Zone has been identified as a new focal area for development in the Eastern Corridor.

For the eastern region states, a total of RM22.3 billion or 11.2 per cent is to be allocated for development in the Ninth Malaysia Plan compared to RM14.3 billion in the Eighth Malaysia Plan. Infrastructure projects would be the main focus of development for the region. Among the projects outlined are the Simpang Pulai-Gua Musang-Kuala Terengganu Road, which will provide the third trunk road link to the Eastern Corridor, and the East Coast Highway Phase 2 in Terengganu. In addition, the Kuala Terengganu airport is to be upgraded to handle wide-bodied aircraft to boost tourism and industrial developments. To further spur the development in northern Terengganu as well as provide more educational opportunities, the main campus of a new university will be located in Besut. In addition, a new university will be established in Kelantan during the Plan period. For Pahang, development projects include permanent food production parks, a palm oil industrial cluster and an integrated halal hub.

1.2 PROBLEM STATEMENT

The regional development is a multidimensional concept practised by countries in the world. Commonly, it relates to a great socioeconomic variety determined by multiple factors such as natural resource endowments, quality and quantity of labour, capital availability and access, productive and overhead investments, entrepreneurial culture and attitude, physical infrastructures, sectoral structure, technological infrastructure and progress, open mind and public support systems (Nijkamp and Abreu, 2009). The problem of uneven development leads to imbalance in per capita income, standard of living, consumption situation, industrial, agriculture and infrastructural development in different parts of a nation. The incidence of poverty remained high in the least developed states of Sabah, Terengganu and Kelantan (Malaysia, Economic Planning Unit, 2006).

The situation of imbalanced development in the East Coast region is quite obvious. For that reason, government has implemented several projects relating to agriculture, tourism and manufacturing as measures to eradicate poverty, improve incomes and distribution in a sustainable manner. It is important to measure the impact of these regional development programs, whether the gap in income have been narrowed or not. This study aims at measuring the impact of development plans (9th Malaysia Plan) towards income inequality among the states in East Coast region. Using indexes such as Gini coefficient and Atkinson to measure inequality.

In Malaysia, the incidence of absolute poverty has traditionally been determined by referring to the threshold of poverty line income (PLI). This PLI is based on what is considered to be the minimum consumption requirements of a household for food, clothing, and other non-food items, such as rent, fuel, and power. The concept of hardcore poverty was first used by the Malaysian government in 1989 to help identify and target poor households whose income is less than half of the PLI. The analysis of poverty prevalence is meant to ensure the success of this plan in eradicating poverty in the targeted areas. There are several techniques used to identify the situation by measuring incidence, extent and the severity of poverty among the states of East Coast region. This analysis will capture the current state of poverty in each state, thus, helping the government to focus its allocation of capital for development programs in areas affected.

For any development program to success, it is important to identify its target correctly. In terms of poverty eradication programs, the government must identify demographic characteristics of the groups that need the most attention. Therefore, this study intends to determine the demographic factors associated with poverty such as education, age, gender and area. In the First Malaysia Plan (1966-1970), it was stated that ‘unless the educational system is geared to meet the development needs of the country, there will be a misallocation of an important economic resource, which will slow down the rate of economic and social advance.’ Ever since, the upgrading of the national education system and broadening of educational opportunities have been a central part of the government’s strategy to foster national unity and support economic growth. Being a

member of the United Nations, Malaysia has also agreed to achieve the eight Millennium Development Goals (MDG) set, one of which includes achieving universal primary education (MDG2). In addition, the third goal is to promote gender equality and empower women by eliminating gender disparities in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015. It is hoped that investment in girls' education will lead to higher returns in a broad range of sectors, hence, contribute towards the development of a country.



1.3 RESEARCH OBJECTIVES

The main objective was to study the implication of regional development on income distribution and poverty incidence in the East Coast Region of Malaysia.

The specific objectives were:

1. To measure the impact of regional development on income inequality in the East Coast Region.
2. To analyze the implication of regional development in reducing poverty in terms of its incidence, extent and severity.
3. To identify the factors contributing to income disparities in the East Coast Region.

1.4 SIGNIFICANCE OF THE STUDY

Commonly, the process of regional development leads to issues concerning asymmetrical development. Thus, the problem of income distribution and poverty are consequences of such process. However, there are very limited empirical studies surrounding this issue. Therefore, this study aims to provide empirical evidence of the effects of government initiatives by ways of regional development in counteracting income inequality and poverty issues in the East Coast region. Using established indices in measuring inequality and poverty, this study would be able to serve as a guide for the government to lay out its future plans in helping to reduce poverty. The action plan would be able to focus more on relevant demographic factors to ensure effective use of capital allocations.

For that reason, the analysis would also try to determine the demographic factors that contribute to the access of income. Socio-demographic factors such as education, gender, age and area would be investigated for its connection towards the inequality.

1.5 SCOPE OF THE STUDY

In Malaysia, studies regarding the effect of regional development on income distribution and poverty are limited. Due to data constraint, this study only involved the entire state territory of East Coast namely Pahang, Terengganu, and Kelantan for the year 1999 and 2004. Basic data for this research was collected from Household Income Survey (HIS) database, which was prepared by the Economic Planning Unit (EPU). These surveys were conducted and processed by the Malaysian Department of Statistics (DOS). EPU is the principal government agency solely responsible for the preparation of development plans in Malaysia. Therefore, the HIS data from EPU is deemed the most comprehensive data for this study. Although only states in the East Coast were selected for the case study, the study covered the pattern of income distribution classified by various socioeconomic characteristics in each state, comprising both the rural and urban areas. Thus, the samples could possibly act as representative of income inequality for the nation.

Nonetheless, due to limited area coverage in this study, the problems highlighted could in fact be unique for such area only, namely the East Coast. Besides, the studies only focused on the impact of regional development on the quality of life of the state citizens. Level of development varies among places, hence, difficult to compare apples with apples. It also does not involve the cause for poverty and the distribution despite determining the demographic factors that causes the income gap, disregarding other external factors. Therefore, this study is only relevant for the purpose of implementing government programs for nearby initiatives such as East Coast Economic Region

(ECER). The findings would be able to direct policy makers to be more aggressive in tackling the prolonged issues raised in this study.

1.6 THESIS ORGANIZATION

The thesis consists of five chapters. It begins with explanation on the background of the study which covers regional development, research problems, scope of the study, and objectives of the study. This chapter also raises the issues of imbalance in development in the East Coast region through aspects of income inequality and poverty incidence. The significance of the study also discusses the relevance and gaps of related studies in this area. The scope of study briefly discusses the area covered and the period of time involved in this study.

The second chapter discusses literature review of the study which divides into two issues relating to standard theories of regional development. The first one discusses the relationship between growth and income distribution while the second part focuses on uneven development process created by poverty. This chapter also provides previous studies that discuss implications of regional development on income distribution and poverty. Methodology of research, including method used in secondary data collection and empirical method of study, is presented in chapter three. The variables and models used in the regression are also explained in this chapter. The data analysis linking the effect of regional development with the income distribution and poverty incidence in the East Coast region are discussed in chapter four. Finally, the summary, conclusion and policy recommendations are laid out in the final chapter.

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