

## Urbanisation and Impact on Development in Malaysia

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### ABSTRACT

*The process of urbanisation has brought forth challenges that need to be addressed by governments of nations who are trying to manage their cities and improve the quality of urban living of their communities. The phenomenon from progressive urbanisation and growth of towns and cities is the acceleration in economic development and social changes in the urban centres. Such urban activities have influenced the development and growth of new towns and conurbations giving rise to a host of new activities encompassing economics, environment, governance, land use, infrastructure and technology. There is need to recognise the emergence of these urban issues and their impact upon the development of a nation. Malaysia is a classic case of a nation challenged with the process of rapid urbanisation and this paper explores the country's efforts at addressing and coordinating urban development between the various sectors and agencies involved. Initial observations reveal that to meet the aspirations of communities and the plan for new development in urban areas, there ought to exist engagement, consolidation and empowerment. In addition, urban centres need to identify niche areas of economic activities and place emphasis on productivity, competitiveness and quality.*

**Keywords:** *progressive urbanisation, urban centres, urban development, empowerment*

## Perbandaran dan Impak ke atas Pembangunan di Malaysia

### ABSTRAK

*Proses pembangunan telah membawa kepada berbagai cabaran yang perlu diutarakan oleh kerajaan-kerajaan negara yang mencuba menguruskan bandaraya mereka dan menambahbaikkan kualiti kehidupan komuniti di perbandaran. Fenomena dari perbandaran yang progresif dan pertumbuhan bandar dan bandaraya ialah kecepatan dalam pembangunan ekonomi dan perubahan sosial di pusat-pusat bandar. Aktiviti perbandaran sebegini telah mempengaruhi pembangunan dan pertumbuhan bandar-bandar baru and bandar-bandar gabungan yang membawa kepada berbagai aktiviti baru yang merangkumi ekonomi, alam sekitar, governan, penggunaan tanah, infrastruktur dan teknologi. Maka sudah tentu akan terdapat keperluan untuk menerima kemunculan berbagai isu perbandaran serta impaknya ke atas pembangunan sesebuah negara. Malaysia merupakan suatu kes negara yang klasik kerana ia tercabar dengan proses perbandaran yang pesat dan artikel ini cuba meneroka usaha-usaha negara untuk mengutara dan mengkordinasikan pembangunan perbandaran di antara berbagai sektor dan agensi yang terlibat. Pemerhatian awal menunjukkan bahawa untuk memenuhi aspirasi komuniti dan perancangan untuk pembangunan baru di dalam kawasan perbandaran, maka perlu diwujudkan penyertaan, pengukuhan dan pemerkuasaan. Tambahan pula, pusat-pusat bandar perlu mengenal pasti ruang yang sesuai untuk keperluan aktiviti ekonomi dan memberi penumpuan kepada produktiviti, daya saing dan kualiti.*

**Katakunci:** *pemandaran progresif, pusat-pusat bandar, pembangunan bandar, pemerkuasaan*

## INTRODUCTION

Malaysia, the focus of this paper, is a country fast developing and has thus far been stable in politics, economic and social values. However, like other countries in the region, it is also beset with the malaise often associated with rapid urbanisation. Asian countries experienced a population growth so high that it posed a strain on the municipalities to provide the necessary services to meet the demands of an ever-increasing population (Lohani, 2005). The urbanisation process has also descended upon Malaysia forcing the government to seek new strategies and smart partnerships to manage the cities and improve the quality of urban living.

Increasing population and economic productivity have greatly influenced the creation of cities and major towns that encompassed new conurbations and growth centres. With rapid urbanisation, villages have been transformed into major towns and cities. Within the context of securing a universally accepted meaning of the term “urban”, the government has adopted the statistical approach to define its urban areas. Prior to 1970, local authorities with population of 1000 and above are defined as urban, and in 1970s, municipality areas with population in excess of 7500 are classified as towns; population with 10000 as larger towns and those with population between 1000 and 9999 as small towns. In 1991, the term ‘urban’ was redefined as the ‘gazetted area and their adjoining built-up areas with a combined population of 10000 persons or more at the time of the census’ (Malaysia, 2001a). Under this definition, the urban population also takes into account areas ‘contiguous to a gazetted area and had at least 60 per cent of their population (aged 10 years or more) engaged in non-agricultural activities as well as having modern toilet facilities in their housing units’ (Malaysia, 2001a).

The country has experienced a transformation paradigm from rural areas into the urban conglomeration. In 1995, the urbanisation rate for Malaysia was 55.1%; and this rose to 63.0% in 2005 and is expected to increase to 63.8% by 2010 (Malaysia, 2006). The increase in urbanisation rate can be attributed to demographic changes and administrative reclassification.

Urbanisation will continue to set a pace in adopting a higher level of technology, acting as a catalyst for further economic growth and development. With the impact of globalisation, movement of people tend to gravitate towards major towns and cities that serve as the nerve centres of the nation possessing within their environment all the infrastructure and benefits sought by people. This also reflects the spatial separation of living and work, emergence of high-density settlements, dependency on personal transport modes that contribute significantly to traffic congestion, pollution, environmental degradation and inhabitants who feel urban living very challenging.

## URBAN POLICIES AND STRATEGIES

Throughout the various Malaysia’s Plans, urban development policies had been mentioned and discussed. However, their impact upon urban development and urban process had seen limited influences and success upon regional development i.e. urban strategies were not able to achieve regional balance and integration between Peninsular Malaysia, Sabah and Sarawak; and between states in the East and West coasts of Peninsular Malaysia. These policies were unable to transform the weak economy of the rural areas to match the pace of growth in the urban areas. This was further aggravated by disjointed physical planning between states. Federal influence was minimal as land matters come under the jurisdiction of the states. Consequently, there is a need for an urban policy to be consistent to bridge the gap between ‘haves and have-nots’, rich and poor, east and west coasts and between regions.

