Abdul Samad Hadi et al 3

Malaysian Urbanization Transition: From Nascent, Pseudo to Livable Mega - Urban Region

ABDUL SAMAD HADI, SHAHARUDIN IDRUS, ABDUL HADI HARMAN SHAH & AHMAD FARIZ MOHAMED

Abstract

In the relatively short history of modern Malaysian urbanization experiences, a three phase urbanization transition is proposed, namely the phases of nascent, pseudo and the rise of the mega urban region. It is recognized that modern urban centres in the country were founded by the British administration of the country as from the 18th century, albeit the existence of the Melaka empire around the 15th or 13th century. The urban centres founded by the British were mainly administrative centres to administer law and order in order to sustain the exploitation of tin and the vibrancy of commercial rubber production, in addition to the provision of goods and services. These urban centres were generally 'foreign' to the conception of life of the local people who participated marginally in the market economy controlled by British capitals and later Chinese migrants' capital. The required labour force to run these urban centres was met mainly by Chinese and Indian migrants whom the British encouraged to be brought in. Briefly, the basic characterization of the urbanization process during the nascent phase is that the process involved cross border labour flows from South China and India, and the urban centres were just islands of modernisation seeds in the relatively rural spatial domain. The challenge of urban living in the mega urban region centres on sustaining the quality of urban life, access to better quality jobs, shelters, education, personal safety, health and infrastructures in a globalizing world.

Keywords: Urbanisation, Urbanisation Transition, Mega Urban Region, Malaysia

Abstrak

Secara relatifnya, dalam sejarah pendek pengalaman pembandaran moden Malaysia, tiga fasa peralihan pembandaran dicadangkan iaitu pembandaran awal, pembandaran pseudo dan pembandaran wilayah mega berdayahuni. Adalah dikenalpasti bahawa pusat-pusat bandar moden di Negara ini diasaskan oleh pendtabiran British dalam kurun ke 18, walaupun kewujudan empayar Melaka dalam kurun ke 15. Pusat bandar yang diasaskan oleh British ini merupakan pusat pentadbiran untuk mentadbir secara pecah dan perintah dalam usaha untuk meneruskan eksploitasi bijih timah dan pengeluaran getah secara komersil di samping barangan dan perkhidmatan. Pusat-pusat bandar ini secara umumnya amat asing kepada kehidupan penduduk tempatan yang terlibat secara marginal dalam ekonomi pasaran yang dikawal oleh modal British dan kemudiannya oleh modal para migran dari China. Buruh paksa digunakan untuk membangunkan pusat bandar terutamanya para migran dari Selatan China dan Selatan India yang dibawa masuk oleh British. Secara umumnya, kriteria asas dalam pembandaran awal ini adalah proses yang melibatkan rentas sempadan dari Selatan China dan India dan pusat bandar hanyalah sebuah benih pulau pemodenan secara relatifnya dengan kawasan reruang desa. Cabaran membina kehidupan dalam pembandaran wilayah mega berdayahuni ini adalah melestarikan kualiti kehidupan, kesampaian terhadap pekerjaan yang lebih baik, kediaman, pendidikan, keselamatan peribadi, kesihatan dan infrastruktur dalam dunia global ini.

Katakunci: Pembandaran, Peralihan Pembandaran, Wilayah Perbandaran Mega, Malaysia

jurnal_idea_ok.indd 3

4

Abdul Samad Hadi et al

INTRODUCTION

The transition of Malaysian urbanization concerns the phases of the Malaysian urbanization experience, about the rise of mega urban regions, and the need for a new way of viewing the process via the myriad daily decision makings carried out by individuals in the city that eventually produce the spatio-temporal patterns of life in the Malaysian cities. These are visualized in the patterns of land use, housing spread and others. The patterns are very dynamic, often time changing in response to changing drivers. These drivers in turn are the outcome of inter-related workings of global capitalism with local ones.

The Malaysian urbanization experiences have progressed from nascent urbanization when a hierarchy of modern Malaysian urban centres were gradually developed by the British colonial administration, effectively as from the beginning of the nineteenth century when Pearl of the Orient (Georgetown), Melaka (much earlier), Labuan and Singapore were founded. The second phase is the era of the pseudo urbanization articulated by Terry McGee (1971) in his seminal paper that argued for a different urbanization experience path taken by the third world societies from that of the western world. The third phase is about the rising mega urban regions, never experienced by the country before but certainly making strong impacts on the Malaysian urbanization landscape at the moment. These mega urban regions are part of the Malaysian society's bid for modernity and advancement, and a first world status by 2020 or thereabout.

