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Enhancing the Livability of Asian Mega-cities

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Enhancing the Livability of Asian Mega-cities

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Note

An earlier version of this paper was delivered as a keynote address at the 9th Inter-University Seminar on Asian Megacities held at the The Chinese University of Hong Kong, 12-13 March 2004.

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ISBN 962-441-148-4

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Introduction

By the millions they came, the ambitious and the downtrodden of the world drawn by the strange magnetism of urban life.... Does the growth of megacities portend an apocalypse of global epidemics and pollution? Or will the remarkable stirrings of self-reliance that can be found in some of them point the way to their salvation? (*Time*, 11 January 1993, pp. 32-33)

This thought from the above quotation, penned 11 years ago, underlines a major phenomenon of our time. Mega-cities of the world at the threshold of a new century are still very much entities with which governments and decision-makers have to contend. The people who live in them are equally concerned about their economic and social well-being in the age of globalization. As products of the interface between global and local forces, or glocalization, as some would call it, mega-cities are subjected to unprecedented forces that determine how the people living in these cities earn their livelihood, how they are governed, and how they live their lives. Indeed, global epidemics, pollution, and other economic externalities are problems that the mega-cities of the present have to deal with. However, there is always hope that human creativity and ingenuity will find ways of tackling old and new problems of living in the most favoured human habitat of the twenty-first century — the city.

In fact, the new century is heralding a new experience for

humankind. This is a new urban century. The United Nations has projected that, within the next decade, 50% of the world's population will be city dwellers. For the first time in human history, more people in the world will live in cities than in the countryside (United Nations, 2002). The recently released book, *Cities Transformed*, arising from a Panel working under the US National Research Council that had been examining demographic changes and their implications for the developing world, has emphasized that population growth in the coming decades will occur largely in the cities of developing countries. In this respect, the cities of Asia loom large. Asia's urban population has increased by a factor of five in 50 years, rising from 244 million in 1950 to 1.38 billion in 2000. Its current level of urbanization — 37 per cent — is anticipated to increase to 53 per cent by 2030. The urban scene is dominated by two population giants — China and India — which, at present, have almost 200 cities with 1 million or more residents and 22 cities with 5 million or more (Montgomery et al., 2003:102). The potential for these two countries and for the rest of Asia to realize sizable urban growth is large, particularly in view of their relatively low levels of urbanization and Asia's recent trajectory as the fastest growth centre in the world.

This paper is built on the conceptual edifice that, given the phenomenal economic growth Asia has witnessed over the past few decades, its mega-cities have undergone a physical and economic transformation. However, this transformation is incomplete if one considers the persistence of urban poverty, inadequacy of basic services, increasing social and economic polarization, and other issues of social concern. This paper attempts to explore the livability of Asian mega-cities, and in particular, their social sustainability.

The paper is divided into three parts. It will briefly survey the growth and status of Asian mega-cities, noting their recent rapid growth and the problems they have to face. The second part probes the question of the quality of life in Asian cities, citing specific examples of how cities have attempted to measure this dimension of urban life. The final part includes some of the

major issues and policies through which the social sustainability of these cities can be strengthened. It concludes with a plea to begin the task of strengthening the social well-being of Asian cities.

Asian Mega-cities and Their Challenges

In 1996, Elizabeth Dowdeswell, then Executive Director of the United Nations Environment Programme, pointed out that there were 213 cities in the Third World with more than 1 million inhabitants. The future of cities, she declared, would increasingly determine not only the destiny of nations but also of the planet. This change in the urban concentration of population in the Third World, especially in mega-cities, which had been pushed to the margins of national and international concern, is back on the agenda (Westendorff and Eade, 2002:107).

Mega-cities are special, super cities or giant cities because of the size of their population. Their definition has changed with time and purpose. The United Nations initially used 8 million as the threshold (Chen and Heligman, 1994), but recently upped this figure to 10 million (United Nations, 1998:23). This shows the arbitrariness of the definition, but it is not so much this that matters, as the influence that mega-cities can wield on society, development, and the state. Table 1 shows that, by the beginning of the new century, the prominence of Asia in the global concentration of mega-cities was very clear. In 2001, 11 of the 17 mega-cities, in fact, the largest cities in the world, were found in Asia. It should be noted that their growth in South Asia over the last quarter of the twentieth century was especially rapid. Without exception, the rates of growth of all mega-cities in the world are anticipated to moderate in the next decade or so.

