

ARE WE GROWING SMART?: A NEW VISION FOR URBAN DEVELOPMENT IN ASIA AND THE PACIFIC

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The present paper explores the implications of smart growth principles for Asia-Pacific urbanization, and discusses how to use such principles for development in this region over the coming decades. After the United States of America experienced urban pathology due to sprawl, the country implemented growth management policies, and later adopted smart growth policies. While Asian cities experience rapid growth and concentration, the principles of American urban planning can benefit future urban policy and public investment in the region. The paper also argues that smart growth policies can lead to more sustainable and equitable urban development by overcoming the current unplanned sprawl. The concept of smart growth emphasizes a sense of community, the preservation of natural resources and open space, support for existing communities, and predictability in decisions and plans.

I. INTRODUCTION

Cities have become increasingly important spaces and locations for human living, and they are rapidly evolving into the brain centres of the world economic system (Sassen 2006). Increasingly, people are moving to urbanized areas due to population growth and industrialization. According to the Department of Economic and Social Affairs of the United Nations (DESA 2007), most of the projected population increase from 2000 to 2030 will be concentrated in urban areas. Cities will hold an additional 2.1 billion people by 2030, and by 2050 the world urban population is expected to reach 6.4 billion—about 70 per cent of the forecasted world population. In addition, most of the increase will happen in the Asia-Pacific region.

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Because of this fast growth, many Asian cities are experiencing urban pathology, including poverty, inequity, sanitation and health problems, pollution and the lack of proper housing. Moreover, ongoing urban sprawl causes more strain on infrastructure and demands more and broader social services from local and central governments. In response to these challenges, central and municipal governments need to prepare more proactive policies to prevent urban pathology and the wasting of resources. It seems that social and economic development could be harmed by increasing social and urban problems, if there is no timely urban policy or management.

The present paper provides an alternative discussion of the principles of smart growth and growth management. It explores the diffusion of planning practices from the United States of America to Asian cities. The urbanization history and policy practices of the United States may have implications for reducing urban pathology through the adoption of smart growth policies. Despite the differences in urbanization and economic structures found in the United States and in Asian countries, the concept of smart growth can reduce the costs that Asian-Pacific cities would have to pay if smart growth principles are not adopted.

Contemporary urban policies in the United States focus on revitalizing inner-city areas through the provision of more social equity and affordable housing. Currently, many state and local governments in the United States have adopted the concepts of smart growth, growth management, sustainability and new urbanism in their urban development policies. The concept of smart growth is regarded as a new vision to accommodate the future of "urban America", and has important differences from the old vision. According to Anthony Downs (2005), while the old vision encouraged unlimited land consumption and spatial segregation based on wealth, the new vision aims for planned land use, social equity and sustainable development. The principles of the new vision can be diffused to other countries and cultures. As the Asia-Pacific region is experiencing intensive growth, its cities need to formulate more aggressive growth management approaches. Such policies must address the urban pathology and growth issues of the coming decades. As the region's cities are facing urban problems after compact economic and urban development, they must muddle through the present hardships and prepare policies for the next generation. This paper discusses how Asian-Pacific countries can build smart growth concepts into their city management and centralized planning systems.

II. SMART GROWTH THEORY

In the United States, suburbanization grew widely after World War II with rising productivity and salaries. As people could afford to buy bigger houses in suburban areas and commute in their cars, there was a massive exodus of the middle- and high-class populations from inner cities to suburbia in order to pursue the old vision of urban development. In some aspects, this urban sprawl is largely based on the prevailing emphasis in the United States on individualism (Hall 2002). The rapid suburbanization resulted in the urban decline of the 1960s. To respond to this challenge, state and local governments began to implement growth management and urban renewal.

As an extension of growth management, the concept of smart growth emerged in the mid-1990s, when traffic congestion and environmental pollution started to become serious concerns. Smart growth is a more advanced policy framework; the concept includes not only physical and managerial approaches, but also social equity and sustainability. The concept is also closely related to new urbanism and new management skills. It assumes that sustainable spatial development can increase social equity and quality of life.