MOVING FROM NASCENT, PSEUDO URBANISATION TO LIVABLE MEGA URBAN REGIONS IN MALAYSIA

The nascent urbanization process is the urbanization process associated with the early founding and development of urban areas in Malaysia, when migrant workers circulated from poor regions in South China and South India, of which so much has been written about, to come and work largely in tin mines and rubber estates and the public work sector of the British administration (Figure 1). British colonial officers were also in circulation from Britain and areas in the Peninsula, Sarawak and British North Borneo. The time-frame used for the urbanization phases may be over generalized and somewhat arbitrary but the three phases remain useful to guide the discussion.

Why nascent urbanization? The urban landscape at the time was essentially in its formative stage; where towns were founded to be administrative centres of districts and states in addition to other basic functions such as food supplies and household items. The urban population was divided into two major urban groups. British colonial officers formed the upper echelon of public personnel while migrant workers from South China and India made the other groups. We can also argue that workers from the local population circulated daily from the urban kampungs, adjacent villages or those close to the urban areas in response to the somewhat limited opportunities throughout the urban system (Lim Heng Kow 1978; Hamzah Sendut 1962a; 1962b; Saw Swee Hock 1972). International labour working in tin mines continued to circulate between these mines to rural south China. Most of the Indian workers brought into Malaya then were for the rubber estates which were urban centres in many ways but usually located far from the towns.

Nascent urbanization is an appropriate term to link the urbanization process in the initial urban founding years of Malaysia to articulate the stuttering urbanisation experience of the local people. The total urban population was small in number, and the participation of the local people was even smaller. Coming from the villages within or close to the newly founded 'western' urban centres the urban experiences of these local people were very limited. Undoubtly the locals must have learnt from the urban centres the 'new way of life', based on commercial transactions, specific working hours when working in the jobs offered by the market place; although the wider urban life style was not immediately adopted. The urbanization experience was nascent too the Chinese and Indian migrant in a new country.

The Pseudo- Urbanization Phase

The pseudo - urbanization phase of urban growth and development in the country captured the enduring experience of the post-second world war urban growth due basically to in-migration of people from the relatively impoverished rural villages in Malaya at first and then Malaysia (1963). By this time urban growth in Malaya depended mainly on urban population fertility and rural to urban migration. International sources of urban population growth must have stopped after the war with Malaya slowly devoluting to becoming an independent country in

nascent	pseudo	mega urban
urbanization	urbanization	regions
151418201947	19481970	1971present

Malaysian Journal of Environmental Management 11(1) (2010)

 (\bullet)

1957- establishing its own citizenship. Rural to urban migration must have brought great pressure on to the small and highly fragmented urban markets after the war. Being from poor backgrounds without skills and good education, these migrants made entry into the urban labour markets through what has been described as the 'kitchen' that is as general house helpers, as gardeners and menial labour works (Abdul Samad Hadi 2007)

Limited opportunities were also opened to migrants as police constables and in the Malay regiment which was founded in the 1930s. A very small percentage of them found higher rung jobs that were reserved for those from higher social birth with skills and English medium education. In these circumstances, squatter settlements dominated the housing landscape, and it persisted for decades after Independence partly in response to lack of affordable housing stocks and limited new housing estates, as well as widespread poverty among the urban dwellers. Had it not been for the kampungs in close proximity to the town centres, the squatter settlements conditions in the city centres could have been more severe. The traditional kampungs managed to house some of these urban migrants who circulated to urban work places daily. As ports of entry, these kampungs offered the most suitable areas for these migrants to come to term with life in the urban area.

The pseudo- urbanization scene persisted into the years after independence. From immediately after World War II in 1945 to mid 1970s the Peninsular saw the release of able bodied rural youth who made their way to the limited urban market, selling whatever limited skill they had, drawing from whatever schooling they had attended in the rural areas, mostly, of course, just the primary school level. For most of them, with basic knowledge of the three 'Rs"- reading, writing, counting-, they made their ways into the urban life, mainly in the lower echelon of urban jobs. The police force and the Malay regiment were the normal pathways for many. The opening up of opportunities for rural children to attend English medium education began with the 'special Malay class' in the early 1950s and the 'remove class' several years after. These opened the path into English medium education for many after the war. The English medium education pathway offered these rural youths some opening in the relatively better paid urban jobs, such as mid range officers in the public sector as well as in the private sector. The in-migration of rural labour in the country did not lead to the rise of massive squatters as seen in the Jakarta metropolitan area or the favelas of Rio de Janeiro. This was possible through planning intervention when massive deforestation led to the planting of oil palm, rubber and cocoa as a means to eradicate rural poverty. Through the mega land development programme, better known as the FELDA (Tunku Shamsul Bahrin and Perera 1977), the expected excessive rural to urban labour movements did not occur.