Towards this end, the federal government initiated the National Physical Plan (NPP), with the cooperation of the state governments in Peninsular Malaysia. It involves physical planning and projects on the ground

that will complement further the urbanisation policy and all urban development activities on a national scale involving infrastructure such as transportation, industrial and commercial premises, health, sewerage, education and technology. In facilitating and coordinating the activities under NPP, the federal government established the Physical Planning Council. This set-up indicates the seriousness of the central government in meeting the challenges arising from rapid urbanisation. Further support comes from the National Urbanisation Policy (NUP), 2006-2020, launched in 2006.

Thus, the NPP and the NUP support the creation of visionary towns with peaceful communities and living environment through sustainable development. The NUP comprises six main thrust namely; towards an efficient and sustainable urbanisation; development of a resilient, dynamic and competitive urban economy; towards an integrated and efficient urban transport system; providing quality urban services, infrastructure and utility; creating a conducive urban living environment with a distinct identity; and effective urban governance (New Sunday Times, August 6, 2006). Similarly, another piece of policy that will have an immediate impact upon urban development in Malaysia is the New Villages Master Plan for Peninsular Malaysia (Draft 2004). In line with the integration of suburban areas into the mainstream towns and major cities, these new villages will be integrated physically, socially and economically.

In Malaysia, urban planning responsibility has remained under the Federal Department of Town and Country Planning, which is a conjoint role of both Federal and State as provided for by the Constitution. However, the Ministry of Housing and Local Government is also closely associated with urban development in Malaysia as urban activities fall under local government. The jurisdiction of local government lies within the boundary determined by its status of city hall, city council, municipal council or district council. These units perform their functions according to the principle of *ultra vires* based upon uniform laws and policies. While the Local Government Act 1976 (Act 171) is the main instrument, for urban planning and development some major regulations that are prevalent are guided by the Town and Country Planning Act 1976 (Act 172), National Land Conservation Act, National Physical Plan, National Development Policy, National Land Code and also the Street, Drainage and Building Act 1974 (Act 133). Needless to say, even with these policies and plans, Malaysia's experience in urban development has had its fair share of hiccups and problems. The NUP, to a certain extent will be relied upon to address any problems arising from the process of urbanisation.

## **URBAN GROWTH VARIATIONS: SOME INDICATORS**

### **Rate of urbanisation**

In line with a higher degree of economic development, the states in the west coast of Peninsular Malaysia are generally more urbanised. In 2000, Kuala Lumpur, which is the capital city of the nation, is fully urbanized followed next by Selangor with a rate of 88.3% (Table 1). The least urbanised state was Perlis at 33.8%. Selangor's degree of urbanisation is due to its position as the hub of industrial and economic development in the Klang Valley and its location within the Multimedia Super Corridor.

### **Land use**

The impact of urbanisation is greatly felt in land use and the changes exerted upon its pattern. Land is the basic resource for different uses; social and economic, from agriculture, farming and harvesting to residential and commercial as well as intact in its natural form. Population increases the impact upon land and its usage is being determined by several factors, most crucial being human beings and the decisions on land use. Physical changes are bound to occur and are associated with the process of land development. In order to meet the demand for infrastructural activities and facilities in housing, industry

and commerce and community, towns undergo intense development and grow outwards and encroach into the rural areas.

### Demographic and social profile

Since independence in 1957, the country has witnessed rapid economic development; shifting from an agro-based economy to one that emphasizes on manufacturing and services. Population has increased from 13.1 million in 1980 to 22.2 million in 2000 recording an average annual growth rate (AAGR) of 2.7% between 1980 and 2000 (Table 1).

**Table 1**  
**Level of Urbanisation and Population Growth by States, 1980-2000**

State	Level of Urbanisation (%)			% Urban to National Population			Population (mil.)			
	1980	1991	2000	1980	1991	2000	1980 (mil.)	1991 (mil.)	2000 (mil.)	AAGR '80-'00
Johor	35.2	47.8	63.9	12.4	11.1	11.9	1.6	2.1	2.6	2.5
Kedah	14.4	32.5	38.7	3.5	4.8	4.4	1.1	1.3	1.6	1.9
Kelantan	28.1	33.5	33.5	5.4	4.4	3.1	0.9	1.2	1.3	1.9
Melaka	23.4	38.7	67.3	2.3	2.2	3.0	0.4	0.5	0.6	2.0
N. Sembilan	32.6	42.0	55.0	4.0	3.3	3.3	0.6	0.7	0.8	1.4
Pahang	26.1	30.4	42.1	4.5	3.6	3.8	0.8	1.0	1.2	2.0
Perak	32.2	53.6	59.5	12.5	11.3	8.8	1.7	1.9	2.0	0.8
Perlis	8.9	26.6	33.8	0.3	0.5	0.5	0.1	0.2	0.2	3.5
Pulau Pinang	47.5	75.0	79.5	9.5	9.0	7.1	0.9	1.1	1.2	1.4
Sabah	19.9	33.2	48.3	4.1	6.5	8.6	0.9	1.7	2.4	5.0
Sarawak	18.0	37.5	47.9	5.0	6.9	7.0	1.2	1.6	2.0	2.6
Selangor	34.2	75.2	88.3	10.8	19.4	25.4	1.4	2.3	4.0	5.4
Terengganu	42.9	44.5	49.4	5.0	3.8	3.2	0.5	0.8	0.9	3.0
Kuala Lumpur	100.0	100.0	100.0	20.5	12.9	9.5	0.9	1.1	1.3	1.9
<b>MALAYSIA</b>	<b>34.2</b>	<b>50.7</b>	<b>61.8</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>13.1</b>	<b>17.1</b>	<b>22.2</b>	<b>2.7</b>

Note: AAGR – Average Annual Growth Rate.