Growth management

Generally, growth management is the regulation of the amount, timing, location, and character of development (Levy 2005). Growth management has become widespread in the United States since the 1960s as an important technique and policy in spatial planning. Like other planning tools, it can be misused. For example, sometimes, growth management may block legitimate growth and simply displace the inevitable costs of development to other jurisdictions. If implemented successfully, it can help ensure that future growth evolves in a planned manner. Growth management can yield good results—with a sensible and attractive pattern of development. Currently, in the United States, about 36 states out of 50 have anti-sprawl or growth management legislation (Palen 2005).

Maryland was the first state to adopt smart growth policies. There was a great deal of interest in smart growth because of the perception of growing suburban sprawl and, in particular, its associated traffic problems. Former Governor Parris Glendening coined the phrase that citizens wanted smart growth, not stupid growth (Levy 2005). The concept, which had appeared in the fields of planning and politics in the mid-1990s, rapidly became popular after the Governor's comments.

Smart growth draws on land-use controls, tax policy and public subsidies to encourage compact development. In the same vein, the smart growth programme places an emphasis on infill development and reuse of old buildings or previously used industrial and commercial sites. Maryland defines the goals of smart growth as follows: (a) saving the most valuable remaining natural resources; (b) supporting existing communities and neighbourhoods; and (c) saving taxpayers millions of dollars by avoiding the unnecessary construction of the infrastructure required to support sprawl. In addition, smart growth is also closely related to sustainable development planning. In recent years, planners have become more interested in environmental issues. Sustainable development can be defined as providing for today's human needs without jeopardizing the needs of future generations.

New vision in the United States

Anthony Downs (2005) criticized the "unlimited low-density sprawl" that resulted from the traditional vision of urban development in the United States. He identified sprawl as the most problematic variable in planning and sustainable development. Urban sprawl has brought more social problems and harmed social equity. In exploring how the United States could overcome this problematic aspect of urbanization, Downs argued that the country should adopt smart growth as a new vision for urban development.

There are 10 main goals in this new vision (Haines 2003; Downs 2005; Choi 2007). Smart growth is an urban and transit planning tool, which concentrates growth in the centre of a city and advocates compact, transit-oriented, walkable and bicycle-friendly land use. It is crucial to manage urban sprawl for the betterment of the environment and sound development of cities and communities. Compact development aims to make most goods and services accessible to residents. It seems that this principle has become a successful practice in the United States, because many new urban developments are adopting the approach. Smart growth also strives to achieve a unique sense of community and place; expand the range of transportation, employment and housing; preserve natural and cultural resources, and promote public health (table 1). For example, smart growth principles favour performance, inclusionary, and cluster zonings instead of traditional and strict zonings, recalling the criticisms Jane Jacobs (1961) made regarding orthodox city planning.

When smart growth is applied to cities, the goals need to be adjusted according to local needs and conditions. People's needs and opinions should be included in the implementation of smart growth through a public participation and visioning process. Those who favour smart growth tend also to support the closely