The somewhat detailed exposition of the rural inmigrants in the urban areas is useful in coming to grip with the action of these urban residents as agents in affecting changes to the human and social structures of the current mega urban region formation in Malaysia, to which the next section will explicate.

The Rise of Mega Urban Regions in Malaysia

Today, Malaysia has several mega urban regions of its own, in which small urban centres, small towns, large municipalities and cities have each grown outwards of their original individual boundaries to merge into each other and form a huge conurbation of urban centres. About two decades of socio-economic and infrastructural developments after Independence Malaysia began to witness the rise of relatively huge urbanconurbations. Initially, these urbancon urbations were the Klang valley urban conurbation stretching from Kuala Lumpur, the national capital, to Port Klang covering about 50 kilometers from the main range to the coast. The second conurbation was the line of urban areas from Georgetown city, Seberang Perai industrial town across to Kulim industrial area, while the third urban conurbation then was in the Johor Baru Pasir Gudang urbanisation surface. Over those years there were other much smaller urban conurbations centring on the state capitals. All these mega urban regions were relatively small in population, offering a pale comparison to the mega urban regions seen in ASEAN (Association Countries of Southeast Asia) such as in Jakarta, Indonesia, and Bangkok in Thailand, let alone the mega urban regions in China; These mega urban regions record a total population of more than twenty million people. The largest Malaysian mega urban region- the Klang valley today has about six million people.

Many overlapping drivers help to account for the growth and development of the mega urban regions in the country. These drivers can be contextualized in the trajectory of the world system that Hopkins and Wallerstein et al (1998 Chapter 1; Wallerstein, Chapter 8 and 9) articulated about a long range view of growth and development in the world economy, and how economic growth and social development spread from core economic activities in the west to the rest of the world, especially into the developing world. Both Hopkins and Wallerstein (1998, Chapter 1) argued that the transition in the world economy covering their study period was a continuation of an historical system since the sixteenth century. They discussed the changes in the world economy from 1945 to 2025 through six vectors, namely the ۲

changing nature of inter-state system, the structure of world production, the structure of world labour force, the patterns of world human welfare, social cohesion of the states and the structure of knowledge. All of the sixth vectors in their analysis of the world system affect the nature of the world production system, increasingly more relevant for city growth and development in Malaysia. Changes in world production since 1945 helped to account for the growth and development of mega urban regions in the country.

The writers and other contributers to the book above argued that since 1945 the world economy had experienced rapid and unprecedented expansion through the United States, promotion of economic expansion at first to Western Europe and East Asia and then to Latin America as an attempt to reconstruct these capitalist allies. Much later world production moved to the third world countries. Of these, non socialist countries benefited most from that expansion. Malaysia gained from that world economic expansion to leverage its industrial manufacturing programme.

It is obvious from the discussion above, although somewhat anecdotal, that the period covering 1945 to 2025 provided the ground work, the source for growth and development and the inflection point for Malaysia to outgrow its poverty syndrome and goes on to move up the development ladder to be among the middle income countries in the Asia Pacific today.

The Bernam-Linggi Mega Urban Region in the Making

The Sustainable Urban Research Group at Lestari, Universiti Kebangsaan Malaysia has identified the Bernam- Linggi area as having the potential of embracing the combined drivers to turn it into a prominent mega urban region in Malaysia. Partly, the Klang valley mega urban conurbation has continued to grow in importance. Kuala Lumpur remains the core attraction to people to come and stay. Subsequently, diverse economic, social, cultural, infrastructural and leisure products have moved in to service the local Kuala Lumpur city population and visitors.