Figure 1 adds another dimension to mega-cities in Asia. It shows the distribution of "million" coastal cities in Asia, that is cities with at least 1 million inhabitants. There are 38 of these, including 9 mega-cities with a population of 8 million or more (old definition). These cities are spread intermittently along the entire coast of the three sub-regions of East, Southeast and South

Table 1 Population and Growth Rate of Urban Agglomerations with More Than 10 Million Inhabitants in 2001, 1975-2015

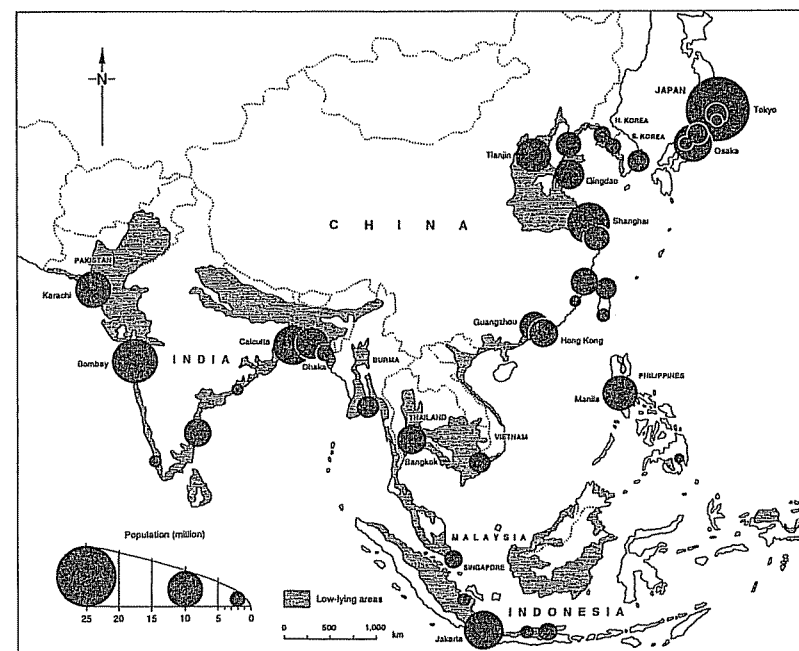
Urban agglomeration	Population (million)				Growth rate (%)	
	1975	2000	2001	2015	1975-2000	2000-2015
1 Tokyo	19.8	26.4	26.5	27.2	1.16	0.19
2 São Paulo	10.3	18.0	18.3	21.2	2.21	1.11
3 Mexico City	10.7	18.1	18.3	20.4	2.10	0.82
4 New York	15.9	16.7	16.8	17.9	0.21	0.47
5 Mumbai (Bombay)	7.3	16.1	16.5	22.6	3.13	2.26
6 Los Angeles	8.9	13.2	13.3	14.5	1.57	0.62
7 Calcutta	7.9	13.1	13.3	16.7	2.02	1.66
8 Dhaka	2.2	12.5	13.2	22.8	7.00	3.99
9 Delhi	4.4	12.4	13.0	20.9	4.13	3.45
10 Shanghai	11.4	12.9	12.8	13.6	0.48	0.36
11 Buenos Aires	9.1	12.0	12.1	13.2	1.10	0.61
12 Jakarta	4.8	11.0	11.4	17.3	3.31	3.00
13 Osaka	9.8	11.0	11.0	11.0	0.45	0.00
14 Beijing	8.5	10.8	10.8	11.7	0.95	0.49
15 Rio de Janeiro	8.0	10.7	10.8	11.5	1.16	0.54
16 Karachi	4.0	10.0	10.4	16.2	3.69	3.19
17 Metro Manila	5.0	10.0	10.1	12.6	2.75	1.56

Note: Urban agglomerations are ordered according to their population size in 2001.

Source: United Nations (2002:12).