Table 1. Smart growth goals in the United States of America

<i>Goal</i>	<i>Concept</i>
Mix land uses	Stimulates diverse land use in urban space instead of traditional zoning. It is aimed at encouraging multiple-purpose development with a combination of commercial, residential, recreational, educational and other uses.
Take advantage of compact development and building design	Promotes more efficient land use by creating a convenient neighbourhood centre that is attractive to residents, and presents opportunities to efficiently absorb growth and development.
Create a range of housing opportunities and choices	Provides quality housing for people of all income levels.
Create walkable neighbourhoods	Ensures that goods (housing, offices, and retail) and services (transportation, schools, libraries) that a community resident or employee needs on a regular basis are available within an easy and safe walking distance.
Foster distinctive, attractive communities with a strong sense of place	Encourages communities to craft a vision and set standards for development and construction that respond to community values of architectural beauty and distinctiveness.
Preserve open space, farmland, natural beauty and critical environmental areas	Preserves areas in a community that people value and that provide valuable environmental functions.
Strengthen and direct development towards existing communities	Uses resources and infrastructure that existing neighbourhoods offer, and conserves open space and irreplaceable natural resources on the urban fringe.
Provide a variety of transportation choices	Responds to increasing demands by communities for a wider range of transportation options to improve beleaguered transportation systems. Communities are coupling a multi-modal approach to transportation with pedestrian-friendly development patterns to create a variety of transportation options.
Make predictable, fair and cost-effective development decisions	Helps make smart growth attractive and profitable to private investors and developers, who are key to a community's successful implementation of smart growth.
Encourage community and stakeholder collaboration in development decisions	Fosters creative, speedy resolution of development issues and greater community understanding of the importance of good planning and investment. Involving the community early and often in the planning process vastly improves public support for smart growth and often leads to innovative strategies that fit the unique needs of each community.

Sources: Haines (2003); Downs (2005); Choi (2007).

related concept of new urbanism, promoted by Andrés Duany and others, as well as sustainable development.

III. URBAN DEVELOPMENT IN ASIA AND THE PACIFIC

The Asia-Pacific region has experienced faster and more intense urbanization than any other region in the world. In 2000, the world urban population grew to 2.9 billion, and it is expected to increase to 5 billion by 2030. About 60 per cent of the total world population will live in urban areas in 2030, up from 40 per cent in 1950. The largest portion of this increase will be concentrated in the Asia-Pacific region. The cities in this region have different urbanization histories from those in the United States and Europe. Since most Asian countries have a history of colonization by Western countries, their cities have mixed models of urban development and planning. While some countries or regions may have benefited from British or French architecture and urban planning models, others have suffered due to inappropriate Western models. While the benefits and appropriateness of past development can be debated, it is evident that most Asian cities need a new strategy or principle for their urban development due to the rapid growth and changing environments brought on by globalization.

Primate cities—cities which house a large portion of a country's population and dominate industry and politics—have led to spatial disparity and social polarization in some countries. In terms of cities, Asia and the Pacific can be divided into four subgroups: South Asia, South-East Asia, East Asia, and Australia and the Pacific islands. Each subgroup has a unique history and pattern of urbanization. Among these subgroups, East Asia is the most urbanized and boasts some world cities.

Cities in East Asia

East Asia has more dynamic cities than any other subregion in the world due to its fast and intense economic growth. East Asian countries can be divided into two groups. The first group, including China and the Democratic People's Republic of Korea, has experienced low levels of urbanization; the second group has experienced high levels of urbanization and successful economic development. For example, even though historically China was one of the original centres of urban development, and is an emerging economic world power, it still has a very low rate of urbanization in comparison with Japan, the Republic of Korea, and Taiwan Province of China. Thus, China may go through different development stages than other economic engines in the region.

The total population of East Asian countries¹ is approximately 1.5 billion. While the countries of East Asia combined (excluding China) averaged 71 per cent (172 million) urban population, China had only 40.4 per cent (530 million) in 2005. The Republic of Korea has the highest urbanization rate (80.8 per cent) (DESA 2007). The annual urban growth rate of China was 3.1 per cent between 2000 and 2005, and growth for the remaining countries is 1.2 per cent. China has about 90 cities with populations of more than 1 million people, and the rest of East Asia has a total of 23. Major cities of East Asia include Beijing; Tokyo; Seoul; Shanghai, China; Osaka, Japan; Hong Kong, China; and Tianjin, China (Williams and Chan 2003).

East Asian cities have different histories and development patterns, but they share some common goals and development trajectories. All are currently moving towards greater economic development, or have already done so. Generally, colonialism had a less important role in urban development in East Asia in comparison with other parts of Asia. Japan; the Republic of Korea; and Hong Kong, China are already highly industrialized and urbanized, and all are deeply involved in the global economy. In addition, in the mid-1990s, there was much talk of the “four Asian Tigers”, namely: Hong Kong, China; Republic of Korea; Singapore; and Taiwan Province of China. China is also showing fast and intensive economic growth, in keeping with the development trajectory of other newly developed countries. Furthermore, an international network is forming among cities in this region. The network takes its name from Beijing, Seoul and Tokyo (BESETO), and extends beyond national capitals to some major economic hubs, including Busan (Republic of Korea); Shanghai and Tianjin (China); Osaka (Japan); and Taipei (Taiwan Province of China).

