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Urban Planning for Sustainable Urbanization

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ABSTRACT

This paper perceives sustainable urbanization as an ideal to be achieved by the urbanization process and urban growth in Malaysia. Sustainable urbanization should become the common shared value for every citizen and urbanite. Yet the concept is still far from being clear to guide city governance and planners. Cities keep on expanding in size in the country. The urbanization of capital at the global level in the thirty years has made it possible for Malaysia to adopt industrialism as a means to bring itself out of the third world to first in the 2020. In the process industrial estates have been developed in strategically planned areas either close to or within existing major cities' contiguous areas. The impacts of the industrialization process are physically and socially clear, ranging from those changes that contribute to the betterment of livelihood in the city to negativities that threaten the urban ecosystem health and the urban environment as a whole. Can urban planning guide the urbanization process to achieve sustainable city? It is argued here that the state of the art in urban planning does pay tribute to sustainable city ideals but there seems to be a gap between planning for sustainable city, that is sectoral, and planning sustainable city that is holistic. Parts of the problems lie in the concept of sustainable development from which sustainable city concept is derived. Apart from being culturally biased to the developed western countries, we need to find commonalities embedded in the concept that is meaningful to us. Urban planning in Malaysia has paid much attention to physical planning, with emphases on meeting standards. Overall, urban planning does not consider the total urban ecosystem dynamics, albeit in recent years the guide lines for structure and local plans do pay due attention to the environment.

ABSTRAK

Kertas ini menanggap pembandaran lestari sebagai suatu yang unggul untuk dicapai oleh proses pembandaran dan pertumbuhan bandar di Malaysia. Pembandaran lestari sewajarnya menjadi nilai bersama sepunya untuk setiap warga bandar. Namun begitu, konsep ini masih lagi jauh untuk memandu para perancang dan urustadbir bandar. Bandar-bandar terus mengalami

perkembangan terutamanya daripada segi saiz keluasan. Perbandaran modal pada peringkat global dalam tempoh tiga puluh tahun yang lalu membolehkan Malaysia menerima industrialisme sebagai asas untuk membawa Malaysia menjadi negara maju menjelang tahun 2020. Dalam proses tersebut, estet industri dibangunkan dengan perancangan kawasan strategik sama ada yang berhampiran atau di dalam bandar itu sendiri. Impak proses industrialisasi secara fizikal dan sosialnya amat jelas, daripada yang menjelmakan kesan yang menyumbang kepada kualiti hidup yang lebih baik di dalam bandar kepada kesan negatif yang mengancam kesihatan ekosistem dan persekitaran bandar secara keseluruhannya. Bolehkah perancangan bandar memandu proses pembandaran yang berlaku untuk mencapai bandar lestari? Adalah dihujahkan di sini bahawa 'state of the art' dalam perancangan bandar memberikan tumpuan kepada pembandaran lestari tetapi terdapat jurang di antara perancangan untuk pembandaran lestari, iaitu perancangan secara holistik. Sebahagian daripada masalah tersebut adalah dalam konsep pembangunan lestari yang menjadi asas kepada pembentukan pembandaran lestari. Selain daripada kejulingan budaya dari Barat, kita perlu mencari kesamaan yang terpahat di dalam konsep yang memberi makna kepada kita. Perancangan bandar di Malaysia telah memberikan perhatian yang keterlaluan kepada perancangan fizikal dengan penekanan untuk memenuhi piawai. Secara keseluruhannya, perancangan bandar tidak mengambil kira kedinamikan ekosistem bandar secara menyeluruh, walaupun akhir-akhir ini garis panduan untuk perancangan struktur dan tempatan memberikan pertimbangan kepada alam sekitar.

INTRODUCTION

Cities in Malaysia and anywhere else are impregnated with contradictions. They are the centres of modernity, culture, economic growth and social development, and carry forward our civilization, offering a range of promises and hope to people from rural areas and beyond. To these centres that people flow. Consequently, these cities grow in size at a fast rate. But cities are also the harbinger of social stresses, local ecological issues and global environmental problems. Their size may be relatively small but they hold too large an influence on people and environment, traversing beyond their own boundary. Because of the urbanization process, city environment is almost completely built-up, suggesting that it is an end of the transition of environmental change from a pristine, through transformed environment as seen in agricultural surroundings to the built-up urban sphere. The role of urban planning should guide the dynamism of the urbanization process and city growth

so that the city becomes attractive and liveable to the heterogeneous city people, their production and consumption, and cultural milieu.