Asia, but the concentration of large coastal cities is especially pronounced in Japan, the Korean Peninsula, and China. It should be noted that no “million” coastal city exists in West Asia. Matching Figure 1 with Table 1, it should be clear that all but 4 of the 11 Asian mega-cities are located along a coast. In fact, this observation holds true for the 16 largest Asian cities. Consequently,

Figure 1 “Million” Coastal Cities in Asia, circa 1990



Source: Adapted from Eisma (1995:59).

a coastal location is a major geographical characteristic of most Asian mega-cities. Figure 1 shows, as well, the vast low-lying coastal areas, which are prone to floods and inundations from the rivers that run through them. Even more hazardous in the long term is the exposure of these areas to lasting threats from accelerated sea-level rises (ASLR) (Yeung, 2001a).

Over the past two decades, Asian mega-cities have attracted widespread attention from scholars and policy-makers because of their increasing importance and growing impact on the economic growth and ways of life of nations (Fuchs et al., 1994; McGee and Robinson, 1995; Stubbs and Clarke, 1996; Yeung, 1997). Mega-cities have become focal points for networks

of economic, social, and political interactions in the age of globalization. Global processes have favoured these locations, for the convenience and efficiency they offer because of their geographical centrality, attractive policy regimes, and other investment incentives that are conducive to economic production and reproduction. Across Asia, examples abound of how mega-cities have positioned themselves well to compete in the new global economy and, in the process, have prospered (Yeung, 1995). The spectacular economic and physical transformation of Chinese cities since 1978 has been breathtaking, and is beginning to influence regional development in Asia and beyond in a profound and positive manner (Yeung and Sung, 1996; Yeung and Chu, 1998, 2000).

In terms of size and population, Asian mega-cities have continued to grow rapidly. The growth that links the mega-city and surrounding rural areas has proceeded in a manner distinctly different from other parts of the world. Building upon the age-old agricultural base of the rural areas, Asian mega-cities have successfully interwoven urban and rural space to form what Terry McGee and his colleagues have termed "extended metropolitan regions" (EMR) (McGee, 1989; Ginsburg et al., 1991). It is observed that this process has been widely replicated in the region and that mega-urban regions have taken shape in many countries along the Western Pacific Rim (Lo and Yeung, 1996). It has been noted that farmers in the fringes of Asian mega-cities have released part of their land to obtain capital. They have allowed urban development to change their lives, with some becoming workers in factories or offices in their neighbourhood, but they still remained farmers and maintained their remaining green patches as active farmland. Thus, a controlled mixture of urban and rural landscapes is characteristic of Asian mega-cities (Yokohari et al., 2000). Apart from the size of their populations, some of these mega-cities have acquired vital functions in the global economy and hence may be viewed as world cities or global cities. The related development of contiguous territories of several countries, often centred on one or two world cities, to form sub-regional

economic entities, specifically called growth triangles, has been noted. The Southern China Growth Triangle and the JSR (Johor [Malaysia], Singapore, and the Riau Islands [Indonesia] Triangle, previously called the SIJORI Triangle) are the most successful and well-known examples. Moreover, urban corridors that can cover an extensive region have appeared through the natural coalescence of large cities. The best-known example of a regional urban corridor is the one linking Beijing, Seoul, and Tokyo, or the BESETO ecumenopolis (Choe, 1996; Yeung, 2000). The rapid economic and physical changes seen in the Asia-Pacific region over the past few decades have been anchored in these mega-urban regions.

However impressive the economic and physical changes that Asian mega-cities have been able to bring about, the authorities of such cities are being confronted with the daunting challenges of how to manage their cities, maintain a judicious balance between growth and sustainability, and show special concern for less advantaged groups of citizens. These challenges have been compounded by the extensive territory covered by mega-cities, their burgeoning population continually fed by internal and international migration, the contest of power between national sovereignty and transnational corporations, and the inadequacy of current structures of governance for meeting changing demands for services. The reality of managing Asian mega-cities in a globalizing environment is as challenging as it is full of opportunities.