Source: Malaysia (2001a), Preliminary Count Report for Urban and Rural Areas, Population and Housing Census of Malaysia 2000, Department of Statistics, Percetakan Nasional Malaysia Berhad.

However, the growth was not distributed evenly i.e. some states experience stronger economic growth as compared to others. Johor, Melaka, Pulau Pinang, Selangor and Kuala Lumpur possessed the highest urbanisation rates (Table 1). Together, Selangor and Johor contributed over 37% of total national urban population in 2000. In 1980, Kuala Lumpur alone contributed more than 20% of total national urban population but reduced to 9.5% by the year 2000 attributed by stronger urban population growth in the state of Selangor. Selangor also recorded the highest population growth (5.4%) between 1980 and 2000.

In 2000, Malaysia's population density was 71 persons per square kilometre and the median age of the national population was 23.6 years indicating that the nation had a young population age structure with children of 14 years and below comprising exactly one-third of the population. The age dependency was 76% in 1980 and was 59% in 2000 while the sex-ratio indicated the existence of more males. Less than 6% of the population are non-citizens (Table 2).

**Table 2**  
**General National Population Indicator, 1980-2000**

	1980	1991	2000
Population density (per sq km)	42	56	71
% Citizens	na	99.2	94.1
Median age	19.6	21.9	23.6
Population aged 0-14 years (%)	39.6	36.7	33.3
Age dependency ratio (%)	76.0	67.8	59.2
Sex-ratio	101	102	104
Unemployment rate (%)	5.7	6.0	3.1

Note: na – not available

Source: Malaysia (1991a), Preliminary Count Report, Population and Housing Census of Malaysia 1991, Department of Statistics, Government Printers.

Malaysia (1995), General Report of the Population Census, Vol. 1, Population and Housing Census of Malaysia 1991, Department of Statistics, Percetakan Nasional Malaysia Berhad.

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Undoubtedly, the higher cost of living in urban areas had an impact on the average urban household size of the population which declined to 4.7 in 2000 as compared to 5.2 in 1980 (Table 3).

Malaysia's urban centres are also saddled with incidence of poverty but this had declined due to strong government programmes and intervention through the New Economic Policy and subsequently the National Development Policy. In 1980, the incidence of poverty stood at 12.6% and this declined to 3.4% in 1999. By end of 2006, the Ministry of Housing and Local Government has begun assisting the urban poor<sup>1</sup>. In Malaysia, primary and secondary schooling is free and as a result, urban literacy rate has increased from 72% in 1980 to 94% in 2000.

**Table 3**  
**Urban Population Indicators**

	1980	1990	2000
Urban Sex-ratio	na	102	101
Household size	5.2	5.0	4.7
Incidence of poverty	12.6	7.5	5.5
Incidence of hardcore poverty	2.4 (1984)	1.4	0.5

Note: na – not available

Source: Malaysia (1986), Fifth Malaysia Plan 1986-1990, Economic Planning Unit, Prime Minister's Department, National Printing Department.

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## Employment

The distribution of Gross Domestic Product (GDP) by state in Malaysia is shown in Table 4. The table divides the growth according to more developed and less developed states. The GDP for more developed states as against less developed states grew at 7.5% and 7.2% respectively between 1990 and 2000. The *Third Outline Perspective Plan (OPP3)* targeted a higher GDP for both categories between 2001 and 2010.

**Table 4**  
**Gross Domestic Product by State, 1980-2000**

State	AAGR (%)		
	(1980-1990)	(1990-2000)	(2000-2010) <sup>a</sup>
<b>More Developed States</b>	5.7	7.5	7.6
Johor	6.2	9.0	7.7
Melaka	6.6	7.5	7.4
Negeri Sembilan	3.2	7.1	7.3
Perak	3.5	6.5	7.2
Pulau Pinang	5.4	6.5	7.7
Selangor	7.9	8.3	7.7
Kuala Lumpur	5.1	6.5	7.4
<b>Less Developed States</b>	7.4	7.2	7.3
Kedah	4.6	8.4	7.6
Kelantan	4.7	8.0	6.6
Pahang	4.2	8.1	7.5
Perlis	5.5	6.9	6.9
Sabah	8.6	6.8	7.2
Sarawak	8.8	7.5	7.4
Terengganu	10.8	5.3	7.0
Malaysia	6.3	7.4	7.5

Note: Based on 1978 prices. AAGR – Average Annual Growth Rate. a – Targeted

Source: Malaysia (1991b), The Second Outline Perspective Plan 1991-2000, Economic Planning Unit, Prime Minister's Department, Percetakan Nasional Malaysia Berhad.

Malaysia (2001c), The Third Outline Perspective Plan 2001-2010, Economic Planning Unit, Prime Minister's Department, Percetakan Nasional Malaysia Berhad.