Developing cities in Asia

Many Asian countries are still underdeveloped, and require urban management and planning to deal with urban pathology. South Asian² countries have a combined population of about 1.4 billion. Even though the cities of this subregion officially have 382 million people, roughly a 28 per cent urbanization rate, much of the population is concentrated in suburban areas of the major cities. Moreover, many South Asian metropolitan areas or urban agglomerations spill out

¹ Population figures for East Asia include China; Hong Kong, China; Japan; Macau, China; Mongolia; Republic of Korea; and Taiwan Province of China. The population data is based on Department of Economic and Social Affairs, *World Urbanization Prospects, 2001 Revision* (United Nations publication, Sales No. E.02.XIII.16).

² South Asia includes Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka.

over political boundaries, making the true urbanization levels and rates higher than those reflected in official statistics. The annual urban growth rate of the subregion is about 4.1 per cent. This subregion has 45 cities with populations that exceed one million people. The largest cities are Mumbai and Kolkata (India), and Dhaka (Dutt and Pomeroy 2003).

South-East Asia is home to roughly 530 million people, with a 38 per cent urbanization rate (203 million). According to the 2005 date from DESA (2007), the following countries have high urbanization levels: Singapore, at 100 per cent; Brunei Darussalam, 73.5 per cent; and Philippines, 62.7 per cent. Cambodia has the lowest urbanization rate in the subregion—19.7 per cent. The annual urban growth rate of the subregion is about 3.7 per cent. There are 18 cities with populations of more than 1 million. The largest cities are Jakarta, Manila and Bangkok (Tyner 2003).

Asia-Pacific cities have many problems due to the rapid or intensified influx of people. Since there is not enough housing, social services, and infrastructure, the urban population of the region suffers many urban pathologies, such as poverty, inequity, unemployment; high rates of HIV/AIDS infection, high fertility rates, high percentages of elderly people, poor ecosystem quality, inadequate physical infrastructure, poor quality of living, insufficient sanitation, poor housing, pollution, gender inequality and government ineffectiveness (Brunn, Williams and Zeigler 2003).

IV. SMART GROWTH FOR CITIES IN ASIA

Many Asian cities have achieved remarkable economic and social development in a relatively short period of time, compared with cities in developed countries. This fast growth has brought with it many problems that harm quality of life. In response to these urgent issues, cities need to introduce appropriate growth management policies. Even though many Asian countries have systems of strong central government, these systems are not responsive or accountable enough. Due to the lack of institutional readiness for the provision of effective and efficient services, the centralized administration systems have failed to provide proactive planning and management in cities. Asian cities are experiencing urban sprawl, unplanned development and social polarization. The region's sprawling urban spaces need more management and planning in order to leverage quality of life to a higher standard.

Implications for Asian cities

What are the implications of smart growth for Asian cities? First, municipal governments of Asian cities can work on ensuring that their current centralized policy systems are accountable and transparent. In terms of implementing smart growth principles, the centralization factor may be an advantage if governments incorporate a new governance approach and participatory decision-making. However, it is important to establish a reliable and effective policy path with political support.

In the United States, states with more centralized policy environments were able to implement smart growth policies more effectively than states with a more fragmented governmental system.³ Even though Asian cities still need to fight against corruption, moral hazards and misconceptions by the public, they can maintain their current centralized policy environments.

Second, an essential element for the implementation of smart growth is government efforts to build systems that maximize public participation. The encouragement of public participation is not only a key element in democratic decision-making, but also a means for raising the awareness of city residents. Governments of Asian cities must understand that public participation can enhance policy implementation and outcome by forging a shared vision.