The ill effects of rapid economic growth and industrialization were first noticed in Japan soon after World War II, the first Asian country to realize an economic miracle in the post-war period. Mysterious new diseases linked to heavy industrial sites near major cities were identified, later known as Minamata disease and Yokaichi asthma (McKean, 1981). One way of coping with the problem was for Japanese firms to move the most polluting forms of production offshore to other parts of Asia, such as Taiwan, Korea, Thailand, and mainland China. Recent industrialization in the region, not necessarily attributable to Japanese investment, has caused serious pollution

in Asia. A leading British magazine described the situation as follows:

Sulphurous coal smoke hides a Chinese city from satellite cameras; chemical waste makes Hong Kong's shell-fish toxic, potentially lethal; the traffic fumes of Bangkok and Taipei make Los Angeles smell sweet by contrast; Manila's five main rivers, curiously described as "biologically dead," are in fact biologically teeming — and provide drinking water for hundreds of thousands. Asia has bought economic growth at the price of ecological devastation (*The Economist*, 6 October 1990:25).

The situation has, by and large, not improved significantly since the above depiction of the pollution status of Asian mega-cities. In fact, the situation has notably worsened in mainland China where high-speed growth has roared ahead unabated and the impact on its mega-cities has been widely felt. The rapid rise of automobile ownership is astounding in large Chinese cities along the coast. For example, the trip from Peking University to the centre of the city at Wangfujing that only recently took 45 minutes now takes 90. To cope with the never-ending growth of automobile ownership, round-the-city road construction has extended to a sixth ring, more than 30 km from the city centre. Recently released images by NASA of the booming Pearl River Delta revealed that in early November 2003, as much as one-third of the entire region was blanketed by a thick cloud of pollutants (Cheung, 2004).

Within Asia, Japan is probably one of few countries that has been successful in combating pollution. For instance, the serious problem of air pollution that bedeviled Tokyo in the 1960s has been considerably mitigated. Japan has probably the best and most efficient system of public transport in the world, with high-speed trains (Shinkansen) and highways serving Tokyo and other large cities on the main island of Honshu particularly well. Coming to grips with garbage disposal has also been a problem, although Greater Tokyo actually produces much less garbage than Greater New York. In this respect, Japan has developed cutting-edge technology in incineration, apart from using other

more conventional methods (Eades, 2002). With borderless growth, global networks, boundless energy, and some 28 million inhabitants, Tokyo has become the world's largest city. Yet the concentration of people in a mega-city does have its perils. This was highlighted by the sarin gas attack in a subway station in Tokyo in a spring morning in March 1995 by the religious cult Aum Shinrikyo (Schram, 2003:153-57). Terrorist attacks of this nature have constituted a constant threat to life in mega-cities everywhere, particularly following the horrendous attacks in New York and Washington, DC on 11 September 2001.

Terrorist attacks are man-made hazards. Asian mega-cities are subject, as well, to natural hazards of diverse types. Many are prone to marine-related natural hazards, as they are located along coastal zones. Typhoons frequently cause extensive damage in Hong Kong, Taipei, and Manila, while earthquakes have killed thousands in Tokyo (1925, 1932), Kobe-Osaka (1995), Karachi, and Jakarta. Ash falling from nearby active volcanic centres has affected Manila; and Dhaka, Seoul, and Bangkok have experienced serious flooding and loss of life. Since 1939, about 100 natural disasters have affected large cities worldwide. It has been observed that natural disasters are a worsening problem in many of the world's largest cities, including those in Asia. Recent studies have submitted that the management of hazards in large cities should be pursued with careful regard to the context of general urban policy-making and management (Arthurton, 1998; Mitchell, 1999a, 1999b).

Apart from the conventional problems faced by mega-cities in Asia, such as housing shortages and the inadequacy of basic services such as water supply and traffic management, and so forth (Yeung, 1998), a globalizing environment has brought to the fore a new set of problems arising from vast increases in the flow of people, goods, money, and information across national boundaries. A borderless world has given rise to unprecedented problems that Asian mega-cities have to confront. The terrorist attacks mentioned above are both local and global, depending on their nature and motivation. The SARS (severe acute respiratory syndrome) epidemic in 2003, which resulted in the