The economy is also reflected by employment patterns. Employment in the urban sector in 2000 accounted for over 88% of total employment in the Peninsular Malaysia. The contribution of the respective economic sectors to total district employment is 11.6% by the primary sector and 32.1% and 56.2% respectively for the secondary and tertiary sectors (Table 5). Urban employment in all the cities shown in Table 5 except Kangar (in Perlis) and Alor Setar (in Kedah) contributed over 88% of total employment implying strong economic sectors in the urban centres. Employment in Kangar and Alor Setar is actively supported by the primary sector, resulting in only these cities having significant location quotients (LQ). Perlis and Kedah are among the states with the lowest rate of urbanisation (see Table 1). Employment in the primary sectors in both cities contributed 22.1% and 20.8% respectively to total district employment. These imply that the economic activities in both cities are heavily associated with agriculture activities, although the secondary and tertiary sectors also co-exist. Other cities have strong employment either in the secondary or tertiary sectors, or both, due to negligible contribution of the primary sector in these cities. However, all cities tend to shift into the tertiary sector, led especially by Kuala Lumpur. Referring to Table 6, Kuala Lumpur and Shah Alam are the only cities that have significant employment in the informal sectors reflected by employment in private households who basically operate their economic activities from their residence.

## Economic activities

Provision of economic opportunities for urban dwellers helps address urban poverty. However, cities do not possess the same characteristics (Table 6). Most local authorities have been strict with the issuance of licenses for the informal sector, due partly to lack of proper venues to conduct businesses and hygiene reasons. However, there has been political pressure recently to legitimise the illegal operators of the informal sector, especially the hawkers, and those operating from the houses, by issuing them licenses.

An analysis of economic growth via employment using location quotient provide some interesting observations (see Table 6). Firstly, there is the tendency among cities to perform similar economic activities thereby competing among themselves. This can be seen in the manufacturing, wholesale, retail hotel and restaurant sectors.

**Table 5**  
**Proportion of Employment in Urban Centres and Location Quotient by Sector for Capital Cities in Peninsular Malaysia, 2000**

	Total Employment	% Urban Employment	Employment by Sector (%)			Location Quotient		
			Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Kangar	57,011	77.14	22.86	22.10	54.04	1.96	-	-
Alor Setar	102,677	83.74	16.26	20.79	62.95	1.40	-	1.12
Georgetown	174,432	99.71	0.28	40.25	59.47	-	1.25	1.06
Ipoh	254,609	96.35	3.65	36.95	59.40	-	1.15	1.06
Kuala Lumpur	594,128	99.70	0.24	19.19	80.57	-	-	1.43
Shah Alam/ Petaling	530,979	99.38	0.59	32.76	66.65	-	1.02	1.18
Seremban	153,355	96.25	3.73	40.97	55.30	-	1.28	-
Melaka	132,199	97.92	2.07	40.15	57.77	-	1.25	1.03
Johor Bahru	434,346	97.40	2.60	45.14	52.26	-	1.40	-
Kuantan	118,991	90.54	9.46	24.36	66.18	-	-	1.18
Kuala Terengganu	81,191	92.93	7.07	25.67	67.26	-	-	1.20
Kota Bharu	103,977	91.34	8.66	24.70	66.64	-	-	1.18
Peninsular Malaysia	6,303,961	88.34	11.64	32.14	56.22			

Note: Location Quotient (LQ) is calculated as comparison of sectoral employment of city over district employment as against total sectoral employment of city over total peninsular employment. Only LQs above 1.00 shown, else hyphenated. LQs > 1.00 are deemed to be significant. Data for district used. Total employment adjusted by removing the category 'unknown'. Cities shown include bordering townships.

Source: Computed from unpublished census data, Department of Statistics, Malaysia.

What will perhaps be significant for the future in Malaysian cities is the need for cities to identify their niche speciality thereby creating and enhancing value-added services and products, and this is addressed by the NUP. Employment can further be increased with support from both State and Federal governments in relocating economic activities according to each city's niche speciality. The Multimedia Super Corridor (MSC) at Cyberjaya as the Malaysian Silicon Valley, the Kulim Hi-Tech Park in Kedah, and Eco-Tourism in Sabah and Sarawak are existing examples of such niche specialisation.

**Table 6**  
**Employment Location Quotient of Capital Cities in Peninsular Malaysia, 2000**

Capital Cities	Agriculture	Mining	Manufacturing	Construction	Utilities	Wholesale and Retail	Hotel and Restaurants	Transportation & Communication	Finance	Real Estate & commerce	Community, Social	Public administration	Education	Health & Social works	Private Household
Kangar	1.98	1.09	-	-	-	-	1.05	-	-	-	-	1.40	1.62	1.26	-
Alor Setar	1.42	-	-	-	-	1.26	1.13	-	-	-	-	1.41	1.62	1.26	-
Georgetown	-	-	1.42	-	-	1.28	1.74	-	1.24	-	1.48	-	-	1.60	-
Ipoh	-	2.90	1.08	1.38	1.07	1.24	1.16	-	-	-	1.22	1.12	-	1.47	-
Kuala Lumpur	-	-	-	-	-	1.52	1.63	1.18	2.36	1.74	2.09	1.01	-	1.47	2.62
Shah Alam/ Petaling	-	-	1.04	-	1.07	-	-	1.22	1.74	3.12	1.18	-	1.06	1.11	2.66
Seremban	-	-	1.34	1.06	-	1.01	-	1.16	-	-	-	1.08	-	-	-
Melaka	-	-	1.29	1.12	1.00	1.16	1.17	-	-	-	1.11	-	1.05	1.47	1.08
Johor Bahru	-	-	1.39	1.46	-	-	-	1.38	-	-	-	-	-	-	1.01
Kuantan	-	1.03	-	1.34	1.25	1.35	1.29	-	-	-	1.14	1.47	1.08	1.16	-
Kuala Terengganu	-	1.70	-	1.34	1.24	1.10	-	-	-	-	-	1.63	1.86	1.44	-
Kota Bharu	-	-	-	1.42	1.27	1.40	1.08	-	-	-	-	1.66	1.66	1.48	-

Source: Computed from unpublished data, Department of Statistics, Malaysia.

