

THE DYNAMICS OF SPATIAL DISPARITIES IN MALAYSIA, 1970-2000

Norhaslina Hassan, Fauza Abd Ghafar
and Rosilawati Zainol¹

Abstract

The underlying motive for intervention in the sense of region in Malaysian development planning is that regional boundaries tend to coincide with most economic, social and institutional spheres. In this context, regional planning was conceptualised and formally institutionalised in the Second Malaysia Plan, to be among the major instruments of New Economic Policy (NEP). Broadly, the NEP seeks to eradicate poverty irrespective of race and restructure Malaysian society so as to eliminate the identification of race with occupation and geographical location. After forty years of regional planning, however, it was pointed out clearly in the Eighth Malaysia Plan that regional disparities among states continue to exist despite above-average performance of the lagging states. The Third Outline Perspective Plan (2000-2020) further predicted that the growth-oriented development strategies necessitated by globalisation will inevitably benefit some regions. Undoubtedly these would be the more established regions with well developed physical, social and economic infrastructures and facilities. This article seeks to establish the extent of spatial disparities in Malaysia and to demonstrate development trends in these disparities over the period of 1970-2000 using factor analysis and GIS. It will not be too surprising to see the persistence of development disparities despite the much theorised success of regional planning in the country.

Introduction

Literature has it that some degree of regional inequality is inevitable, at least at the early stages of development (see for example, Hirschman 1958, Friedman 1966 and Cooke, 1983). This is mainly because growth which is essentially driven by innovation and technological progress are unlikely to appear everywhere at the same time. It was Williamson (1965) who proposed an inverted-U hypothesis on the causal relationship between economic development and regional inequality. Facilitated by the coefficient of variation method, his cross-sectional analysis of 24 different countries found that regional disparities are greater in the Less Developed Countries (LDCs) and smaller in the More Developed Countries (MDCs). The study's longitudinal analysis of the states in America, furthermore, confirmed his earlier contentions that inter- and intraregional inequalities were greater at the intermediate than at high or low levels of development. In a more recent study, Lucas (2000) describes the dynamics of regional economies moving from stagnation to growth. This model likens regional economic inequalities to the growing

¹ Dr Norhaslina Hassan is an Associate Professor in the Urban Studies and Planning Program, Faculty of Arts and Social Sciences, University of Malaya, Kuala Lumpur. Dr. Fauza Abd Ghafar is a Professor in the Geography Department, Faculty of Arts and Social Sciences, University of Malaya. Rosilawati Zainol is a Lecturer in the Urban Studies and Planning Program, Faculty of Arts and Social Sciences, University of Malaya.

pain of the national development process. Accordingly, some variation in the levels of regional development can be expected as countries are engaged into fast economic catching-up.

Perhaps the significance of regional policy evaluation in Malaysia is best described by Kamal Salih (1988) who based it on four reasons: first, Malaysia being one of the pioneer countries in ASEAN to incorporate the concept of regional spatial development into national development; second, the importance of the New Economic Policy (NEP) which after 1970 permeated every aspect of development planning in the country, and the emphasis given to regional development as a means to overcome disparities between races and regions; third, based on the fact that Malaysia was one of the earlier Asian countries to experiment with the growth pole strategy; and fourth, much resources had been spent on regional development projects. Indeed regional policy as an instrument aimed at better achieving the distributional objectives of NEP need to be evaluated especially after the termination of the NEP and basis for formulating regional policy in the post NEP periods towards achieving the National Vision 2020.

Studies of regional performance in Malaysia after more than five decades of national development tend to concentrate on assessing the effectiveness of Regional Development Authorities (RDAs) in promoting decentralisation especially in establishing new townships in the frontier zones (see for example, Johari Mat, 1983). Kamal Salih and Young (1988) in another example, argued that the bulk of the new townships that were built (30 out of 36 planned towns by 1985) were under populated, have economic base that is too narrow and did not contribute significantly towards the betterment of the populace within. There seemed to be a lack of integration between the plans of the towns at the national level. The RDAs were also beset by management problems.

The assessment of regional strategy towards achieving the overall goal of balanced development has been systematically documented in the Malaysia's five-year plans since 1981 when states in Malaysia were divided into three categories based on their level of GDP per capita. There were two high-income states: Federal Territory of Kuala Lumpur and Selangor; eight middle-income states: Johor, Melaka, and four low-income states: Kedah, Perlis, Kelantan and Terengganu. From 2001 onwards, the composite development index has been used to divide the states into two categories according to their levels of development (Malaysia 2001). The composite development index comprises ten indicators; GDP per capita, unemployment rate, urbanisation rate, registration of car and motorcycle per 1,000 of population, poverty rate, population provided with piped water, population provided with electricity, infant mortality rate and number of doctors per 10,000 of population. Following this index, states in Malaysia fall into these two categories: *More developed states* comprising Johor, Melaka, Negeri Sembilan, Perak, Pulau Pinang, Selangor and Federal Territory of Kuala Lumpur and *Less developed states* comprising Kedah, Kelantan, Pahang, Perlis, Sabah, Sarawak and Terengganu.

This article seeks to examine the dynamics of regional development disparities in Malaysia over the period of 1970-2000 using factor analysis and GIS. The findings herein would have important policy implications which aimed at achieving convergence and catching-up of lagging regions and at reducing inequalities across the country during development.

Regional Planning in the Five-Year Malaysia Plans

The history of Regional Planning in Malaysia dates back to the First Malaysia Plan of 1966-70. A World Bank-United Nations Regional Planning Advisor has divided regional development in Malaysia into three phases which include:

- i. a period of tacit recognition of regional planning which coincides with the period of the First Malaysia Plan;
- ii. a brief period of ad-hoc regional planning;
- iii. a period of explicit regional policy starting with the period of the Third Malaysia Plan to the Fifth Malaysia Plan in 1990; and;
- iv. the post 1990 period of regional planning at a crossroad
- v. the revival of regional approach to development planning to achieve the National Vision

During the four decades, the nature, scope and emphasis of regional planning have undergone various changes. These changes, seen in the focus, types and intensity of development projects and programs are being spelled out very clearly in the development plans related to each phase. In fact, these phases also reflect the changing economic, social and political circumstances of the country as a whole. After the third phase, regional development planning is considered to be at a crossroad; with a new set of environment and challenges at the national and international levels, amidst the persistent problem of inequality.