Table 2. Elements of smart growth in Asian cities

<i>Element</i>	<i>Purpose</i>
Centralized policy environments	To ensure a reliable and effective policy system with political support and accountability
Visioning to maximize participation	To maximize people's participation/share development goals
Public-private partnerships	To increase the feasibility of the projects with proper partnership and financing with private sectors
Development and environment in harmony	To invest for future generations/preserve the natural environment, open space and historic built environment

³ For example, the states of Florida, Maryland and Oregon, which have more centralized policy and planning systems than other states, formulated and implemented smart growth and growth management aggressively. However, some states with fragmented planning and policy systems, such as Georgia, could not even successfully complete the formulation of state-wide growth management or smart growth policies.

Third, Asian cities need to build more partnerships among different sectors, including public-private, public-public, and public-non-profit. Since many current urban projects need enormous amounts of funds, they are impossible to implement with limited public budgets. Thus, it is critical to improve the feasibility of projects through experimental partnerships and financing from the non-profit and private sectors as well as other public institutions. The public participation and visioning process can enhance these partnerships. Moreover, large urban projects require the consideration of diverse stakeholders, such as community-based organizations, interest groups, environmental groups, neighbourhood organizations, religious institutions, private companies, and real estate developers.

Lastly, Asian cities need to emphasize harmony between development and the environment. The city needs to preserve its natural environment, open spaces, and historic built environment. To enhance sustainability of the city, urban policies must include such concerns.

Further implementation

Governments of Asian cities may wish to consider the 10 principles of smart growth in the context of the four elements described above. First, regarding mixed land use and compact building design, governments of Asian cities can consider establishing small or neighbourhood block developments rather than large-scale developments. If small communities and neighbourhoods, rather than new large projects, were the focus, people could expect more effective and efficient improvements to quality of life. Large projects frequently fail to satisfy residents and stakeholders, due to their tendency to focus less on people. Mixed land use and compact building design can fit well with the dense inner-city structure of many Asian cities, along with other principles, such as infill development, walkable community design, and diverse transportation choices. Many cities can improve the quality of life of their residents by applying these principles. Moreover, some spaces are being wasted by leapfrog-style development (Downs 2005). Cities should fill any unused space with public greens, amenities and necessary public facilities.

Second, regarding housing opportunities and choices, public or private housing projects need to produce a range of home types to accommodate diverse social classes. Unfortunately, many Asian cities currently segregate housing according to economic status, a system that can rapidly undermine social cohesion and urban development. Thus, cities should consider housing projects or spatial designs that incorporate diversity, in order to enhance interaction among different classes. These interclass or interracial connections may increase the social capital of cities and the economic opportunities of different social groups.

Third, in regard to walkable communities, Asian cities should continue to restructure streets designed for cars into spaces designed for pedestrians. In comparison to cities in the United States and Europe, many Asian cities currently have better urban design for pedestrians. Governments of Asian cities need to maintain the current pedestrian- and bike-oriented urban structure, while adding safety and convenience features, such as traffic signals, signs and dividers. Cities should also continue to improve their public transportation systems.

Fourth, in terms of fostering distinctive, attractive communities with a strong sense of place, governments of Asian cities need to focus on existing inner-city communities rather than new towns or new land development in suburban areas. It is much easier to implement social and urban policies in the many urban communities and neighbourhoods that have their own communal spirit and history. However, occasionally, policymakers attempt to develop new towns on the outskirts of cities or in suburban areas. Such developments have higher price tags, due to hidden costs and the need to construct new infrastructure. Since many Asian cities are suffering from a lack of resources, city decision makers should think smart. When cities invest in existing communities, it is possible to enhance the distinct identities of urban communities to produce a more profound impact.

Fifth, regarding preserving open space, cities need to focus on developed space or the reuse of depressed urban areas in order to improve sustainability. The reuse of sites can reduce shortages in the supply of land in many Asian cities. In addition, this can help cities to save their outskirts and suburban land for the next generation. When cities make smart land-use decisions, they can help to achieve sustainable development, and reduce the impact of climate change.