### The National Physical Plan and its significance

Through the NPP the process of urban development in Malaysia is further defined especially integrating the different growth activities in line with the development of conurbations. By using the NPP, urban growth is managed across state and local authority boundaries, a concept that will further encourage economic activities beyond states and towards regions.

At the same time in-situ development in cities such as Kuala Lumpur, Petaling Jaya, Ipoh and Johor Bharu has created special zones for urban activities and business. City development and growth is enhanced via identification of significant needs and activities that cater to special clients attracted to the cities. An example is the international business zone in special demarcated areas in Kuala Lumpur such as Mont Kiara, Bangsar and Sri Hartamas.

### URBAN INFRASTRUCTURE DEVELOPMENT

Often, urbanisation is accompanied by better economic opportunities that result in improved infrastructure facilities and quality of life, and increase in property values. However, increase in land use and acquisition as a consequence of urbanisation may lead to overcrowding and high-density development. For urbanisation to proceed in an orderly manner the development of urban infrastructure and related services need to be planned and policies systematically implemented. The facilities need to be administered, monitored and effectively maintained. In Malaysia, urban infrastructures take the form of physical structure and services. These facilities are provided for the urban population based upon the

government's perception of what is necessary and needed in an urban area. Basically, these infrastructures are divided and identified with facilities normally found in cities and large towns.

### Land use patterns

The highest concentration of urban land use is found along the west coast of the Peninsular; Penang (22%) and Selangor (14% with the prominence of the Kuala Lumpur conurbation) as compared to many other states having less than 10%. The National Spatial Plan identified areas, which are suitable for new development and for other uses and the intensification of existing development. The National Spatial Policy also specifies areas for conservation and environmentally sensitive areas (ESA) which is required by the Federation. Such areas are clearly demarcated in local plans which are legally binding under the National Town and Country Planning Act, 1972. As such, if problems arise in the utilisation of land, the reason should be sought primarily in the inability to direct land use according to well-defined priorities, rather than in the quantity of available land (Garzia-Jansen, 2002).

Apart from Kuala Lumpur, the birth of a new city, Putrajaya as the new federal government administrative centre perhaps reflects a diversion of urban living problems of Kuala Lumpur<sup>2</sup>. As can be seen in Table 7, a reasonably good balance of land use is in place to be implemented. Each section of the land use was carefully considered in the context of policy formulation, with environment consciousness taking centre stage with development of green lake and wetlands area comprising 36.5%, followed by utility and infrastructure (23.3%) and residential (14.5%).

**Table 7**  
**Land Use in Putrajaya**

Land Use	(%)	Hectares
Government	6.8	333.17
Commercial and mixed development	3.4	169.88
Residential	14.5	715.53
Public Facilities	9.1	449.80
Utility and infrastructure	23.3	1150.65
Green Lake and Wetlands area	36.5	1798.13
Future Development	6.4	313.84
Total	100.0	4931.0

Source: *The Star*, 4 December 2004.

### Transportation

The expansion of infrastructure development and transport services that include upgrading and integration of roads and highways, rail, ports, airports as well as telecommunications was emphasized in the OPP3, Eighth Malaysia Plan and Ninth Malaysian Plan by the government to address the inadequacies of the public transport system. In line with the expansion of infrastructure as witnessed in the increasing capacity of these infrastructure in meeting the escalating demands of business activities and the urban population, much restructuring and improvement was and is undertaken in many significant parts of urban areas, notably, Klang Valley and Putrajaya where the hub of activities and industrial zones are concentrated and in other cities as well, such as Penang and Johor Bahru. In the Ninth Malaysian Plan, Road Development Index (RDI) has increased from 0.75 to 0.85. Arising from such needs, infrastructure investment policies were complemented by privatized projects as can be seen from Table 8.

**Table 8**  
**Major Road Projects Implemented Nation-wide 2001 – 2005**

<i>Project</i>	<i>Length (km)</i>	<i>Completion (Year)</i>
<b>Completed Projects</b>		
<b>i. Government-Funded Projects</b>		
Upgrading of Brinching – Lojing Road	22	2001
Upgrading of Beaufort – Sindumin Road	65	2001
Upgrading of Beluran – Spur Road	31	2001
Upgrading of Kuala Kangsar – Grik Road (Phase 3)	21	2002
Access Road to Proton City Industrial Park (Phase 1 & 2)	9	2002
Middle Ring Road II (Phase II)	6	2002
Rehabilitation of Sandakan – Tawau Road	29	2002
Upgrading of Keningau – Nabawan Road (Phase 1)	45	2002
Upgrading of Merotai – Kalabakan Road (Phase 1)	20	2002
Sayong Bridge, Kuala Lumpur	0.4	2002
Tanjong Manis – Rejang – Belawai Road	18	2003
<b>ii. Privatised Projects</b>		
New North Klang Straits Bypass	18	2001
Western Kuala Lumpur Traffic Dispersal Scheme (SPRINT) Package A & B	20	2001
<b>Under Construction</b>		
<b>i. Government-Funded Projects</b>		
Upgrading of Pitas	28	2004
Kunak – Semporna Road	42	2004
Triso – Melebu – Pusa Road	51	2004
East Coast Expressway	169	2004
Upgrading of Merotai – Kalabakan Road (Phase 2)	59	2004
Upgrading of Muar – Melaka – Alor Gajah – Simpang Ampat Road	70	2004
Upgrading of Batu Pahat – Ayer Hitam – Kluang Road	47	2004
Upgrading of Kapar – Sabak Bernam and Klang – Banting Road	118	2004
Sungai Rejang Bridge	7	2004
Upgrading of Kuching – Serian Road	34	2005
Kanibongan – Nangoh Road	150	2005
Pusa – Sesang Coastal Road	46	2005
Tanjong Kidurong – Bakam Coastal Road	178	2005
Upgrading of Gemas Baru – Ayer Hitam Road	120	2005
Trans Eastern Kedah Hinterland Highway	116	2005
Sepulut – Kalabakan Road	145	2005
Sipitang – Tenom Road	54	2005
Keningau – Kimanis Road	59	2005
<b>ii. Privatised Project</b>		
New Pantai Highway	20	2004
Kajang Ring Road	36	2004
Butterworth Outer Ring Road	14	2004
Shah Alam – Kuang Highway (Guthrie Corridor Expressway)	25	2004
Western Kuala Lumpur Traffic Dispersal Scheme (SPRINT) Package C	6	2004
Kajang – Seremban Highway	46	2005