In the beginning, during the First Malaysia Plan, regional planning strategies were just but one of the major tasks of rural development. Basically, it was meant to be a strategy of poverty eradication among the rural poor by increasing opportunities for higher income earning capacities. Among the strategies carried out included land development, large scale infrastructure development including irrigation facilities for paddy growing areas and improvement of agricultural institutions. The lack of the spatial element in the early regional planning process was very obvious and thus the impact of the various projects and programmes carried out during this period was marginal.

The racial riot of May 1969 brought about a change in the regional planning emphasis in the country. The inception of the New Economic Policy (NEP) and the Second Malaysia Plan (SMP) recognized the mistakes of the earlier plans and for the first time admitted the increase in as well as the persistence of regional unequal development. The new plan took much more explicit and extensive account of the regional problems. It accounted for the nature of inequalities, identified the so-called less developed areas and the more developed areas, and sectors considered to be of potential for development. The above concern was well reflected in the objectives of the NEP as stated in the SMP to be "the eradication of poverty regardless of race, and the restructuring of the Malaysian society so as to reduce the identification of employment with race and location within the context of an expanding economy" (Malaysia, 1971). Thus the NEP gave a major impetus to the formulation and adoption of regional development as a strategy in national development with the major aim of reducing inequalities.

However, the concern for the problem was mainly focused on economic imbalances particularly in terms of pattern of ownership and control of economic activity, and the distribution of income and employment. The SMP was thus designed to strengthen the process of restructuring society in order to correct the imbalances between the Malays and the other indigenous groups and between the Malays and the other races. Therefore, the concern was very much for racial economic imbalances. Within the above context, various regional development strategies were implemented, among others including, modernization of the rural sector, improvement of the education facilities in the rural areas and urbanization through the introduction of modern industries in rural areas. This period also saw the implementation of projects for specific regions like the JENGKA Triangle, Pahang Tenggara (DARA), Johore Tengah (KETENGAH), as well as the MUDA, KEMUBU and Besut Irrigation schemes. Various regional studies were also carried out to identify opportunities for further development.

The spatial dimension of inequality, specifically inequality between states was first analysed in detail in the Mid-Term Review of the SMP in 1974. This and the subsequent Third Malaysian Plan, 1976-80, reviewed the problems of economic and social inequalities between the states of Malaysia and stressed the need to overcome the imbalances and the role of regional development planning in national development as stated: "there is a need to bring closer integration among the states of Malaysia through redressing economic and structural imbalances among the regions in the country by drawing and building upon the strengths of each region, to ensure that regional development contributes towards the national goals of economic development" (Malaysia, 1976). It is obvious from the above that the Third Malaysia Plan recognizes the extent and dimension of the regional problems. Therefore the central issue of regional development in this plan was to reduce regional differences as well as to ensure overall economic growth. The main strategy of regional planning during this period was to bring about social and economic cohesion among the states, to have a more balanced urban systems and to limit growth in the Klang Valley Region in order to avoid congestion, to promote growth in the east coast states through maximum utilization of their resources and to encourage the outflow of labour from congested areas to other areas with underdeveloped resource.

The Fourth Malaysia Plan 1981-85, marked the beginning of the second decade of the New Economic Policy. Although the objective of regional planning remained the same as the earlier plans, several new elements were seen to have emerged. Firstly, for the first time planners had become conscious of the "region" instead of the "state-wide" development. The plan defined a region as "a relatively contiguous land mass which is in more or less uniform state of development, has similar resources and economic activities and is dominated by a single metropolitan area. A region therefore, may encompass an entire state or a group of states" (Malaysia, 1981). Six regions were identified consisting of the Northern, Central, Eastern and Southern Region in Peninsular Malaysia, and Sabah and Sarawak each as a separate region. Another new element of regional development planning was the making of the private sector an integral part in the development process with the public sector concentrating in national development. The emphasis on the development of regions rather than states was further stressed in the Fifth Malaysia Plan. In addition, this plan also realized the importance of both inter and intra-regional planning. The characteristics and development achievements and problems of each of the region were identified and described. It was envisaged that this would enable states, which were poor in resources and experienced growth constraint to benefit from

the overall development efforts undertaken in the region. The Fifth Malaysia Plan also realized that there is a need to streamline the planning and implementation machinery in the country in order to effectively operationalize the regional approach to development.

In addition, the plan also emphasized the need to integrate urban and regional development in national planning. In the Fifth Malaysia Plan, urban development complements the strategy for reducing regional imbalances. The plan called for the strengthening of urban centres in the less developed regions and formation of an urban network within the various regions in order to achieve greater spread of urban development in an orderly and hierarchical manner. To complement this strategy the plan also, for the first time, introduced the strategy of rural urbanization involving the creation of rural growth centres which acts as a catalyst for development in the rural areas and at the same time completing the lower end of the urban hierarchy. Development in the country would also be carried out in a systematic manner, along the axis of the development corridors. Another new orientation of regional planning in the Fifth Malaysia Plan was the realization for the need to strike a balance between 'people-prosperity', and 'place-prosperity' strategies. To this end, the plan attempted to reinvigorate and modernize the agricultural sector through rural urbanization programs. On the whole it can be summarized that regional development during the Fifth Malaysia Plan was directed towards the consolidation of efforts to ensure greater efficiency of resource utilization. This was in line with the resource constraint situation experienced by the country since the beginning of 1980.

The year 1990 marks the end of the Outline Perspective Plan 1 (OPP1) period within which the objectives of the NEP were to be realized and the beginning of the Outline Perspective Plan 2(OPP2) period. On the whole, the country attained favourable economic growth over the two decades. Individual regions too benefited from the national growth. This can be seen in the increased of household income in the various regions especially the poorer ones, the decline in the incidence of poverty and the improvement of the quality of live in these regions. However, the different regions grew at different growth rates with the richer regions having higher growth rates than the poorer regions and thus the problem of regional imbalances persisted. It is envisaged that the richer regions will grow at a faster rate than the poorer regions and this would lead to further inequalities. In view of the above fact, regional development during the OPP2 period starting with the Sixth Malaysia Plan 1991-2000, continued to focus on the emphasis to reducing the imbalance in economic and social development between the regions and states. The main thrust of regional development during this period will be for the less developed states to take the advantage of the spillover of development occurring in the relatively more congested urban centres in the country (Malaysia, 1996). The peripheral areas will be provided with the necessary infrastructure to absorb the spillover. Meanwhile, the natural resources available in the less developed states will be developed on a commercial basis, oriented towards exports. Parallel to this, rural development in resource poor states will continue to emphasize on the commercialization of in situ agriculture.