loss of many lives, created widespread fear and alarm in some cities and countries. The avian flu in 2004 in Asia and elsewhere has also raised alarm bells and led to continued disquiet because it is still not known with certainty how the disease came about. One theory has blamed the seasonal migration of birds as possible culprits, but more information needs to be unearthed before substantiated links can be established. Transnational crime has also become an issue on which many governments are focusing increased attention. It has many manifestations, including the illicit trafficking of drugs and people, sea piracy, arms smuggling, money laundering, terrorism, economic crime, and cyber crime. These crimes are considered possible threats to the political, societal, and economic security of the countries concerned. As a group of countries, ASEAN (Association of Southeast Asian Nations) has sought to cooperate in combating transnational crime by legislating and enforcing existing laws against different categories of transnational crime (Emmers, 2003). Finally, as globalization is by nature an uneven process, it has led to increased economic and social polarization within cities (Yeung, 2001b). Asian mega-cities have to be mindful of their increasingly heterogeneous population, which is a result of continual internal and international migration. For example, Tokyo has to face the reality that its population is much more diverse than ever before, with the infusion of migrants from more countries and in greater numbers as it has continued to open up and globalize over the past two decades. Likewise, as the levers of population control began to be loosened in 1984, large coastal cities in mainland China have matter-of-factly allowed temporary migrants to make up between one-quarter to one-third of their total population. The challenges involved in managing mega-cities in Asia in a globalizing era have never been as great as in the present.

The Livability of Asian Mega-cities

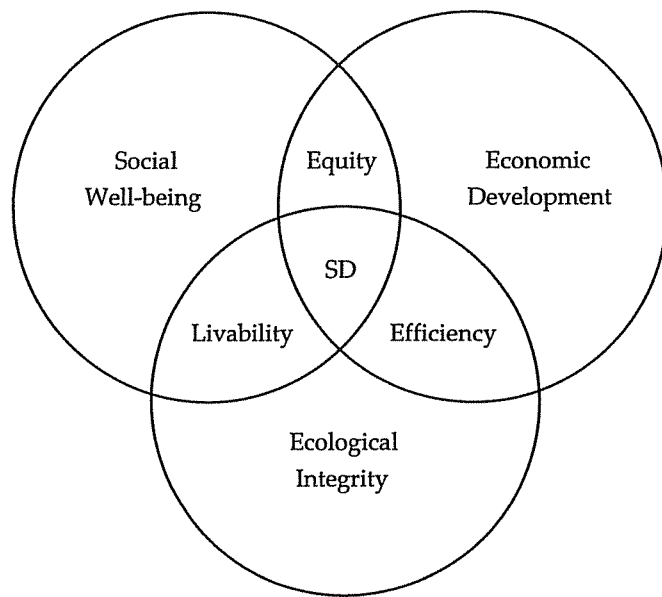
Amidst their headlong rush towards economic development and against the background of the recent interest and concern about

sustainable development, some Asian cities have begun to turn their attention to the issues surrounding livability or, broadly, the quality of life in their urban environment. The related question of the sustainable city has also been posited. The sustainable city may be defined in various ways, but it has been described in a recent workshop as a city:

- that genuinely pursues improvements in livelihood and habitat for all in the short, medium, and long run without damaging in the process the carrying capacity of the city's hinterland or other region;
- in which decentralized governance, democracy, and non-exploitative community participation are necessary but insufficient conditions to move cities in this direction;
- in which adverse macro-economic environments — and especially unfettered international economic competition — are likely to retard movement in the right direction; and
- in which a strong, just state is an essential asset for pursuing true social, economic, and environmental sustainability (Westendorff and Eade, 2002:9).

It is clear that these are almost ideal conditions for the sustainable city, which barely exist in the real world. However, in order to strive towards sustainability in urban development, most scholars would subscribe to maintaining a balance of three sets of interrelated and sometimes competing factors, namely social well-being, economic development, and ecological integrity, in a "three ring circus" (Figure 2). These sets of factors touch on the concepts of economic sustainability (i.e., the ability of the local economy to sustain itself without causing irreversible damage to the natural resource base), social sustainability (i.e., a set of actions and policies aimed at improving the quality of life), and natural sustainability (i.e., the rational management of natural resources) (Westendorff and Eade, 2002:15-16; also Chatterji and Yang, 1997:35, 61-63). These concepts, in turn, intersect with the broader issues of efficiency, equity, security,

Figure 2 The “Three Ring Circus” Model of Sustainable Development



Source: Westendorff and Eade (2002:15).

democracy, ethics, and their relationship with development (Chen and Voogd, 1997).