A primer in the drivers is industries; The Klang valley received import substitution industries as early as in the 1950s (Malaya 1956; Malaysia 1961, 1966, 1971). But the tipping point in the rise of manufacturing activities in the country and specifically in the Klang valley began in the 1970s. The Malaysian state instituted the New Economic Policy with the twin aims of eradicating poverty and restructuring the Malaysian society that no one race is associated with any main specific economic activity (Malaysia 1971, 1976, 1981, 1986). The policy provided a broad

development equity framework for all Malaysians for the period of 1970-1990 but the essence of the Policy remained until today (Malaysia Malaysia 1991, 1996, 2001, 2006). Widespread infrastructures, facilities and amenities were made available, making the country as competitive as any other among the new destinations of global foreign direct investments in Asia after the rising economic tigers comprising South Korea, Hong Kong, Taiwan and Singapore a decade earlier. Malaysia along with Thailand, Indonesia and the Phillippines became the next emerging manufacturing tigers of Asia. The investments were at first in the labour intensive manufacturing industries especially in the electric and electronic industries, food and beverages mainly from the United States of America, European industrial core and Japan, but much later Malaysia also gained from cross border investment flows from the four rising tiger economy.

Two broad inter-related impacts of industrialization on Malaysian urbanization were recorded. First, it was the founding of manufacturing areas in new neighbourhoods of existing cities or municipalities and new towns with a strong industrial base. Second, massive rural to urban labour flows taking the form of daily circulation from rural kampungs or more permanent rural to city migrations mainly to seize job opportunities in these industrial centres especially to fill up vacancies in the labour intensive industries. Female workers made up a substantial percentage of those labour flows. As the urban population agglomeration took shape other supporting social infrastructures, facilities and amenities grew; from shelters to educational facilities- from primary schools to colleges and universities, health provisions, personal and family security, intra and inter city mobility, recreational needs and so on.

What are the outcomes to the cities, municipalities and the whole urbanization process? A broad outcome is summarized in the six maps that follow visually provide the population changes and trends in the spatial patterns of urban distribution and agglomerations.

Population growth in urban centres throughout the Bernam-Linggi river basins shows slow growth until 1945, slightly rising after Independence but growing faster after 1970. The year 1957 may be regarded as the tipping point for urban growth and expansion in the area. Figure 2 to Figure 10 capture the spatial spread of urban areas in the area.

Urban Centres in the Bernam-Linggi Basins: During Nascent Urbanization

Most modern urban centres in the Bernam to Linggi river basins were founded during the British colonial intervention in Perak state-where the Bernam basin ()

is, in Selangor in which at least three major basins are to be found, and the Linggi basin in Negeri Sembilan around the 1874 to 1900 period. An insight into the size and distribution of urban centres during the period is afforded by the size distribution of urban centres in 1891. Except for Kuala Lumpur the rest of the urban centres were small and somewhat isolated from each other except for the connecting main trunk roads linking each other.

Perhaps the generalization that urban centres were mainly peopled by Chinese migrants as shopkeepers and providers of other basic services could very well started from this early urban population landscape. The local people remained in their kampungs and peripheral to the urban life then. Over the years these urban centres grew in size through population increase mainly by migration and internal urban population fertility in 1931 (Figure 2). Being the capital of the Selangor state Kuala Lumpur grew substantially compared to the rest. Commercial and services functions grew with the population increase. The urban growth patterns continued to change slowly as shown in the census after the war in 1947 (Figure 3). War destruction and much uncertainty during the Pacific War 1939-1945 contributed to the slow growth of these urban centres.

It is useful to point out that by the Population Census in 1947, the area covering Kuala Lumpur and south to the Seremban–Port Dickson area had begun to form a clear urban belt, centring on the main north – south trunk road (Figure 3). These urban centres and towns dotted the largely agricultural surrounding area which was in some ways urbanised rural areas. Rubber estates along the north- south stretch were the epitome of modern commercial agriculture existing next to traditional villages. Each urban centre seemed to be isolated from the other and there were noticeable breaks separating one urban centre from the other.

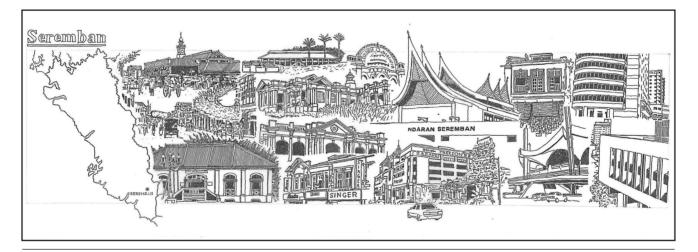


Plate 1: Seremban Landscape



Figure 2: Population in Bernam Linggi Mega Urban Region, 1891



Figure 3: Population in Bernam Linggi Mega Urban Region, 1901



Figure 4: Population in Bernam Linggi Mega Urban Region, 1911

Urban Distribution During the Phase of Pseudo-Urbanization

On the eve of Independence, the emerging urban belt bordering Kuala Lumpur and Seremban had become more marked. Kuala Lumpur developed further. A small urban conurbation was developing linking the capital to the Petaling Jaya new town - founded in 1953 (Concannon 1955; McGee and McTaggart 1967). Overall the framework for a huge urban belt was in place (Figure 5).