The Sixth Malaysia Plan had also introduced a new dimension in regional development planning, in the form of international regional planning seen in the formation of supra-national regions like the Indonesia-Malaysia Growth Triangle (IMS-GT), Indonesia-Malaysia- Thailand Growth Triangle (IMT-GT) and others. These are regions comprising areas of the different countries within which complementarities of resources can be exploited. The 1990s also witnessed certain trends in regional developments which

would have implications for regional growth and thus regional inequalities. These new developments relates closely to the process of globalization. Besides the emergence of the sub-regional cooperation as mentioned above these trends include mega-urban development programmes like the Kuala Lumpur International Airport (KLIA), the Multimedia Super Corridor (MSC) with the twin cities of Putrajaya and Cyberjaya, massive sub-urban projects like Lembah Beringin and also the decrease role of the Regional Development Authorities and thus the Resource Development Programmes. Due to both the nature and scale of these projects as well as their location, mostly in the most developed parts of the country, it is envisaged that they would have implications on regional growth and thus regional inequalities.

Under the Seventh Malaysia Plan, the major focus of regional development was to achieve equality in social and economic development in all regions and states as well as to improve the quality of life of their population. Within the above context, the economic structure of the less developed regions was diversified especially through the contributions of the manufacturing and the service sectors. The less developed states experienced an annual GDP growth of between 3.0 to 5.5 per cent. However, the impact of the financial crisis of 1997 on the national economy trickled down to the states, especially the less developed states, thus making the inequality gap wider.

The diversification of state economy based on the strength of each state remained the focus of regional development planning was under the Eight Malaysia Plan. The plan also emphasized on the efficient utilization of resources to ensure sustainable regional development. In addition, urban and rural development strategies remained important and regional cooperation through the growth triangles strategies was enhanced. Although all states and regions experienced economic growth during the 8th Malaysia Plan period, regional inequalities persist and in certain instances became more diverged. New dimensions of inequalities also emerged especially seen in the existence of intra-state and intra-urban inequalities.

In view of the above, balanced regional development remains as one of the major objectives of national development. This can be seen in the formulation of the National Vision under the Ninth Malaysia Plan (2006-2010) which stresses the need for affirmative actions towards redistribution. The 9th Malaysia Plan, emphasizes on efforts towards the reduction of inequality in development between regions and states as well as urban and rural areas. Within this context, development transgressing the state boundaries would be emphasized and development within existing development centres and axis/corridors intensified. Various strategies have been formulated and the machinery of regional development has also been strengthened.

It can be seen from the above that regional development planning in Malaysia has undergone a number of phases. Each of these phases spells out clearly the types and emphasis of development to be carried out. The emphasis and orientations of regional development efforts have also changed through the various national development plans. However, it is very clear that the aims and objectives of regional development remained the same over the three decades or so and likely to remained so.

Data and Analysis

The aim of this analysis is to establish the extent of regional disparities and to study the dynamics of these disparities in Malaysia. For this purpose, the regional development differentials will be demonstrated by comparative analysis of disparities at the census dates 1970-2000 using factor analysis and mapped using GIS. The selection of indicators to be used in the study depends on the availability of comparable data for the four census years at the regional (state) level. These indicators were collected from various published and unpublished reports of the Department of Statistics. A total of 25 indicators covering demographic, economic, social and infrastructural development of the states in Malaysia were factorized in the analysis. The indicators were:

- Population density
- % Malays in population
- % Chinese in population
- % Indians in population
- Number of motor vehicles per 1000 person
- Number of motor cycles / scooters per 1000 person
- % of living quarters with electricity
- % of living quarters with piped water
- % of living quarters with toilet facilities
- Average number of persons per household
- Mean monthly household income
- Gross domestic product per capita
- Infant mortality rate
- Persons per registered doctor
- Urbanization rate
- Employees in labour force
- Manufacturing employees per 1000 people
- Literacy rate
- Teacher student ratio - primary school
- Teacher student ratio - secondary school
- Incidence of poverty
- Telephone per 1000 people
- Road development index
- Capital investment in manufacturing (RM million)
- Indexed crime

Factor Analysis

Factor analysis provides a useful technique to construct a composite index given a large number of indicators potentially representing socioeconomic development of regions in Malaysia. It is a method of grouping a large number of indicators into a relatively small number of contributing components (factors) which explain most of the variance in the original indicators. After grouping, the variables within each factor are more highly correlated within variables in that factor than with other variables in other factors. Factor analysis is particularly useful in situations where the dimensionality of data and its structural composition are not well known. This procedure helps unravel and clarify

the complex interrelationships between the individual indicators and more importantly derive a score for constructs (i.e. regional development) that are not directly observable (Hair, 1992).

The main aim of factor analysis performed in this study is the construction of scores that describes the regions in Malaysia in terms of information derived from the 25 indicators insofar as correlations exist. The coefficients that express the degree of correlation between indicators are termed "factor loadings" which can be used to interpret the factors extracted according to be meaning of the indicators. As seen above, factor analysis allows each factor to be given a numerical value for each region. Further the study approach used factor analysis to allocate to the individual indicators their appropriate weighting related to that particular developmental stage since socioeconomic development is defined in advance using the selected indicators. Only the first factor accounting for the most part in the variance (over 50 percent), interpreted as the level of socioeconomic development, is taken into consideration for the purpose of this analysis.