A school of thought has argued that economic development is creating more poverty and widening the poverty gap. For instance, the United Nations Development Programme's *Human Development Report 1996* showed that 89 countries worldwide were worse off economically than they were a decade before. The social and political basis for sustainable development in mega-cities in the Third World has been markedly weakened (Westendorff and Eade, 2002:104-08). It has been reported that the quality of life in Metro Manila has deteriorated, despite respectable economic growth and the proliferation of urban facilities. The “brown” environment has long been abused — air,

noise, and water pollution, inadequate waste disposal, and congestion. The same study contended that cities in the Philippines have developed at the expense of the poor and the environment (Constantino-David, 2002).

With growing doubts about whether economic growth should be pursued for its own sake, there has been a notable increase in studies on the quality of life in cities. According to Veenhoven (2000), quality of life may be distinguished as (1) the livability of the environment, (2) the life-ability of the person, (3) the utility of life for the environment, and (4) the appreciation of life by the person. By developing social indicators in each of these dimensions and over time, one can track the social sustainability of a city. For over a decade, the Social Indicators Research Programme of the Hong Kong Institute of Asia-Pacific Studies at The Chinese University of Hong Kong has been conducting regular surveys on the population of Hong Kong to track the social development of Hong Kong, many on the same subjects over time. It is probably one of the most comprehensive series of surveys and studies on the subject on an Asian city. Its regular conferences and seminars have drawn an increasing number of like-minded scholars and researchers in the region, particularly from Chinese societies, to engage in dialogues about the importance of the social sustainability of cities in Asia. To date, a large number of publications have enriched the literature on this dimension of social change in Hong Kong (Lau et al., 1991, 1992, 1995, 1997, 1999, 2001, 2003).

The pursuit of the all-round development of society has prompted interest in the quality of life in Chinese cities. Chen and Voogd (1997) have carried out a statistical analysis of Chinese cities based on a number of indicators chosen on the basis of their theoretical significance with respect to quality of life and availability. Table 2 shows the list of variables used. Four clusters of cities based on statistical rankings have been identified. The top ten Chinese cities from the standpoint of quality of life as based on their statistical scores were: Shenzhen, Zhuhai, Beijing, Xiaogan, Kelamayi, Guangzhou, Geermu, Dongyin, Xiamen, and Wulumuqi. It was found that income,

Table 2 List of Quality of Life Indicators

GDP per capita
Number of hospital beds per 10,000 persons
Average green space per 10,000 persons
Number of cinemas and theatres per 10,000 persons
Average expenditure on education per person
Dwelling space per person
Number of telephones per 10,000 persons
Average wage per employee
Number of doctors per 10,000 persons
Population density
Average water consumption per person
Average electricity consumption per person
Number of urban public transport vehicles per 10,000 persons
Number of scientists and engineers per 10,000 persons
Number injured and killed in traffic accidents per 10,000 persons
Average savings per person at the end of year
Ratio of food to living expenditures
Disposal rate of water waste
Disposal rate of gas waste
Disposal rate of solid waste
Number injured and killed in fire accidents per 10,000 persons
Number of colour TV sets per 100 families
Percentage of families with gas
Inflation ratio

Source: Chen and Voogd (1997:137).

savings, transportation, communications, electric power, recreation, and health care are the factors that most influence the quality of life in China. The quality of life is highest in

economically developed cities. The conclusion drawn was that, based on the current situation in China, economic development should be given a high priority in any policy to improve the quality of life in a country.

At the level of the individual city, Shanghai, China's largest city, has chosen the theme of raising the quality of life in the city as an approach to eventually realizing its goal of making its inhabitants relatively well-off. This theme was stated in its 2003 *Social Development Bluebook*. Proposals for improving the quality of urban life include comprehensive human development as the ultimate goal to enhancing the quality of life, an emphasis on a quality life for the majority, the advancement of a collective rational spirit of "sharing weal and woe" by all members of society, and concern about the physical, cultural, and spiritual life of the whole population so that everyone will share in the fruits of social and economic development. Special attention will be devoted to disadvantaged families, with stress being placed on more humanistic care. The rapidly aging population of Shanghai will be taken into account in planning facilities and in the future allocation of resources. The proportion of the population aged 60 and above has risen from 10.2 per cent in 1979 to 18.67 per cent in 2001. Similarly, the proportion of the temporary population has increased from 3.58 per cent in 1979 to 23.59 per cent in 2000, accounting for 387.11 million inhabitants in the latter date (Yin, 2003:1-39, 194, 209).