Source: Malaysia (2001d), Eighth Malaysia Plan, 2001-2005.

Despite the government's role in the provision of the public transport infrastructure, there existed many grievances. Among these are, many housing areas have and are being built without any provision for an adequate public transport system; bus drivers arbitrarily change routes and fail to stop at designated stops; and many public transport users spend hours every day waiting for the public transport vehicles to arrive and are often overloaded during peak periods. As a result, there were initiatives from the government to connect the main terminal stations, introduce a common ticketing system as an initial process, and extend the area-coverage of the public transport under the Ninth Malaysia Plan (2006-2010). The advantage of ICT is also used to monitor and track traffic flows and provide real-time information to users with the application of an Integrated Transport Information System (ITIS) in Kuala Lumpur and the Klang Valley. In an attempt to facilitate intercity transportation, the rail transport has been given due attention as an alternative to improve traffic flows and address congestions. Rail transport includes the Malayan

Railway (*Keretapi Tanah Melayu, KTM*) commuter for regional operations (Kuala Lumpur to Rawang in the north, Port Klang in the southwest and Seremban in the south), the Light Rail Transit (LRT) for metropolitan operations and KL Monorail for inner-city public transit system. In terms of passenger volume, intra-city passengers witnessed an increase but major decline in the inter-city passenger traffic due to the preference of using the highways and expressways, and the rehabilitation and upgrading of the main line and electrified double tracking project of the 180-kilometre Rawang – Ipoh sector. Trains are still the preferred form as a cargo and mass-freight transportation system. In 2005, the largest contributor to its sales is freight services (RM107.4 million) followed next by KTM-Komuter services (RM74.0 million) and Inter-city passenger services (RM69.8 million) (KTMB, 2005). Currently, 35 million passengers use KTM-Komuter services and only 3.8 million passengers use the inter-city services (The Sun, 18 April 2007). Total passengers are expected to rise to 152 million by 2012 once the double-tracking services for the Ipoh-Padang Besar and Seremban-Gemas sectors are completed. The current rail system is already heavily subsidised by the government which provides RM40 million annually for maintenances and “uneconomical services” besides shouldering 40% of KTMB's monthly fuel consumption (The Sun, 18 April 2007).

## **Energy**

With urbanisation and development, there is a growing demand for electricity among the households and industries with capacity increasing from 14,291 MW (2000) to 19,217 MW (2005) and predictably to 25,258 MW by 2010. The transmission system and distribution network were upgraded and expanded apart from the Five-Fuel Diversification Policy 2000 from oil, coal, gas, hydro and petrochemical in the utilisation feasibilities in meeting the goals of supply adequacy, efficient utilisation and environmental protection. In addition, the Malaysian BioFuel Policy unveiled in August 2005 has a three-pronged plan: a) biofuel production/usage for transport/industries; b) biofuel production for export to Europe; and c) commercialising biofuel as a home-grown technology. There is big potential considering the fact that Malaysia has abundant biomass waste resources coming mainly from its palm oil, wood and agro-industries. The Energy Commission was established under the Energy Commission Act 2001 on 1st May 2001 to regulate and enforce the energy supply activities, law and matters related to the energy industry in Malaysia. The energy industry in Malaysia was privatised in 1990 to increase private sector participation in infrastructure development, promote competition and improve efficiency. Currently there are three main energy utilities in the country namely Tenaga Nasional Berhad (TNB), Sabah Electricity Sdn Bhd (SESB) and Sarawak Supply Corporation (SESCO) while independent power providers sell their ‘power’ to these giants. The Power Grid consists of 14 individual electricity interconnection projects that will eventually be the regional electricity grid by 2020. Since February 2003, the Peninsular Malaysia-Singapore and Thailand-Peninsular Malaysia grids have been in operation.

## Water supply

Rapid urbanisation and population increase ultimately means an increasing demand for water, hence its supply and conservation. The projected domestic and industrial demand as shown in Table 10 projects a three-fold increase from 9,543 million litres per day in 2000 to 31,628 million litres per day in a 50 year period.

**Table 9**  
**Projected Domestic and Industrial Demand for Water (million litres per day)**

Year	Demand	Annual Increase
2000	9,543	-
2010	15,285	6.0
2020	20,338	3.3
2030	24,485	3.0
2040	28,131	1.5
2050	31,628	1.2

Source: *New Straits Times*, April 30, 2005.