TABLE 1: Factor loadings for the first factor (factor of socioeconomic development) for 1970, 1980, 1991 and 2000

Indicator	Factor Loadings			
	1970	1980	1991	2000
Population density	0.43673	0.71468	0.67474	0.65023
% Malays in population	-0.96602	-0.91146	-0.52333	-0.89179
% Chinese in population	0.94602	0.91851	0.87258	0.84953
% Indians in population	0.87167	0.72558	0.79623	0.82276
Number of motor vehicles per 1000 person	0.94469	0.96265	0.81433	0.94107
Number of motor cycles / scooters per 1000 person	0.95262	0.25852	0.30732	0.04014
% of living quarters with electricity	0.73136	0.76626	0.56271	0.56270
% of living quarters with piped water	0.46625	0.60459	0.90394	0.75439
% of living quarters with toilet facilities	-	0.96639	0.95232	0.92980
Average number of persons per household	-0.00048	0.32683	-0.43967	-0.86705
Mean monthly household income	0.93557	0.90997	0.83088	0.85674
Gross domestic product per capita	0.90522	0.91555	0.64710	0.80207
Infant mortality rate	-0.92503	-0.15979	-0.67630	-0.42833
Persons per registered doctor	-0.96414	-0.92465	-0.91460	-0.84981
Urbanization rate	0.25957	0.74914	0.89403	0.89655
Employees in labour force	0.95913	0.94636	0.38818	0.21682
Manufacturing employees per 1000 people	-0.55463	0.81009	0.64803	0.55316
Literacy rate	-0.35150	0.77618	0.75423	0.80516
Teacher student ratio - primary school	0.58013	0.65530	0.68127	0.40477
Teacher student ratio - secondary school	-0.55139	0.38361	0.54323	0.33730
Incidence of poverty	-0.93043	-0.91492	-0.85491	-0.87200
Telephone per 1000 people	-	0.91752	0.97793	0.28972
Road development index	-	0.51313	0.78074	0.71005
Capital investment in manufacturing (RM million)	0.80224	0.11446	0.13482	*
Indexed crime	-	-	0.84572	0.70367

Source: Calculated based on unpublished data from the Housing and Population Censuses 1970, 1980, 1991 and 2000.

- Data not available

* Not significant

Empirical study and comparison of socioeconomic development in the states in Malaysia was undertaken by establishing a multidimensional factor described above for each of the years 1970, 1980, 1991 and 2000. The first factor used in each case, subsequently termed the factor of socioeconomic development, which were extracted for all the observed years account for over 50 percent of the variance and showed high stability. Table 1 shows all the indicators that contributed substantially to the socioeconomic development of the states for the all the years; only those larger than 0.5 were accounted for interpretation. The indicators which describe the factor of socioeconomic development and the corresponding factor loadings are given in Table 1 and Figure 1. Significant features are the overall high (positive) factor loadings of the following indicators in 2000:

- % Chinese in population
- % Indians in population
- Number of motor vehicles per 1000 person
- % of living quarters with toilet facilities
- Mean monthly household income
- Gross domestic product per capita
- Urbanization rate
- Employees in labour force
- Literacy rate
- Road development index
- Indexed crime

Similar significance attaches to the high (negative) factor loadings of the indicators representing:

- % Malays in population
- Average number of persons per household
- Persons per registered doctor
- Manufacturing employees per 1,000 people
- Literacy rate
- Incidence of poverty

These factors show declining significance (both positive and negative) in describing socioeconomic development of the states since 1970:

- Number of motor cycles/scooters per 1,000 persons
- % of living quarters with electricity
- Infant mortality rate
- Employees in labour force
- Capital investment in manufacturing (RM million)

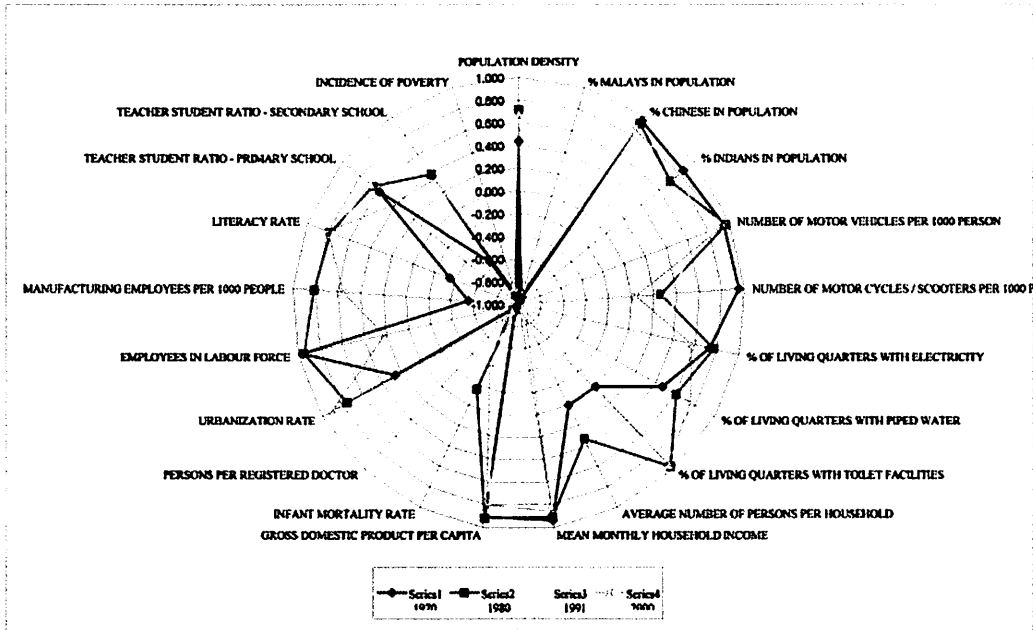


FIGURE 1: Factor loadings for the first factor for 1970, 1980, 1991 and 2000

For mapping purposes using GIS, data is collected from different sources. Paper based maps were scanned and digitized using ArcGIS 9. This data together with existing data were projected according to RSO projection before it can be used as based maps. Some spatial data were obtained from the Statistical Department. The latter has saved time and cost of building new maps. Two types of database were required for the purpose of this study: one is meant for spatial data and the other for attribute data. The spatial maps only contained the geo-referenced data. In this study the state and district boundary maps were constructed. The attribute data were kept in a separate database. In this study too Microsoft Access was used. The attribute data consisted all the indicators in mapping the spatial disparities. This data was combined with spatial data based on similar field. In this case district and state IDs' were used as primary reference. The indicator layers from different decades then were joined together in order to view economic growth according to districts.