Table 3 presents the major indicators of the four Chinese municipalities that have been awarded a status equivalent to that of a province. They are truly mega-cities that have continued to show progress in various aspects, as even a comparison of two consecutive years reveals. The per capita discretionary income of urban households has improved noticeably. At around RMB10,000 per year, or more than US\$1,200 per year, these cities are qualified to be classed as middle-income cities. Income levels are correlated with lower Engel coefficients, meaning that less of the household income is spent on food. The rate of ownership of household appliances is generally very high, especially of colour TV sets, of which an average family owns

Table 3 Comparison of Social Indicators in Four Chinese Municipalities, 2000-2001

	Beijing		Tianjin		Shanghai		Chongqing	
	2000	2001	2000	2001	2000	2001	2000	2001
Total urban registered population (million)	13.64	13.67	9.12	9.14	13.22	13.27	30.91	30.98
Non-agricultural population (million)	9.37	9.61	5.33	5.35	9.86	9.99	6.61	24.30
Annual per capita discretionary income of urban households (RMB)	10,350	11,578	8,141	8,959	11,718	12,883	6,276	6,721
Engel coefficient of urban residents ¹	0.363	0.362	0.401	0.370	0.442	0.431	0.404	0.387
Washing machine (set/100 households)	103	102	98	96	93	99	95	97
Refrigerator (set/100 households)	107	107	100	103	102	103	100	99
Colour TV set (set/100 households)	146	149	132	134	147	154	132	139
Video recorder (set/100 households)	57	58	34	32	52	50	—	—
Air conditioner (set/100 households)	70	90	66	74	96	100	81	86
Annual per capita net income of rural households (RMB)	4,687	5,099	4,370	4,825	5,565	5,850	1,892	1,971
Per capita living space of urban residents (m ²)	10.9	11.3	8.9	9.6	11.8	12.5	10.7	11.5
Per capita public green area (m ²)	9.7	10.1	5.4	5.9	4.6	5.6	1.0	1.4

Note: 1. The proportion of food expenditure in total consumption.

Source: Yin (2003:370-72, 374).

more than one. The incomes of rural households in the four mega-cities pale in comparison with those of their urban counterparts, but are still decent by Chinese standards. Considering their huge size, the cities in question offer a quite acceptable amount of living space and greenery per person, and they are continuing to improve. All in all, these indicators provide convincing evidence that the four Chinese mega-cities show sign of being sustainable.

Enhancing Social Sustainability

The unease and disenchantment felt by many academics and socially minded activists regarding the present pattern of economic development, which comes at the expense of a balanced social distribution, have given rise to a spate of recent works arguing for new paradigms of development and questioning the conventional wisdom of governing and managing cities (Stren, 1994; Montgomery et al., 2003). The quest for economic growth per se without sufficient regard for distributive mechanisms is an approach that has been called into question. The reorientation of urban studies from a rather technocratic approach to one that emphasizes governance and social sustainability has been grounded on a humanistic concern to share the fruits of development with a wider spectrum of the populace. Urban governance has now entered the parlance of international assistance programmes, an indication of the wide acceptance of this new mindset.

To make diverse urban societies truly sustainable and inclusive, Polèse and Stren (2000) have argued that urban policies must be supportive of urban sustainability, which is defined as:

development (and/or growth) that is compatible with the harmonious evolution of civil society, fostering an environment conducive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration, with improvements in the quality of life for all segments of the population (pp. 15-16).

The emergence of the social economy has coincided with a powerful drive in the Third World, as well as in developed countries, to redefine the distribution of power between the central and city governments, and between the government and civil society. Innovative approaches to urban management and governance have been developing. These approaches have been more realistic, more broadly based, consultative and inclusive, and account for more social, cultural, and institutional factors to give a deeper meaning to urban life.

In a similar but more specific vein, Kim and his colleagues (Kim et al., 1997) have emphasized the cultural role of cities in East Asia, which have entered the world of global capitalism fairly recently. The built environment in an East Asian city serves symbolic and ideological functions that underpin the cultural basis of status, power, and authority. Within these cities, minority subcultures have thrived throughout history and into the present. As ancient countries in East Asia have joined the mainstream of global economic development, its cities, mega-cities in particular, face the challenge of enmeshing old values, attitudes, and institutions with new ones, while ensuring that the downtrodden and disadvantaged are not left behind in the rush towards economic growth.