In the post independent years the existing urban centres continued to grow, most markedly in the Klang valley centring on Kuala Lumpur and Petaling Jaya new town. From Figure 6 the Bernam-Linggi basins urban region continued to experience growth in the size of its urban centres. New towns in the Klang valley too grew in response to labor migration to job opportunities in the manufacturing industries in Petaling Jaya and newer towns right up to the old Klang town west of Petaling Jaya.

The urbanised frontier was moving west to Klang town and beyond to Port Klang. By the 1970s, Kuala Lumpur and Petaling Jaya began to dominate the urban landscape; a primacy was in the making for the Bernam- Linggi basins urban landscape (Figure 7).

Malaysian Journal of Environmental Management 11(1) (2010)

jurnal_idea_ok.indd 8



Figure 5: Population in Bernam Linggi Mega Urban Region, 1947



Figure 6: Population in Bernam Linggi Mega Urban Region, 1957



Figure 7: Population in Bernam Linggi Mega Urban Region, 1970

The Phase of Mega Urban Regions in the Bernam-Linggi

Widespread impacts of manufacturing industries following the relocation of parts of the parent companies activities from the core world industrial area, facilitated by the New Economic Policy, and in the North supported by relatively efficient administrative, managerial, physical as well as social infrastructures along with developed transportation network and modes made Malaysia one of the preferred destinations for those industries mentioned earlier. The availability of relatively better educated skilled labour in large numbers brought labour intensive manufacturing industries into the country. Where are the destinations? The established cities, municipalities and towns with the basic infrastructures became the main choice areas. Specifically created industrial neighbourhoods and new towns were planned and developed. Thus, starting from Kuala Lumpur to Port Klang on the coast and Seremban to the south throughout the 1980s industrial neighbourhoods emerged to replace the agricultural landscape. In the meantime, the manufacturing industrial frontier was also moving north from Kuala Lumpur to the Bernam basin where the national car industry, Proton, has a commanding area in the urban landscape. At the small town of Serendah another automotive assembly plant has been producing another well known local car. In almost 40 years the Bernam to Linggi basins emerged into a huge urbanised area replacing the widespread agricultural landscape earlier, (Figure 8, 9 & 10).

Malaysian Journal of Environmental Management 11(1) (2010)

()



Figure 8: Population in Bernam Linggi Mega Urban Region, 1980



Figure 9: Population in Bernam Linggi Mega Urban Region, 2000

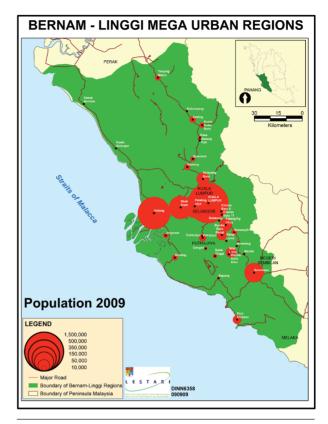


Figure 10: Population in Bernam Linggi Mega Urban Region, 2009

THE BERNAM- LINGGI MEGA URBAN REGION - THE OUTCOMES

There are three main outcomes of the emerging Bernam to Linggi basins mega urban region that we need to consider further here; first, concerns the issue of urban livability as a refinement to urban sustainability. Second, the move to understand the urbanization process associated with the mega urban region and to search for a new way of coming to grip with the process, especially with respect to 'urban complexity' where processes at the local level, individuals', families and communities, in daily decision making, which has produced the kind of spatial and temporal growth patterns within the mega urban region. This attempt to understand the mega urban region is subsumed here under the study of city complexity (Batty 2005; Allen 1996).