The Dynamics of Regional Inequalities in Malaysia

Figures 2 through 4 graphically show the factor scores for socioeconomic development of the states in Peninsular Malaysia in 1970 and 2000². Generally the higher the factor score (positive value), the higher the level of socioeconomic development in the respective states and vice versa. The states are classified into five groups according to their socioeconomic development achievement in figures 2 and 3: the states in the first two groups have an above-average level of socioeconomic development; those in the remaining groups are average or lie below average³. Throughout 1970 -2000 the federal states of Penang, Selangor, Wilayah Persekutuan⁴, Negeri Sembilan, Melaka, Perak and Johor have attained above-average performance whereas Pahang, Kedah, Perlis, Kelantan, Terengganu Sabah and Sarawak fell below the average.

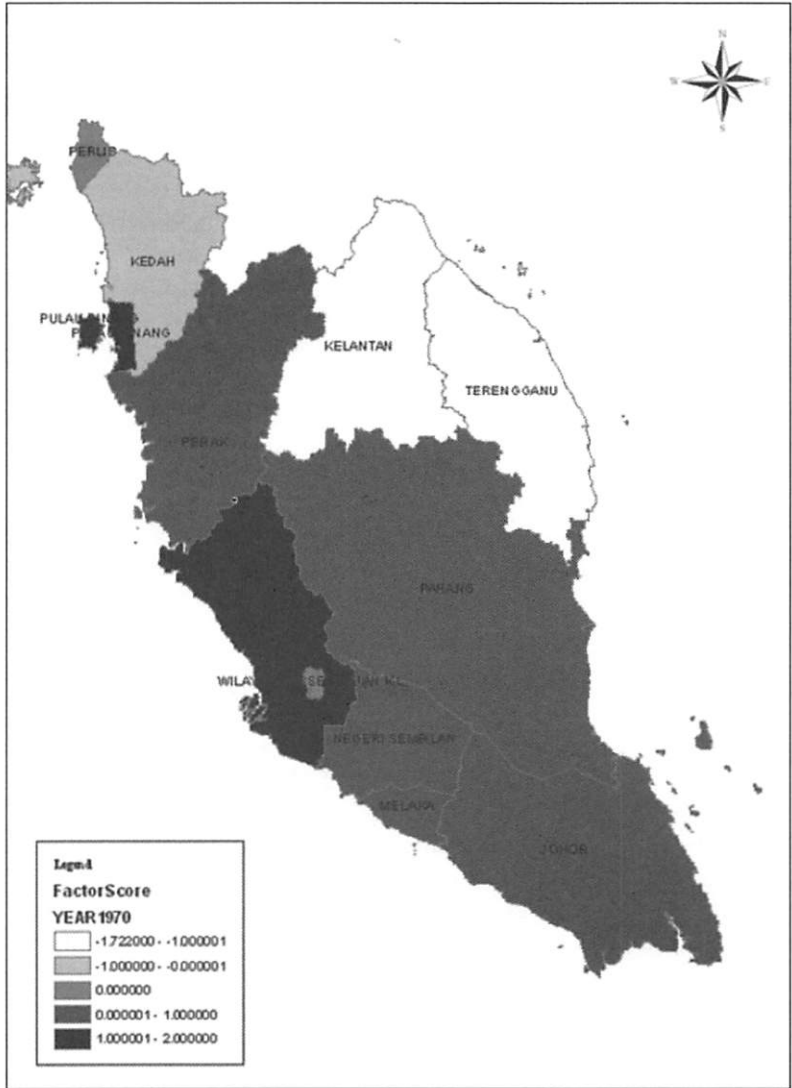


FIGURE 2: Factor of Socioeconomic Development in Peninsular Malaysia 1970

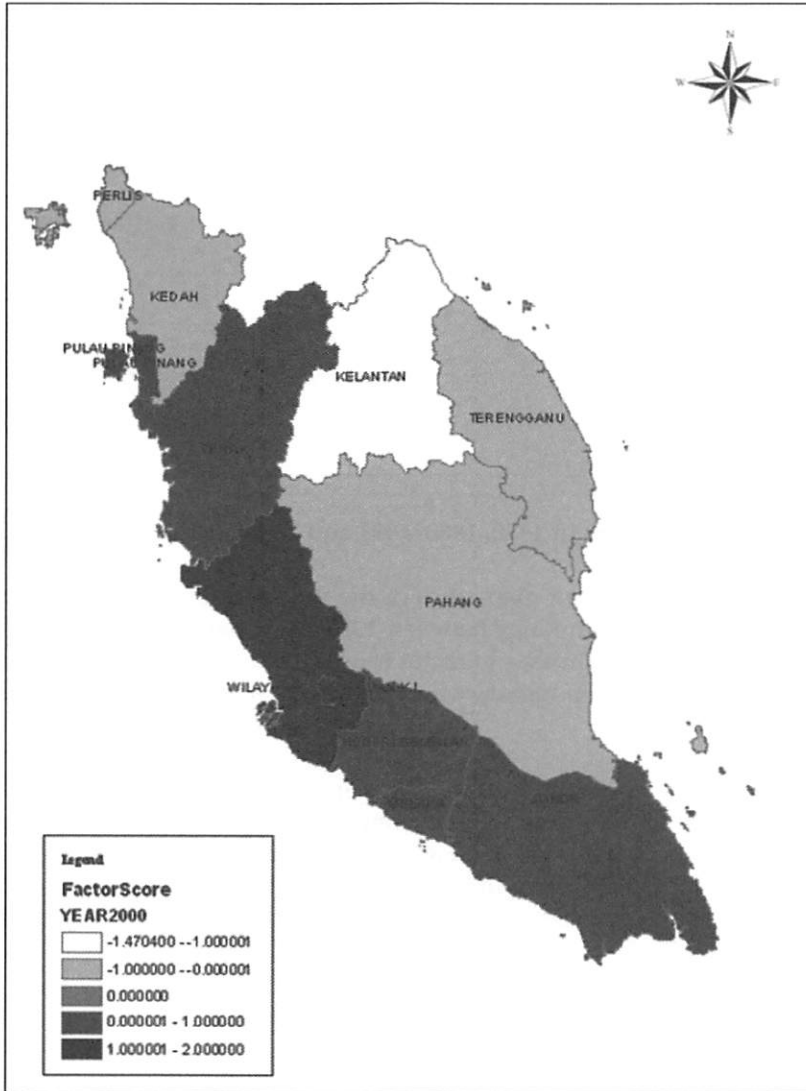


FIGURE 3: Factor of Socioeconomic Development in Peninsular Malaysia 2000

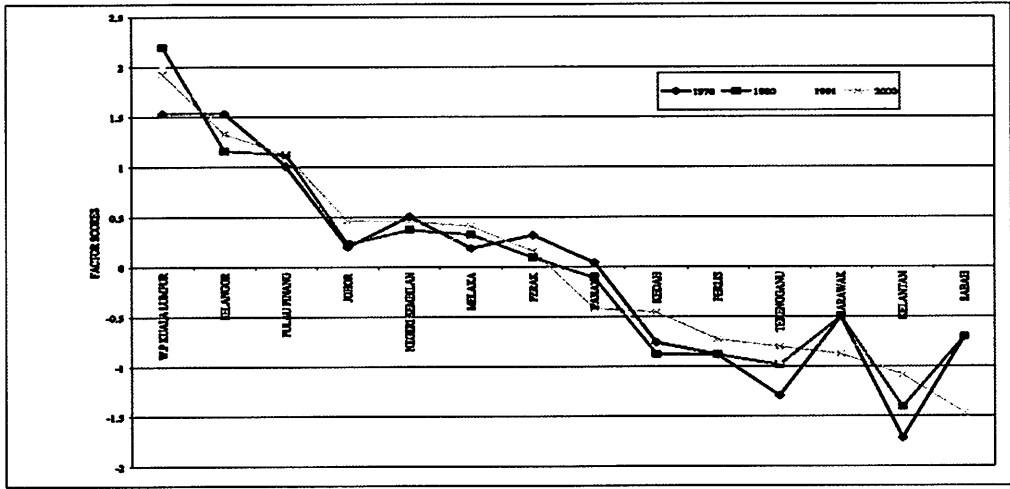


FIGURE 4: Factor Scores in 1970, 1980, 1991 and 2000 for the states of Malaysia

Trends in regional development disparities of the states can be identified by examining the changes in factor score rankings between 1970 and 2000. Shifts in the rankings are expressed by increases or decreases in factor scores for the period of study; an increase indicates progress in the given region, whereas regions with reduced factor scores have lost ground.