Finally, Asian cities need to use a visioning process for development projects and policy formulation by the municipal government. If a city needs to implement a large project, it should first establish participatory institutions, and communicate visions with diverse stakeholders. This process will reduce tension and conflict with stakeholders.

It is important for Asian cities to focus on creating institutional arrangements commensurate with smart growth. Without institutional readiness, cities may struggle with many challenges when they are implementing smart growth policies. Thus, Asian cities need local governments and stakeholders that are capable, committed and willing. While Asian cities experience intense growth and concentration, the principles of urban planning developed in the United States can benefit further urban policy and public investment in this region. Smart growth policies can lead to more sustainable and equitable urban development by overcoming the current unplanned urban sprawl.

REFERENCES

- Blakely, E.J. (1994). *Planning Local Economic Development—Theory and Practice*, 2nd ed. (Thousand Oaks, SAGE).
- Brunn, S.D., J.F. Williams, and D.J. Zeigler, eds. (2003). *Cities of the World: World Regional Urban Development*, 3rd ed. (New York, Rowman & Littlefield Publishers Inc.).
- Buckwald, E. (2003). *Toward the Livable City* (Minneapolis, Milkweed Editions).
- Chapin, T.S. and C.E. Connerly (2004). "Attitudes towards growth management in Florida: comparing resident support in 1958 and 2001", *Journal of American Planning Association*, vol. 70, No. 4, pp. 443-452.
- Choi, H. (2007). *Smart Growth and Visioning Process: City of Jacksonville, Florida* (Seoul, Korea Research Institute for Human Settlements).
- Department of Economic and Social Affairs (DESA) (2007). *World Urbanization Prospects: The 2007 Revision* (United Nations publication) (highlights available at www.un.org/esa/population/publications/wup2007/2007WUP_Highlights_web.pdf).
- Downs, A. (2005). "Smart growth: why we discuss it more than we do it", *Journal of American Planning Association*, vol. 71, No. 4, pp. 367-381.
- Dutt, A.K. and G.M. Pomeroy (2003). "Cities in South Asia," in Brunn, Stanley D., Williams, Jack F. and Zeigler, Donald J., eds., *Cities of the World: World Regional Urban Development* 3rd ed. (New York, Rowman & Littlefield Publishers Inc.), pp. 331-371.
- Haines, A.L. (2003). "Smart Growth: A Solution to Sprawl", *The Land Use Tracker*, vol. 2, No. 4, accessed on 7 May 2007 from www.uwsp.edu/CNR/landcenter/tracker/spring2003/SmartGrowth.html.
- Hall, P. (2002). *Urban and Regional Planning*, 4th ed. (New York, Routledge).
- Jacobs, J. (1961). *The Death and Life of Great American Cities* (New York, Vintage).
- Korten, D.C. (1996). "Civic engagement in creating future cities", *Environment and Urbanization*, vol. 8, No. 1, pp. 35-49.
- Levy, J.M. (2005). *Contemporary Urban Planning*, 7th ed. (New Jersey, Pearson Prentice Hall).
- Palen, J.J. (2005). *The Urban World* (Boston, McGraw Hill).
- Sassen, S. (2006). *Cities in a World Economy*, 3rd ed. (Thousand Oaks, Pine Forge).
- Tyner, J. (2003). "Cities of Southeast Asia," in Brunn, Stanley D., Williams, Jack F. and Zeigler, Donald J., eds., *Cities of the World: World Regional Urban Development*, 3rd ed. (New York, Rowman & Littlefield Publishers Inc.), pp. 373-410.
- Williams, J.F. and K.W. Chan (2003). "Cities of East Asia," in Brunn, Stanley D., Jack F. Williams, and Donald J. Zeigler, eds. *Cities of the World: World Regional Urban Development*, 3rd ed. (New York, Rowman & Littlefield Publishers Inc.) pp. 413-455.