Urban Livability

A current issue about city growth and development concerns its sustainability in the context of sustainable development. Since the report by Bruntland on the state of our planet towards the end of the 1980s (WCED 1987) the principles of sustainable development have been adopted as an enduring framework for development by countries around the world. At the United Nations sponsored Earth Summit in Rio de Janeiro 1992 all countries agreed to adopt the

Malaysian Journal of Environmental Management 11(1) (2010)

()

Abdul Samad Hadi et al **11**

framework, and ten years later in Johannesberg in 2002 the framework was further discussed so as to give each country the benefits of its own needs and hence interpretation. Whatever the weakness or objections to it the sustainable development framework stands without rival at the moment, and therefore remains useful (Dovers 2009).

The research group on city livability finds the concept somewhat complicated and less clear when applied to the complexity issues that the group grapples with. A window to city sustainability is best captured though city livability, about the daily lives of the city people- about their behaviour patterns imprinted on space over time. We have articulated the concept of city livability for Malaysia elsewhere (Abdul Samad Hadi et al 2008; Abdul Samad Hadi et al 2007). It captures the essence of the city's economic vibrancy such that people can offer their labour, getting choice jobs that are generally always available; socially, the city is attractive for people to come and live; It is healthy, safe, green with an enabling framework to pursue an ethical living which is necessary in a world gripped by extreme weather variability. The city then has an agglomeration of enablers that facilitate possibilities to realise everyone's potential in life. Viewing city livability from this angle gives us the domain to encompass agents and structures of the city's community, which go beyond the activities demanded by the Agenda 21 of the sustainable development framework. However, the three pillars of sustainable development are embedded in the domain of livability. A comfortable level of quality of city people's life has been attained in such livable cities; that each urbanite has a place in the city that allows him or her to call the city a home and sustains The emerging mega urban region stretching it. from the Bernam to Linggi basins should in the end embellish this livability. It is equally useful to note that the Bernam- Linggi urban areas are framed in the nexus of five river basins. Our group feels that the basins embed a dynamic interactive system of natural components upon which the urbanisation process takes place.

In working towards the livable city the rising issues of environmental degradation following the combined expansion of large manufacturing, small and medium industries, supplemented by neighbourhood housing growth, more physical and social infrastructures, commercial expansion and faster growth of educational institutions especially noticeable in the growth of eight major public universities and numerous private ones in the Bernam to Linggi basin are bringing environmental issues home to roost. Environmental problems such as solid and toxic wastes, water and air pollution and land degradation among others are real city problems. These environmental problems are now moving to the periphery and the rural urbanised areas beyond the cities', municipalities' and towns' jurisdictions following the dynamic in the locations of these industries.

COMPLEXITY AND THE SEARCH FOR AN HOLISTIC UNDERSTANDING OF URBAN GROWTH

The shaping of city livability can be linked directly to the issue of city's complexity. Before venturing into the city complexity seen from the window of the city population, the physical structure of the city itself is complex enough not only in the individual urban centres, cities or townships but also in the whole Bernam to Linggi basins urban region. All of these need to be articulated. There is a hierarchy of goods and services provisions which are offered to the consumers though an hierarchical distribution centres. In the Bernam to Linggi basins Kuala Lumpur is the city core to the region. A larger collection of goods and services are housed in specialised commercial areas; high end, expensive products such as branded imported goods, beverages and food items are being sold in the central business area, marked by high rise buildings and well maintained specialised buildings. The variety of goods is reduced in the smaller municipalities, although expensive products and services are found in new shopping complexes away from the central core area of Kuala Lumpur. Much lower range goods and services are being offered in the smaller urban centres throughout the Bernam to Linggi basins urban areas.

Throughout the 1970-2009 period housing neighbourhoods sprung up, generally moving out of the Kuala Lumpur city centre, from the smaller towns' as well as from the various municipalities' centre areas. New towns also grew to accommodate the increasing number of city population. The ease of movement following the construction of highways and good connecting roads supported by the private car ownership policy has promoted sprawling urbanised areas along the highways and connecting roads. In time traditional villages which used to be isolated from the cities, municipalities and urban centres are now being engulfed into the urban spread. For most such traditional villages, especially those closer to the existing cities they provide shelters for urban workers. Thus, these villages may show some traditional activities, such as traditional farming and living in traditional kampong houses, but the people are actually going through an urbanized way of living. Such a condition of change in the villagers' life patterns has been described as 'in situ urbanisation' (Brookfield, Abdul Samad Hadi, Zaharah Mahmud 1993). In a way the manner that the traditional villages have been slowly engulfed by urban land use spread and diffusion of urbanism is akin to what McGee has referred to as the desa-kota in Indonesia. What about the 'urbanism as a way of life? If measured by

jurnal_idea_ok.indd 11

 (\bullet)

12 Abdul Samad Hadi et al

material possessions and patterns of consumption the so called rural population in the Bernam to Linggi basins has been greatly influenced by the city way of life.