Table 2 facilitates an examination of the shifts in the score rankings for the states of Malaysia. It indicates that no substantial change in regional development between 1970 and 2000 can be directly observable. Factor scores remained relatively stable and it would seem that while there were fluctuations in the socioeconomic performance, the changes were not significant enough to have lifted the lagging states especially beyond the average.

TABLE 2: Factor scores in 1970, 1980, 1991 and 2000 ranked according to 2000 scores

States	Factor Scores				% Change in Factor Scores		
	1970	1980	1991	2000	1970-1991	1991-2000	1970-2000
W.P Kuala Lumpur	-	2.1965	2.0174	1.9239	-0.08	-0.05	-0.12
Selangor	1.5278	1.1546	1.3561	1.3236	-0.11	-0.02	-0.13
Pulau Pinang	1.0029	1.1185	1.1584	1.1172	0.16	-0.04	0.11
Johor	0.2002	0.2292	0.3812	0.4622	0.90	0.21	1.31
Negeri Sembilan	0.5048	0.3690	0.2972	0.4565	-0.41	0.54	-0.10
Melaka	0.1878	0.3242	0.2716	0.4085	0.45	0.50	1.17
Perak	0.3166	0.0920	0.2465	0.1576	-0.22	-0.36	-0.50
Pahang	0.0407	-0.1121	-0.3381	-0.4194	-9.32	0.24	-11.32
Kedah	-0.7612	-0.8760	-0.6286	-0.4574	-0.17	-0.27	-0.40
Perlis	-	-0.8850	-0.6526	-0.7299	-0.26	0.12	-0.18
Terengganu	-1.2981	-0.9898	-0.9531	-0.8060	-0.27	-0.15	-0.38
Sarawak	-	-0.5027	-0.6841	-0.8792	0.36	0.29	0.75
Kelantan	-1.7220	-1.4126	-1.1517	-1.0872	-0.33	-0.06	-0.37
Sabah	-	-0.7057	-1.3202	-1.4704	0.87	0.11	1.08

Source: Calculated based on unpublished data from the Housing and Population Censuses 1970, 1980, 1991 and 2000.

In 2000, Wilayah Persekutuan Kuala Lumpur, Selangor and Pulau Pinang ranked the highest in terms of socioeconomic development whereas Sarawak, Kelantan and Sabah ranked the lowest. Table 2 (and Figure 5 for a map of Peninsular Malaysia) show clearly that two-thirds of the states in Malaysia experienced a decline in socioeconomic development between 1970 and 2000; the biggest loser being Pahang whereas among the top gainers were Johor, Melaka and Sabah.