Established major players in the water industry such as Ranhill Utilities Bhd, Puncak Niaga, and Gamuda Bhd have water concession that spilled over to related companies such as civil and engineering players and pipe makers under the National Water Resource Master Plan.

In addition, inter-state raw water transfer project was also undertaken, for instance from the state of Pahang to Selangor to meet the increasing demand for water in urban areas apart from groundwater sources. Measures are also taken to reduce non-revenue water (NRW), pipes leakage and water piracy. Pollution caused by human activities is posing a huge threat to the nation's water sources. Water intake points at several main rivers have been found to have high levels of ammonia and aluminium because of pollution from urban industries and rural plantations. Presently and in forthcoming years, jurisdiction over the distribution of water and setting of tariffs are to be transferred from states to the Federal Government to better facilitate and regulate the privatised water sector.

In relation, land use activities are crucial functions of the quality and quantity of water and to steer urban drainage development, the Urban Storm Water Management Manual for Malaysia was set up in 2001 to replace the Department of Irrigation and Drainage's 30 year old Urban Drainage Design Manual. Two key issues dealt with in the manual on water-sensitive urban design are pollution of waterways and urban floods, where on a number of instances environmentally, socially and economically inappropriate or poorly planned physical developments have been allowed, resulting in flash flooding or worsening water quality.

## Information and communications technology (ICT)

The government has taken concerted efforts in propagating development of IT in the cities through the National Information Technology Agenda (NITA) whose intention is to encourage private, non-government and community participation in all its programmes. The government has also expanded the scope of Multimedia Super Corridor located in Cyberjaya to rollout to the rest of the country especially at Klang Valley, Penang, Perak, Selangor, Negeri Sembilan and Melaka in 2005, including the setting-up of cybercities and cybercentres. Designated MSC areas are committed to the 10 Bills of Guarantee to attract investors. One of the approaches to acclaim the whole of Malaysia into MSC status area by 2020 is by encouraging building owners to acquire cybercentre and cybercities status. According to the Multimedia

Development Corporation, cybercities and cybercentres serve to catalyse and support the growth of ICT and ICT-based industries.

The telecommunications infrastructure sees the expansion of its capacity and accessibility. In line with the expansion, the National Broadband Plan was put in motion to spur the demand for internet services in government departments, schools, universities, hospitals and community centres from 2% of the population in 2004 to 5% in 2006 and 10% by 2008. Approximately 900 government departments, research institutions and public universities, 4000 hospitals and clinics and 10,000 schools would benefit from such facility (New Straits Times, 8 May 2004). The government has given serious attention to provide wireless telecommunications to a larger portion of the urban population. WiMAX, the trade name for a group of wireless standards that encompasses fixed-wireless and portable/mobile deployments, offers a low-cost replacement option for traditional broadband solutions such as digital subscriber lines and cables. In 2007, four companies obtained licenses to provide the WiMAX services, three for the Peninsula and another for Sabah and Sarawak. Wireless coverage is expected to rise to 40% by 2009 (New Straits Times, 26 March 2007).

ICT is also taking centre stage in the health services with all new and existing hospitals installed with automation services and integrated health information system network to facilitate communication and referrals through various levels. This is in line with the Ministry of Health's effort to strengthen and regulate the provision of services of promotive and preventive healthcare other than the complementary role of the private hospitals besides meeting the needs to achieve international health indicators.

As organisations in Malaysia strive to compete with international players, IT infrastructure and investment in business solutions are becoming more efficient and effective. Financial services, government and the communications sector are the largest buyers of ICT in Malaysia. According to the latest figures from International Data Corp (IDC), the information technology segment of the overall ICT market will grow by 12.3 per cent and reach about US\$3.3 billion (RM12.5 billion) in 2006 as compared to US\$2.9 billion in 2005 (New Straits Times, 21 April, 2005).

## **Governance**

The urbanisation process that has become a common phenomenon worldwide required the government to seek new strategies to improve the quality of urban living and ensure that urban development is developing within its control with systematic planning, efficient administration and better performance from all agencies responsible. This is to ensure that "run away urbanisation" neither plagues the country nor hinders its effort to achieve the status of a developed nation in 2020. Ultimately, this translates into having good governance and recognition of the fact that local governance assumes a pivotal role in the urbanisation process of any nation. Although good governance has not been identified specifically for urban development in Malaysia, it has been the buzzword of the federal government for operations at all levels of government. Emphasis has been placed upon the various principles of good governance to be displayed by all government agencies particularly transparency, accountability and public participation. In Malaysia, the pursuit of good governance is therefore encouraged by the central government and the various state and local governments are the conduits for the practice of good governance at the lower levels of administration. Certainly, the influence of globalisation has also contributed to implementation of good governance at the local level. In pursuing the principles of public participation and sustainable development according to Agenda 21, Malaysia launched its own Local Agenda 21 (LA21) programme in 1999 with local authorities of Petaling Jaya, Kerian, Miri and Kuantan, being the pioneers. With increasing urbanisation, the local government in Malaysia as elsewhere is expected to perform above and beyond their listed mandatory functions. Hence, LA21 and good governance became the hallmark of efficiency and effectiveness for the local authorities in pursuing their urban activities from the start of the 21st. century which is often regarded as the urban century. In the meantime, urban projects had to ensure

that they do not have any negative impact upon the environment. For many local authorities in Malaysia the challenge was to be able to balance the three aspects of economic, social and environment in pursuit of sustainable development (Phang & Beh, 2004).

## ISSUES AND SUMMARY

As we have noted, contemporary issues relevant to urban living with respect to economic, demographic, social, infrastructure, and governance have been discussed in this paper. In meeting the aspirations of communities as well as planning for new development in urban areas there is the need to consolidate social engagement and empowerment amidst intricate workings of government institutions.

