LAND USE and URBAN PLANNING in the YEAR 2000

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Abstract

With the approach of the new Millennium, it is timely for us to take stock of our achievements, to assess the changing trends and to work out our planning strategies to ride on these trends and turn them into opportunities. Our cities must be poised to meet the challenges of increased globalisation, the rapid advancement in information technology as well as the rising concern over the quality of life and the physical environment. These are the main forces that will shape the land use and urban planning paradigm in the Year 2000 by changing the way cities are planned. Urban planners must therefore discern and respond to these trends and challenges by adopting proactive planning strategies to create a vibrant, conducive and sustainable environment for urban living.

While these trends are global in nature, every city still needs to work out its own approach to capitalise on these trends within its own unique political, social and economic context. The purpose of this paper is to address these key planning issues facing our cities in the new millennium, using Singapore's approach as a point of reference.

Challenges In the New Millennium

Increased Globalisation

Globalisation refers to the growing economic interdependence of countries world-wide through the increasing volume and variety of cross-border transactions in goods and services and of international capital flows, and also through more rapid and widespread diffusion of technology.

Cities which rise to this challenge will evolve to become part of the network of strategically positioned cities servicing and supporting the global economy. Each city will have to identify and consolidate its strengths and competitive advantage and make itself relevant to the global economy.

Rapid Advancement in Information Technology

In the last decade, we witnessed the explosion of information technology in the form of the Internet and E-commerce. These have fundamentally altered the business structure in terms of production, distribution and marketing of products and services across cities and countries. Cities will have to come to terms with these changes and carefully evaluate the profound impacts of information technology on the demand and spatial distribution of land uses. These impacts reflect the changing working and living arrangements, business practices and lifestyle brought about by the growing popularity of the internet, E-commerce and telecommuting.

Quality of Life and the Physical Environment

Another key challenge facing planners in the next millennium is the rising concern over the quality of life and the physical environment. Once the more basic needs such as food and shelter are met, there will be demands for improvement in the less tangible and more qualitative aspects of life.

The rapid urbanisation of cities has also brought about many undesirable problems for the physical environment. Although some cities have achieved a high level of functional efficiency through economic development, infrastructural improvements and urbanisation, what the planners can do more is to develop innovative solutions to bring about significant improvements to the qualitative aspects of city life. One of the key issues for planners to address is the need to create an attractive and distinctive urban environment for work, play and living.

Planning in the Year 2000 - the Singapore Approach

Singapore has undergone very rapid transformation in the last few decades from a colonial trading post to a modern city-state and an important centre of finance, commerce and industry in the region. In terms of housing, Singapore boasts a home ownership rate of over 90%, with 86% of the population staying in public housing. It is also well served by an efficient mass transit system, complemented by a network of expressways and roads. Our air and sea ports have gained international recognition as some of the best in the world. Despite the spatial limitations, Singapore has managed to earn the reputation of a Garden City through years of efforts in greening the city and protecting the environment.

However, given our small size, Singapore's economy remains heavily dependent on the region and the world. With increased globalisation, ever changing tastes and shorter product and economic cycles, Singapore must continue to offer relevant products and be responsive to market demands, or risk economic decline.

Recognising our strengths and limitations and the many challenges facing urban planners in the Year 2000, we

have adopted the following key planning strategies to better prepare Singapore for the new millennium: -

Planning for A City for Business

In an increasingly globalized economy, what cities need to do is to make their economies relevant to the world economy. This is more so for Singapore, being a small and open economy. Singapore's continued growth depends on our ability to build on our strengths and to provide the world market with products and services that meet their needs.

1. International Financial Hub

To enhance Singapore's attractiveness as an international business and global financial hub, a new downtown at Marina South, adjacent to the existing CBD, has been proposed. The New Downtown will improve Singapore's attractiveness as a financial centre through the provision of more affordable office space and at the same time provide a prestigious address for the head offices of large multinational corporations, professional and financial institutions.

The new downtown will allow seamless growth of the existing CBD. With a good mix of commercial, residential, institutional and entertainment uses, a state-of-the-art common service tunnel system and a comprehensive transport and pedestrian network, it will be the thriving hub of the city in the next millennium.

2. Science Hub

To meet the need of businesses and industries in a knowledge-based economy, one of the key strategies is to provide excellent infrastructure and a conducive physical environment for these business and industries to flourish.

The latest project to encourage the development of technopreneurs and to create a conducive physical environment for knowledge-based and high technology businesses is the Science Hub at Buona Vista. It brings together IT and communications companies, research facilities and tertiary institutions, including branches of world class institutions such INSEAD and John Hopkins University. With the Science Hub, Singapore is set to position itself as an innovation milieu for high technology activities involving research and development and other knowledge-based businesses.

In the new millennium, it is anticipated that e-commerce and telecommuting will have a significant impact on the demand and spatial distribution of office and retail space in the long term. However, as the speed and magnitude of this impact is unpredictable, we must continue to find innovative solutions to allow greater flexibility for businesses to make better use of land and floor space.