FIGURE 5: Changes in Factor Scores 1970- 2000

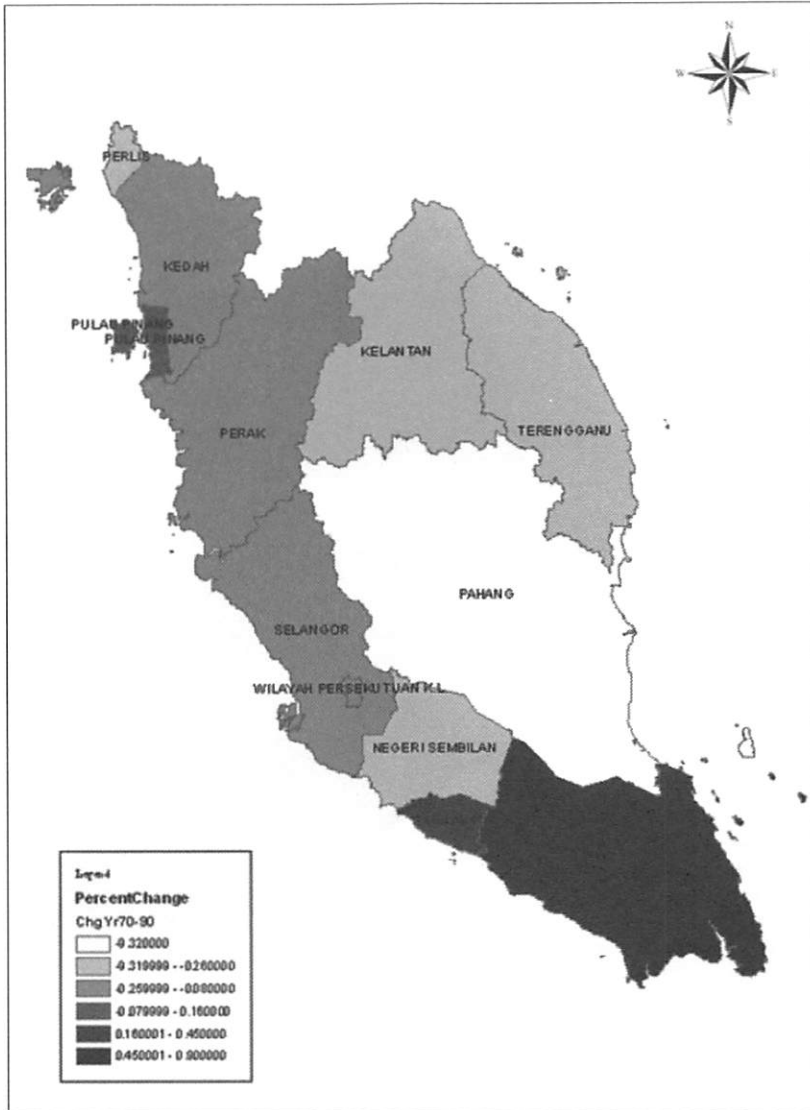


FIGURE 6: Changes in Factor Scores 1970-1991

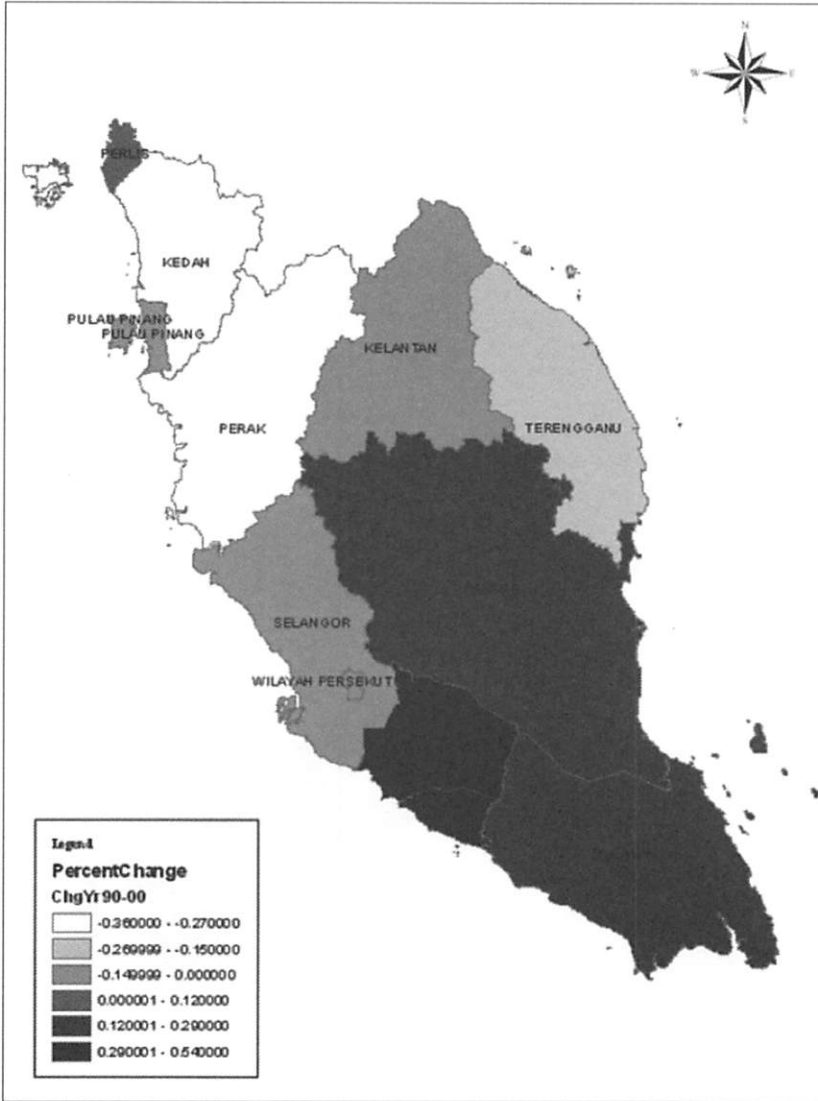


FIGURE 7: Changes in Factor Scores 1991- 2000

Figures 6 and 7 visually display the percentage change in factor scores for the states in Malaysia for two periods that coincides with the long-term development plan periods the country had underwent. This would enable analysis of development disparities which would have implications on regional approach for development planning. The New Economic Policy (NEP), 1970-1990 saw major regional planning instruments being put into place ensuing the racial riot of 1969. Socioeconomic development up to 1990 (Figure 7) was modest in all states except Pahang. The subsequent National Development Policy (NDP, 1990-2000) saw further improvements in socioeconomic development of the states in Malaysia, although some may argue that there may still be the downstream effects of regional development planning beyond 1990.

Conclusion and Policy Implications

The above analysis demonstrates the continued presence in Peninsular Malaysia, especially, of a spatial structure which originated in the colonial period, that is, a relatively highly developed west coast with the major centers of Kuala Lumpur, Georgetown, Ipoh and Johor Bahru, and a less developed east coast.

Is there, however, evidence of interregional decentralization? The investigation above shows overall that there is some observable evidence of incipient polarization reversal in Peninsular Malaysia.

It is clear from the regional analysis exercise that inequality although has been declining is still an important problem in the country. It is also clear from the analysis that although Malaysia has undergone a period of favorable economic growth up to the early 1990s and amidst the growth, tremendous efforts have been geared towards regional development planning, inequality although improved still forms a major development issue. This would mean that regional development efforts in the country need to be continued. The continued stress on the role of regional development can be clearly seen in the aspiration of Vision 2020 as clearly stated in the National Vision Plan (NVP) following the NDP and NEP; in the objective of achieving a balanced development.