Coming back to the central issue of city complexity, the myriad decisions made by the seven million, a rough estimate, in the Bernam to Linggi basin to live in their chosen neighbourhoods, in urban centres, towns, municipalities and cities have to be studied. We hold the view that the peoples' behavioural responses to these urban condition and the decision to stay in the city influence the manner and patterns of city growth in the Bernam to Linggi basin.

City complexity in parts is path dependent, meaning the behaviour patterns of the people in the past tend to influence the future direction, an understanding of the process shaping the ensuing urban growth patterns is crucial. The growth process may not be linear, and could assume other forms, more complex but providing more useful insights into the city development process. Such scientific knowledge goes beyond the disciplinary base to move into multi, inter and transdiciplinary approach where science is no longer for society but rather science develops with society. Such knowledge is a key to our search for an understanding into the dynamic process of urban growth and thus urban planning for livable Bernam to Linggi mega urban region.

The Governance Issue

The third concerns management and governing issues; Who is to do what to ensure that the mega Bernam to Linggi basins urban region is able to function, to handle the complex issues and finally to move the urban region for the benefits of its population and the country as a whole. The options are either to go on status quo with the cities, municipalities, townships and urban areas to go on to manage as usual. The other options are to change the management style - to develop new partnerships between the people, the public and the private organisations, and the non governmental organisations to manage the region, or the final option of developing an entirely new governance structure. The research group has gone to look at the combinations of these options to argue for a more entrepreneurial approach to governing the mega urban region.

CONCLUSION

The Bernam to Linggi basins complex urban area is slowly developing into an extended mega urban region centring on the national capital, Kuala Lumpur. The research group on city livability has been making the attempt to see the whole hierarchy of cities, municipalities, varying sizes of urban centres, and the kampungs in the urban periphery and in the rural areas as one unit because of the region's potential to create a huge metropolitan area and metropolitan life style for Malaysia. Overlapping development drivers focusing on the economics, manufacturing industries and commercial activities, as well as educational and health provisions along with better physical, economic and social infrastructures today prop up the initial advantage enjoyed by Kuala Lumpur as the capital of the Federated Malay States, Malaya and Malaysia and Seremban as the capital of Negeri Sembilan.

That the population of the urban areas grew and went to influence the physical expansion of all the urban areas to go beyond their legal administrative boundaries engulfing the once isolated kampungs into huge urban areas is there on the landscape for all to view. There is a need to look into the role of the individuals, the families and the local urban communities in shaping the growth patterns in the urban regions; specifically on how the people at the local level influence the physical growth and expansion of the urban areas within the establish planning requirements of the country. Here is an attempt to look at the urbanization process from below that is the local community; embedded in this is the idea of city complexity that the group sets to examine: that city complexity will determine the nature of city livability and its sustainability, influencing its governance and planning for the coming years.

REFERENCES

- Abdul Samad Hadi, Shaharudin Idrus, Abdul Hadi Harman Shah & Ahmad Fariz Mohamed. 2008. *Dayahuni Bandar (Urban Livability)*. Bangi; LESTARI and Museum Negeri Sembilan.
- Abdul Samad Hadi, Abdul Hadi Harman Shah, Shaharudin Idrus, Ahmad Fariz Mohamed & Norlida Mohd Hamim. 2007. *Modelling Local Urban Sustainability: Developing a Conceptual Framework for Sustainable Development.* Bangi; Round Table Dialogues No 15; LESTARI.
- Allen. P.M. 1996. Cities and Regions as self- Organizing Systems; Models of complexity. London. Taylor & Francis.
- Batty. M. 2002. *Cities and Complexity*. Cambridge; MIT Press.
- Brookfield. H., Abdul Samad Hadi & Zaharah Mahmud. 1991. *The City In The Village*. New York; OUP.