3. World-class Infrastructure

Air Hub

The air hub around Changi International Airport encompasses business parks, aviation support industries, logistics and warehousing as well as the Singapore Expo Centre offering international exhibition and convention facilities. A mass rapid transit system, which is currently under construction and when completed, will link Changi Airport with the Singapore Expo Centre and Central Business District.

Telecommunication Network

To gear Singapore up as a world class digital city, the Singapore one, an island-wide multimedia broadband network to link up homes, businesses and schools was launched in 1998. With the national broadband network and its interactive multimedia on-line applications and services, it will pave the way for the development of the knowledge-based businesses and industries of the next millennium.

A Comprehensive Rail and Road Network

With the island-wide expressway network already in place, the road network will continue to be upgrade to facilitate the movements of goods and people. However, increasing emphasis has been given to the development of a comprehensive rail network with light rail transit complementing the expanding mass rapid transit system. In the next five years, five new MRT/LRT lines totalling 65 km, will be provided to further improve the rail network to make travel by public transport as convenient and comfortable as possible.

Planning for an Attractive and Distinctive City

Besides planning for a global business hub equipped with world-class infrastructure, an equally important requisite of a thriving world class city is the provision of an attractive and distinctive living environment to meet the different lifestyle expectations of the increasingly affluent population. To meet this challenge, the following planning strategies have been adopted.

1. Punggol 21-a seaside town of the 21st Century

Punggol is proposed as a 21st century seaside town comprising a good mix of private housing, executive condominiums and high-grade public housing grouped into smaller, distinctly designed estates. Each estate contains about 1,200-2,800 units surrounding a common neighbourhood green as a focal point. By having smaller number of units within each estate, it facilitates community bonding and foster community ties among the residents.

As a new concept, it proposes a relatively car-free and a more pedestrian friendly neighbourhood with MRT and LRT as the main modes of travel. LRT stations will also be within 300m walking distance from homes.

To foster a sense of community spirit and at the same time, to optimise land use, Punggol 21 will also feature the concept of clustering of community facilities such as schools, places of worship, recreational and social facilities which act as focal points within Punggol town. For instance, the school field is proposed as 'community green' to be shared between the school and residents.

2. Island Garden

As Singapore continues to undergo rapid urbanisation, it is important to safeguard more greenery to soften the harsh concrete landscape. Singapore is an island home to over 2000 species of plants and flowers. A great variety of parks and open spaces are distributed throughout the island, linked by an extensive network of park connectors for jogging and cycling.

To enhance the feel of islandness, a multi-agency panel, the Waterbodies Design Panel has initiated the upgrading of canals lining residential developments. Due to their efforts, canals running through urbanised areas have been turned into richly landscaped rivers with park connectors, inviting residents to stroll along or linger at the waterfront to exploit the many unique experiences of living at the water's edge.

3. Arts and Entertainment

Arts and entertainment form the key components that contribute to the vibrancy of a city. An entertainment district has been identified in the Bugis area with a critical mass of entertainment activities - cinema, theatres, music and dance, thematic shopping and dining; brightly illuminated signs and a bustling street life.

Other forms of leisure and entertainment activities have also sprouted along the Singapore River with variety of choices of restaurants for alfresco dining and pubs. It provides opportunities for Singaporeans and tourists alike to fully experience the nightlife along the river in the tropics and to unwind and socialise after work.

Each city has a major cultural centre for the arts - the Lincoln Centre in New York, the South Bank Centre in London and by the turn of the new millennium, Singapore will have the Esplanade, a Theatre on the Bay. It will synergise with the existing theatres, concert halls, arts galleries and museums in the Historic Civic District to provide opportunities for one to indulge and be fully immersed in the arts and cultural activities.

4. Conservation

Besides the arts and entertainment that adds to the memory and vibrancy of a city, the preservation of our rich cultural and historical heritage gives the population a sense of place and identity. It also enhances our city's distinctive character. In a land scarce city-state, we are constantly faced with the increasing pressure of urban development. Nevertheless, with careful planning and the adoption of pragmatic approach to conservation, we are able to preserve Singapore's historic areas and architecturally outstanding historical buildings while optimising the use of land.

We have witnessed conservation giving a new lease of life to our historic districts such as Chinatown, Kampong Glam and Little India through an exciting mix of shops, offices, hotels, restaurants, institutions and residences in these areas.

Other than these historic areas, China Square and Bugis Junction are examples of the successful juxtaposition of old shophouses and new buildings, integrating the old and the new. These projects have successfully married yesterday's charm with the excitement of the future, while optimising the use of land.

Conclusion

The strategies illustrate Singapore's planning approach to capitalize on the changing trends in the Year 2000. They are certainly not perennial solutions to the many challenges facing other cities in the Year 2000 and beyond. In the fast changing world, cities will inevitably face these daunting challenges set within their unique context and constraints. What is common is the need to devise creative planning and development strategies to turn these constraints into opportunities. I hope that the learning points gathered through an understanding of the approaches and experiences of others in tackling these problems would help cities develop their own creative strategies for future urban development and redevelopment. Hopefully it will lead to a better home and living environment for all to enjoy.