Urban planning as a discipline has undergone many changes over the past years. Whether those changes in the discipline are able to cope with the wholesome urban changes at present depends on the conceptual and practical appropriateness of the discipline itself and the real world in the city. As a profession and as a knowledge discipline it has had to deal with various issues and changing perspectives on the development and management of cities. It has to grapple also with new types of cities and urbanizations, with new demands and expectations, and with changing development forces. With new terms of reference and environment, which lead Castells (1998) to argue that, what the world of planning used to deal with has been left behind. In Malaysia, the changing urbanization scene for the past thirty years has been so different from past experiences that planners need to rethink their position in the entire urbanization process, both from an authority viewpoint and from the common peoples' perspectives.

Calls for sustainable development and sustainable urbanization are among the latest concepts to challenge the urban planners; having also to listen to a hierarchy of stakeholders' voices as well as responding to local needs.

In the above context, urban planning is there then to guide the city in achieving its sustainability which in the Malaysian case is more meaningful if we talk in terms of city liveability within the context of sustainable development, in particular with respect of not only the well-being of the urbanites but also the health of the city environment and the wider interactions of both people and his urban physical and social environment. The fact that the city environment comprises the natural and the physical built-up components as well as the social environment has made it a complex unit. Together with this are overlapping intra and inter components interactions. The total man and environment relation is indeed very dynamic.

THE CHANGING ROLE AND EXPECTATIONS FOR PLANNING

We need to grasp the driving forces behind the dynamic urbanization and transformation of cities world wide and in particular in Malaysia in the last thirty years to assess the role of planning in sustainable city. The urbanization of capital globally has enabled Malaysia to make a structural shift of its economy from resource extraction, plantation agriculture and import substitution to manufacturing of products for the world markets.

Certainly, by adopting industrialism Malaysia is able to grow out of the poverty and dependent syndrome carved out by centuries of western imperialism. The development impacts of industrialism are the widespread change in the country, noticeable from the physical environment to people's lifestyles that tend to contest their cultural resiliency.

Profiling those impacts in some details, we can start off from the founding of industrial estates in strategic areas, often close to existing urban centres. Housing estates soon bloom to follow the growth, giving shelter to increasing in-migration of workers to the industrial complexes. Commercial and services products provide the essential support needs of the people while transport network links all sectors to one another within the city and with other urban centres within a larger urban region. In time, the city and industrial complexes merge with others to form mega urban conurbations. The Penang-Bukit Mertajam-Sungai Petani in the north, the Lembah Bernam-Lembah Kelang-Lembangan Langat through to the Lembangan Linggi in central Peninsula, and the Pasir Gudang-Johor Baru urban complex in the south of the Peninsular Malaysia are examples of these mega urban conurbations. At 2020, granting that the driving forces continue to generate more growth, we can safely predict that these major urban complexes will grow into mega urban built-up complexes, absorbing in its territorial spread other smaller cities nearby. The resultant urban form becomes more amorphous.

Adding to the complex mega city condition will be the somewhat fluid cyber space. This space is being extensively created by the new telecommunication technology and fast contributing to shaping a new spatial structure worldwide. This technology is able to compress space-time, creating more cosmopolitan communities with global networks. Our Multi-media Super Corridor (MSC) is an example of this new space in the city. This space calls for specific demand on the concrete urban space to locate its apparatus including its building complexes. More localized representations of these cyber worlds are spread through the city systems via local points such as cyber cafes. The cyber space is new to the urban planning concepts and practices, presenting some direct challenges to planning for future city sustainability.

Flowing through these mega-urban complexes will also be greater inputs, throughputs and outputs than their proportionate area proper. More capital, food, energy, water and other resources will be drawn in from a hinterland that can stretch to include just about the whole world. The output from the urban complexes are equally daunting in size; imagine the volume of solid waste originating from households,

commercial centres, industrial complexes and construction sites, effluents in water ways, particulates and chemicals in the air and above all the short of land for more usages. All these are stresses in the physical components of the environment.

The urban social metabolism is equally potent in generating social benefits and equally important, producing stresses too. Large city may produce social situations as seen in 'city without city' or built-up areas without soul and humanism, traffic chaos, squatters and slums (Sieverts 2003). Consequently, in these large cities there will always be marginal groups and multi-sector issues. By 2020 the city will be saddled with multi-sector burdens, ranging from health issues with respect to the city ecosystems, vulnerable areas and communities to improving accessibility that ranges from intra-city travel to inter social communications. Despite that, history has shown that the larger the city more people will move to it, in the forms of businesses and investments for more growth. City problems will always be there and their presence is not necessarily an indication of unsustainability.

PLANNING BLUES

How does urban planning cope with the dynamism of city life? To begin with, planning theories should evolve to capture the complexity and dynamism of Malaysian cities at 2020. We begin with a re-evaluation of concepts and thoughts for a developed country status. It is an understatement that the urban planning scenario in Malaysia is almost entirely Western. The few ideas from Eastern traditions (such as the Kukaku Seiri from Japan) are either too new or too local to have their influence on planning thinking in the country. Those who are trained in Malaysia are also imbued with planning concepts that are entirely of the West. The situation by itself is not wrong but can be problematic. What makes the approach a problem is when the thoughts and concepts are drawn without a deep understanding of the local situation. The idea of transforming a Malaysian city into an image of Chicago or London may not be entirely in our interest. If one is not careful, one will prescribe the sort of planning that will suit the western city. One will sustain the search for a clone western sustainable city.