 (\bullet)

- Concannon, T. A. L. (1955), "A New Town in Malaya: Petaling Jaya, Kuala Lumpur," *Malayan Journal* of Tropical Geography 5, 39-43.
- Dahlan. H.M. 1989. Urbanisation in Sabah; Probing into the Urban Social Mind. Kota Kinabalu; IDS (Sabah).
- Dovers. S, 2009. Implementing Sustainable Development: Long Term Policy and Institutional Challenges. LESTARI Public Lecture Series No 6. Bangi: LESTARI Publisher.
- Gladwell. M. 2000. *Tipping Point*. New York- Boston; Little Brown & Company
- Jones. G. 2008. 'Comparative Dynamics of the Six Mega Urban Regions', pp. 41-61. In Jones. G. & Douglass. M. Mega Urban regions in Pacific Asia; Urban Dynamics in a Global Era. Singapore; National University of Singapore.
- Hamzah Sendut. 1962a. Patterns of Urbanization in Malaya. *Journal of Tropical Geography*, 16; pp. 114-130.
- Hamzah Sendut. 1962 b. The Resettlements in Malaya. *Geography*, XLVII; pp.41-46.
- Hopkins. T.K. and Wallerstein L 1998. The World System: Is There a Crises? Chapter 1, pp. 1-12. The Global Picture, Chapter 8, pp.209-225, and The global Possibilities, 1990-2025, Chapter 9, pp.226-243. In Hopkins. T.K., Wallerstein, et al. *The Age of Transition; Trajectory of the World System*, 1945-2025. London; Zed Book
- Lim Heng Kow. 1978. *The Evolution of the Urban System in Malaya.* Kuala Lumpur; University of Malaya.
- Malaya.1956. *First Malayan Plan*. Kuala Lumpur; Govt. Printer.
- Malaya. 1961. *Second Malaya Plan.* Kuala Lumpur; Govt. Printer.
- Malaysia. 1966. *First Malaysia Plan.* Kuala Lumpur; Govt. Printer.
- Malaysia. 1971. *The Second Malaysia Plan.* Kuala Lumpur; Govt. Printer.
- Malaysia. 1976. *The Third Malaysia Plan.* Kuala Lumpur; Govt. Printer.
- Malaysia. 1981. *The fourth Malaysia Plan.* Kuala Lumpur; Govt. Printer.
- Malaysia. 1986. *The Fifth Malaysia Plan.* Kuala Lumpur; Govt. Printer.

- Malaysia. 1991. *The Sixth Malaysia Plan.* Kuala Lumpur; Govt. Printer
- Malaysia. 1996. *The Seventh Malaysia Plan.* Kuala Lumpur; Govt. Printer
- Malaysia. 2001. *The Eight Malaysia Plan.* Kuala Lumpur; Govt. Printer
- Malaysia. 2006. *The Ninth Malaysia Plan.* Kuala Lumpur; Govt. Printer.
- McGee, T.G. 1971. *The Urbanization Process in the Third World.* London; Bell
- McGee, T.G. 1967. The Southeast Asian City. London; Bell.
- McGee. T.G. and McTaggard, W.D. 1967. Petaling Jaya: A Socio-Economic Survey of a New Town in Selangor, Malaysia. *Pacific Viewpoint Monograph No* 2. Wellington Department of Geography; Victoria University.
- McGee, T.G. 1995. "Metrofitting the Emerging Mega-Urban Regions of ASEAN: An Overview" Chapter 1, pp.3-26. In McGee, T.G. and Robinson, I.M. *The Mega Urban Regions of Southeast Asia*. British Colombia: UBC Press.
- Saw Swee-Hock. 1972. 'Patterns of Urbanization in West Malaysia, 1911-1970'. *Malayan Economic Review*. 17; pp. 114-120
- Tunku Shamsul Bahrin and Perera, P.D.A. 1977. 21⁵¹ *year of FELDA*. Kuala Lumpur FELDA HQ.
- WCED. 1987. *Our Common Future*. Oxford: Oxford University Press.

Emeritus Professor Dato' Dr. Abdul Samad Hadi Institute for Environment and Development (LESTARI) Universiti Kebangsaan Malaysia (UKM) 43600 UKM, Bangi asamad@ukm.my

Shaharudin Idrus Institute for Environment and Development (LESTARI) Universiti Kebangsaan Malaysia (UKM) 43600 UKM, Bangi dinn6358@gmail.com

Associate Profesor Abdul Hadi Harman Shah School of Social, Development and Environment Faculty of Social Sciences and Humanities Universiti Kebangsaan Malaysia (UKM) 43600 UKM, Bangi aharmans@gmail.com

Associate Professor Dr Ahmad Fariz Mohamed Institute for Environment and Development (LESTARI) Universiti Kebangsaan Malaysia (UKM) 43600 UKM, Bangi fariz@ukm.my

Malaysian Journal of Environmental Management 11(1) (2010)