However, it looks as if that regional planning in the last half a decade or so and certainly in the new decade has been and would be confronted by certain dilemmas reaching a crossroad where certain choices have to be made; the resolution to which would set the direction for future regional policies in the country. The choices include:

- i. To change or continue adopting the strategy of growth with distribution. It would seem rather clear that although the impact of this approach to development require a long time to be seen, a continuous efforts along this approach would in the coming years, means that tremendous efforts and more important amount of allocations be made to regional development projects spread throughout the country. On the other hand, a growth strategy would call for concentration of development efforts to achieve national economic growth which would be distributed to the various parts of the country anyway. The basic question is whether the least developed areas of the country are ready to receive the effects of national growth.

- ii. To give attention to the rural or the urban dimensions of regional problems and thus a - rural or urban based approach to regional planning? In terms of their location, the past regional development programmes were largely rural in nature. This was because of the nature of the regional problem where the depressed areas are mainly rural areas. However, the strategy adopted in these regional development schemes are also urban-based activities which was part of the reasons why some of these programmes failed to achieve their goals mainly due to the inappropriateness of the strategies and the activities carried out. Since the mid-1980s however, these programmes seemed to have decrease in importance and the rate of industrialization and urbanization during the last decade seemed to have change the dimension of the regional problem. Thus it is rather pertinent to review and emphasize the focus of regional development planning because the emergence of the so-called urban regions and thus urban problems is still beset with obvious rural depressed areas especially in the eastern and the northern states.
- iii. To adopt a national or international form of regional planning? In view of the continued existence of intra-national inequality it would be questionable what the impacts of such form of development be on regional inequalities. Would it be possible to limit the leakage of growth to other regions of the country and how would this be overcome? On the other hand, in the midst of the globalization era, and the emergence of its impact on the Malaysia regional development scene like the emergence of mega-urban regions, trans-border regions, corridors of development and the influx of international migrants, it would seem inevitable to follow the trend of international regional development planning.
- iv. To establish the relevance of existing regional planning mechanisms to overcome the present problem and the need for new machinery for regional development planning. This is very true in terms of the application of the concept of regions as well as the formation of regional development authorities. From the latest pattern of inequality, the four regions of the Fourth Malaysia Plan seem to be less inappropriate now, and if the state is considered as the planning region, within each state itself there might be sub- regions. So perhaps it is time to review the role of the districts in regional development planning. This in fact has long been advocated by researchers like Ahmad Suhaimi (1992) and Zainul Bahrin (1988).
- v. To resolve the question of whether the growth pole strategy which provides the basis for regional development planning is still relevant despite its lack of success and more important perhaps in lieu of the new spatial pattern emerging as a result of globalization.

Malaysia has gone a long and moderately successful evolution in regional planning. It is important that a compromise be taken in making the choice to the above dilemmas to ensure the country experience growth which must precede redistribution while at the same time, redistribution takes place in order to reduce inequalities. Similarly, both the rural and urban dimensions of the regional problem would have to be given due attention; while urban growth would be the catalyst to national growth the rural areas should be developed so that they would be prepared to receive the trickle effects of growth from the urban centres and that no or minimal leakages occur. Finally, while the international

dimension of regional planning is important so as to establish regional cooperation in terms of achieving nationally balanced regions, national regional planning; both inter- and intra regional planning would be of greater benefit.

Acknowledgement

This article is based on the findings of the authors' project in 2006 entitled Mapping Growth and Socioeconomic Development in Malaysia (1970-2000), a research project funded by the Center for Economic Development and Ethnic Relations (CEDER), University of Malaya.

References

- Cooke, P 1983, *Theories of Planning and Spatial Development*, Hutchinson and Co. Ltd London.
- Friedmann, John 1966, *Regional Development Policy: A Case Study of Venezuela*, Cambridge, MIT Press, Massachusetts.
- Hair, JF et.al. 1992, *Multivariate Data Analysis* (3rd edition), Macmillan, New York.
- Hirschman, AO 1958, *The Strategy of Economic Development*, Yale University Press, New Haven.
- Johari Mat 1983, *Regional Development in West Malaysia: A Comparative Effectiveness Study of JENGKA, DARA, KEJORA and KETENGAH*, Institut Tadbiran Awam Negara Malaysia, Kuala Lumpur.
- Kamal Salih and Young Mei-Ling 1988, "Evaluation of Regional Development Experience in Malaysia". Paper presented for the Meeting on Regional Development Policy in ASEAN, Phuket, Thailand.
- Lucas, RE 2000, "Some Macroeconomics for the 21st Century", *Journal of Economic Perspectives*, Vol. 14 (1), pp 159-168.
- Malaysia, *1st Malaysia Plan, 1966-1970*, Government Printers, Kuala Lumpur.
- Malaysia, *2nd Malaysia Plan, 1971-1975*, Government Printers, Kuala Lumpur.
- Malaysia, *3rd Malaysia Plan, 1976-1980*, Government Printers, Kuala Lumpur.
- Malaysia, *4th Malaysia Plan, 1981-1985*, Government Printers, Kuala Lumpur.
- Malaysia, *5th Malaysia Plan, 1986-1990*, Government Printers, Kuala Lumpur.
- Malaysia, *6th Malaysia Plan, 1991-1995*, Government Printers, Kuala Lumpur.
- Malaysia, *7th Malaysia Plan, 1996-2000*, Government Printers, Kuala Lumpur.

Malaysia, *8th Malaysia Plan, 2001-2005*, Government Printers, Kuala Lumpur.

Malaysia, *9th Malaysia Plan, 2006-2010*, Government Printers, Kuala Lumpur.

Williamson, JG 1965, 'Regional Inequality in the Process of National Development: A Description of the Pattern', in *Regional Policy*, Friedmann, J and Alonso, W (eds), MIT Press, Cambridge, Massachusetts, pp.158-200.

Zainul Bahrin, 1987, 'Pattern of Spatial Development and Regional Inequality in Peninsular Malaysia', Unpublished PhD Dissertation, Michigan State University.

Notes

- ² In the interest of space, maps for Sabah and Sarawak were not presented here; the result of the analyses however, can be discerned from Table 2.
- ³ The factor scores are standardized measures with a mean of 0 and a standard deviation of 1.
- ⁴ In 1970 it belonged to the state of Selangor