A more pressing demand made of urban planning is how to conceptualize the physical and human components of the Malaysian urban environment, the population dynamics and the social and cultural diversities in the city along with the numerous interactions within the physical and human components, and between both of them, and between

the whole city with other cities in one holistic theory or model or whatever.

There are options to achieve this end, of course. One is to make reference to an appropriate social theory, by defining an entire city as seen from its social ramifications - the people, their social class and other characteristics. The urban physical environment - the landscape and the built-up townscape - from this viewpoint is being structured according to the perception and behaviour of the urbanites through either their economic, social class or political-economic articulation of the sustainable urbanization.

Another holistic approach is offered by the ecological nuances in the form of urban ecosystem. In cities, we have seen a complex relation between man and the environment. One tends to influence the other. In order to develop a perceptive examination of the complex range of interactions, man and environment in the city are placed in an integrative perspective. One way is to place the interaction within an urban ecosystem.

As we all know, the term urban ecosystem is derived from the work of perceptive ecologists who have conceptualized a term that is built upon their understanding of the doctrine of holism. Tansley (1935) used the term ecosystem to mean, the interactive system comprising living things together with their non-living habitat, including the organism complex, and the whole complex of physical factors forming the environment. Since then the concept has been extended and modified to suit other applications. For over three decades now that the concept has been used to characterize and conceptualize the urban area. One source to draw some conceptual underpinnings of the concept from is Detwyler et al. (1972) who assert that all the elements and processes of environment are interrelated and interdependent, and that a change in one will lead to changes in the other. The authors go on to suggest that man in the urban area makes demand on the environment to satisfy his biological needs and his cultural exertions. The basic needs are controlled by three conditions, namely, city population size, cultural development and energy flow. As city expands the interactions between the biological and cultural conditions become complex. More sophisticated technologies and larger supply of raw materials have to be procured. More energy is required and consumed.

Both options can capture the intricacies and complex interactions of man and environment, internal dynamics of the natural and the built-up parts of the environment and the socio-economic and cultural dimensions of the city in the current city sustainability context.

The issue at hand therefore, is whether the current urban planning concept and practices are sufficiently perceptive and adequate to handle sustainable urbanization in a holistic manner.

THE MALAYSIAN URBAN PLANNING SCENE

In its historical development, urban planning has had to deal with changes arising from contemporary issues appropriate to the day. At this juncture, the current issues that have to be dealt with in cities revolve around the larger problem of sustainable urbanization. Within it city sustainability issues loom large, especially in fast developing country like Malaysia. Not only a large number of rural people still circulate from rural localities to the urban areas to impact on the larger cities for work and shelter but cities also grow and expand beyond their boundaries to sprawl into the countryside. In the man and environment interactions in the cities, success and problems intermingle. Is urban planning to date able to handle the issues?

Planning in Malaysia, as well as many other countries, presents development through a comprehensive perspective. Master plans, structure plans and environmental plans are all designed to be all encompassing, although in reality, these plans would be very difficult to follow through; part of the reason is the misconception about what constitutes a comprehensive plan - in the context of its approach towards structuring the environment, and the common impacts on the environment.

Malaysia approaches planning from all sides, ad-hoc, middle range and comprehensive. Such is often the case in the practice of planning. To sift through the everyday routine of development control and determine a future route is difficult but some patterns can be discerned.

Malaysia began urban planning as an exercise in health control. Part of the public health, safety and welfare concerns of public administration, the earliest modern planning in Malaysia is attributed to the efforts of one C.C. Reade, the planning director for the Federated Malay States during the 1920s (Lee et al, 1991). The focus on compliance towards development control standards and procedures have remained throughout the planning exercise in Malaysia. Waves of rapid growth have required the full attention of most planners, ensuring that common problems of rapid urbanization are minimized.

Although comprehensive planning in Malaysia can be argued to have begun with the CAP 137, it was in the mid 70s, that planning in Malaysia took a major transformation. It began to question the bigger

picture of development purposes and aligning it to newly established National Economic Policy and its five-year Malaysia plans. Planning was called upon to present the spatial and physical embodiments of these new policies. At the local level, municipalities and other local authorities were called upon to present their idea of the future growth and development. The structure plans were made compulsory under the 1976 Act for all local governments. While it took years for total adoption of structure plans, the idea of comprehensive planning took hold early among many, their constraint being the technical expertise in preparing the plans. Structure plans which outline at the conceptual level the aspirations of the localities are complemented with local plans that detailed out spatially demarcated means of achieving the goals stated.