Economic growth in the country has shifted from the emphasis on agriculture into the labour intensive manufacturing industries, subsequently to high technology based industries and of late into the services sector. The nation observed that heavy reliance on the manufacturing sector posed serious threats during the downturn in the economy. While the contribution of the manufacturing sector to the economy had somewhat stagnated, the government had begun to rely on the infinite potentials and capability of the services sector e.g. financial, tourism, education, health and the ICT sub-sectors. This however, posed serious demands on the urban sectors and land in the cities in ensuring that existing provision of services meet international standards.

While cities had to face new demands, there was the need for urban centres to ensure that their residents are pre-equipped with the relevant skills required by the new and emerging industries and services. Institutions of higher learning and industrial training centres were urged to meet these demands with an emphasis on the concept of life long learning and improving skills.

Certainly, in-migration and some existing urban dwellers will always depend upon activities in the informal sector to earn a living. While on the one hand the urban citizenry demand for cleaner, hygienic and quality products and services, those in the informal sector could ill-provide them and are also not prepared to invest more to upgrade their activities and skills. Apart from this, local authorities are faced with the issue of urban poverty and in-migration into urban centres has continuously aggravated urban poverty as a serious problem to overcome.

Another emerging observation is that most cities and big towns in the country are competing within the same economic sector. Almost all the urban centres have ventured into manufacturing activities turning some of their areas into industrial centres producing the same products or providing similar services; usually by clusters of SMEs. In so far as specialisation of industries is concerned, cities have not been successful in reassigning specific activities to operate in a city or town. The idea of playing a supportive or complementary role by a town or city to another is still not receptive, and thus Malaysian urban centres with their industries operate regardless of each other. Thus, its setback in current times since industries are moving into high-technology bases that employ fewer workers and many investors have shifted operations into neighbouring countries in Asia. There is, as such, a need for urban centres to refocus into niche areas of economic activities with greater emphasis on productivity, competitiveness and quality.

It is no surprise that, with road improvement, urban development has begun to spread along major transportation routes, causing suburban sprawl, inefficient use of land and resources, not to mention environmental pollution. There is high car ownership in the country and private car ownership has given rise to serious traffic congestions. Data from the Road Transport Department Malaysia shows that registration of new vehicles (all types) in 1996 totalled 750,511 and has increased to 1,020,108 vehicles in 2005.

Private car ownership registration totalled 537,900 and motorcycles 422,255 as at 2005. Government intervened to restructure the public transportation system in Klang Valley by giving special attention to integrated, efficient and reliable transport system to encourage a modal shift from using private to public transportation (Malaysia, 2006).

The law gives local authorities and state governments significant power of initiative and decisions, particularly with regard to land development in accordance with changing public needs and government strategies (Garzia-Jansen, 2002). Given the complex reality of political-administrative subdivisions, planning decisions are often influenced by policies of the government rather than local public interest.

With regards to the demand of energy, there are numerous challenges in the energy sector such as the lack of laboratory facilities lack of Malaysian standards in energy efficiency, lack of consumer awareness on the importance of energy efficiency, lack of incentives on energy efficiency programmes and the employment of co-generation due to the non-competitive gas pricing. In addition, there is a need to ensure that issues such as pricing, quality of supply, quality of services and access are given due recognition and addressed.

As the urbanisation process continues unabated in Malaysia, there exists a need to address and coordinate urban development processes among the various sectors and agencies involved. Local authorities can be deemed the main agency in urban management while others form the integral part of the delivery system. For local authority to function effectively as the key player in managing the urban centres, it is necessary that the principles of good governance be made part of its management. In this matter, it is suggested that local authorities develop a set of parameters to address specific situations in the cities. It is time that participatory governance offer legitimate representation and opportunities in favour of marginalized areas and groups.

Another specific issue that emerged from the urbanisation process is urban poverty. As previous data has shown, poverty is not confined only to the rural areas in Malaysia, but has now descended onto the urban areas and may soon become more threatening in urban than rural areas. As Lohani (2005) has stated, urban poverty can be harsh and consequences will be reflected through high living costs, shortage of affordable housing and vulnerability to changes in the economy as well as exposure to environmental risks. Compounded with an increasing population, the government will need to address the issue of supply and demand for basic necessities of urban services and utilities that will need to be provided under various ministries. The approach on urban development and growth in Malaysia within the overarching framework of urban management that includes urban finance, capacity building and environmental management will not become a choice but a necessity.

Specifically, public-private partnership projects as well as the participation of the public through the NGOs must be encouraged. A public-private partnership can be seen as an appropriate means of providing the best of services through mutual collaboration between the government and the private sector to meet the growing demands of people in the cities and urban areas in the future.

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## END NOTES:

<sup>1</sup> Under the Ninth Malaysia Plan, the Ministry of Housing and Local Government has formulated seven programmes to address urban poverty. These are (i) housing for the poor; (ii) assistance in reducing educational expenditure; (iii) setting up community centres; (iv) increasing household income; (v) education and training; (vi) establishing poverty data bank; and (vii) financial assistance to urban residents. Of these, the first was initiated in 2006. Local authorities have been assigned to implement all the programmes.

<sup>2</sup> Due to heavy traffic congestions in Kuala Lumpur, and the existence of government departments and agencies in the city led to the shift of the administrative centre to Putrajaya. A shift to the new city allowed for the private sector to readjust and fill in the space left by the government agencies. Besides, Kuala Lumpur has been earmarked as the national finance and business centre.