Now proposed development reports (*Laporan Cadangan Pembangunan* - LCPs) provide site-specific planning that show comprehensive preparation that should be in tandem with local and structure plans. At the other end of the planning continuum, Malaysia has embarked on a National Spatial Plan which completes the comprehensive planning approach in Malaysia (Town and Country Planning Department 2005). This plan serves to ensure compatibility between the more localised structure plans and as a spatial representation of the aspirations of the nation.

Aside from these major tools in comprehensive planning Malaysia has also embarked on planning at the regional level, bringing urbanization to largely rural regions. The now defunct regional development authorities (RDAs) were part of the regional planning scheme. Malaysia has also developed other natural and functional region based planning in realization of the need to go beyond administrative boundaries for more effective planning and management, especially with respect to environmental planning and management. Even the FELDA land scheme can be considered part of the urbanization agenda for the country. Ecosystem based regions are a current trend in trying to present a more holistic picture of urbanization.

Yet planning also needs to take into consideration un-planned urbanization which creates sprawls and incompatible land uses. These cities without cities are the result of unplanned urbanization, albeit planning-approved. Part of the reason for this sprawl is the impact of globalization. Globalization posits the greatest challenge yet to any local planning where the question is whether one can still plan when elements of development are out of the local scene. Global capital lured on to the local scene provides a growth impetus that is uncertain in nature, creating demand for change which is often uncalculated. Yet the impact, either

real or perceived, often results in local land use change and increased local investments.

THE SECTORAL SIDE OF PLANNING

While much of planning is comprehensive, it is not necessarily holistic. Rather much of planning takes a sectoral view of development with environment being only one of the sectors in planning. There was a time when environmental planning was only relegated to the task of beautification, and greening. Water problems were passed to the health or sanitation boards along with the appropriate water bodies. The role of planning used to be simply to call representatives from these bodies to development meetings.

Today the responsibility of sustainable development and sustainable urbanization requires both environmental and social sustainability to be part of the goals in planning, demanding the direct attention of planners. Planners began to have a re-look at traditional sectors in planning in a new light – integrated with many feedback loops. Transportation is currently not simply an issue of shortest distance, mode choice or estimating traffic demand. Transportation, in sustainable urbanization, is seen as a means towards equitable access to protect against social and economic exclusion. Together with land use, transportation is also perceived to be an important component for a safer and healthier city. Solid waste managements, once more the realm of engineers and the sanitary boards rather than planners, have been a new major concern. From the traditional spatial solver to the NIMBY (Not In My Back Yard) problem, planners have also been called to change the very lifestyles of urbanites, and to instil ideas of recycling, re-use and reduction. Planners now need to be educators as well as designers and policy makers.

A similar situation exists with respect to the management of water bodies and flood control. It used to be that water bodies are just another classification in the land use map. Ideally a reserve. The focus of land use planning is the active land uses, not the passive. However, with the goal of sustainable urbanization, the impacts on water bodies are a major concern and means to minimize these impacts. From passive receivers of impacts, planners are expected to be pro-active and improve current conditions. Yet another challenge to the multi-disciplinary character of urban planning. Flood mitigation, a specific case of water hazard is also part of what is asked from planners today. Not simply to curb flooding but to control socio-economic impacts from flooding as well.

We argue that planning should be concerned with more than just the allocation of space. It should, in proposing development plans, be particularly concerned as to the impacts these development might have on culture, be they part of the present way of life, or a lifestyle that might no longer be dominant. Planning should view development impacts beyond the cost effectiveness economies, to include cultural semiological grounds. Planning creates and destroys cultural symbols in its wake. In destroying symbols, planning has the potential to destroy communities, or at the very least, weaken them. These impacts are felt by minority cultures. However, in many developing countries, the majority belongs to a specific traditional culture that is still very much a part of everyday life. These are part of the community that embraces both a traditional outlook as well as a mainstream 'modern' position, which will also feel the sense of cultural displacement.

CONCLUSIONS

At the centre of it all however, is the need to comply with standards. Yet there is no clear overall standard for city sustainability as yet. Available concepts in planning and the planning process in the country have touched upon the sensibility of achieving sustainable urbanization. There are guidelines to ensure the city is clean, green, safe, healthy and many more. But to ensure attractions that make the city liveable to all leaves much to be desired.

In order for cities to be able to support viable communities in liveable surroundings and progress to a more ethical development, urban problems should be tackled in a holistic manner. Both the city population, its cultural ramifications and the natural and built-up environment together with the dynamic interactions within each and between them call for an integrated approach to enable us to understand, to find solution to any dysfunction in the inter-related human and environmental components, and finally to manage the urban ecosystem in a sustainable framework. The ideals and practices of urban planning at present beg the quest for the sustainable city.

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