Of all the countries in East Asia, South Korea has been most successful in transforming itself from a war-ravaged country in 1953 to an industrial powerhouse of global stature. Yet Korean scholar Suh (1998) has provided a refreshingly new analysis of the Korean development experience by questioning the meaning of state-sponsored growth and following the approach of reorienting issues of development towards a quest for quality of life. Suh is deeply concerned about the perceived inequalities in the system, as seen in the process of wealth creation, such as in speculation in the land and real estate markets, and considers it highly important to revisit issues of social sustainability. He has pointed to state entrepreneurship in the authoritarian process of state-societal relations, the ideological orientation of the ruling regime, and the impact of state policies as all being significant determinants of the quality of life in the process of social

transition (Suh, 1998:10). He identified the issue of the quality of life in South Korea as a process of social transformation designed to promote the well-being of the population as a whole, along with the dynamic process of economic growth. This involves another transition from non-cooperative to cooperative strategies revolving around the relationship between the state and various interest groups within civil society. Suh has succeeded in showing that, rather than an abstract ideal, quality of life is a realistic approach to promoting the welfare of the people. In his model, the market, civil society, and the state would all work together to achieve quality of life and the welfare of the people, with their respective roles complementing one another.

A similar study of the Capital Region of South Korea, or Greater Seoul, has shown that as the mega-city becomes primarily a knowledge-based economy, social and environmental capital acquire greater importance in developing a livable and productive region. As the region's economic performance is intertwined with the quality of its life, arrangements for its governance have become more critical. Two key problems facing the governance of Seoul are inclusiveness and collaboration, reminiscent of the attributes of social sustainability that have been reviewed earlier. Peculiar to the Korean situation, the country runs a system that is akin to an agent model. The central government holds the effective power to make policies, and the local government, including Seoul, merely implements the decisions of the centre (Kim, 1999).

Conclusion

As Knight (1993:38) has highlighted, the growth of mega-cities is propelled by global forces over which neither cities nor states have control. These forces, which underlie the processes of industrialization and urbanization worldwide and are undermining traditional patterns of settlement, are intensifying and becoming increasingly global in nature. The future of cities, according to Knight, depends on their integrity and livability.

Instead of being shaped by global forces, cities must become intentional and sustainable, and have the ability to integrate global knowledge with local cultures, with conservation of local knowledge being a priority. Only then will sustainable cities with knowledge-based development exist.

In their effort to improve their management and environment, many cities in Asia have been experimenting with various management designs, with different degrees of success and failure. Table 4 shows that, over the past 40 years, the major cities of Southeast Asia, including the mega-cities, have been on a constant track of administrative restructuring, a reflection of their failure to seek sustainable development. Only Kuala Lumpur has had a sufficiently high standard of professionalism to cushion the damaging impact of restructuring, as the many instances of administrative reorganization in the other cities must have taken their toll (Rüland, 1996:7). On the other hand, another review of the same region shows that the governance of mega-urban regions has to be in tune with recent spatial and administrative developments arising from a globalizing environment. Laquian (1995) identified the following four factors as crucial to a better quality of life for urban citizens in

Table 4 Reorganizations of Southeast Asian Metropolitan Areas

City	Number of reorganizations	Year of major reorganization
Bangkok	7	1958, 1968, 1971, 1972, 1975, 1977, 1985
Metro Manila	4	1955, 1975, 1978, 1986
Kuala Lumpur	6	1952, 1960, 1972, 1974, 1978, 1987
Jakarta	5	1950, 1960, 1965, 1966, 1974
Yangon	8	1949, 1958, 1963, 1972, 1974, 1978, 1985, 1990

Source: Rüland (1996:7).

Southeast Asia: efficiency, equity, economic development, and environmental sustainability.

Indeed, environmental sustainability must be accompanied by social sustainability. In this respect, the Japanese urban environment appears to have been able to achieve this combination better than most Asian countries. Socially, technologically, and environmentally, Japanese cities have achieved much since World War II. It has been maintained that, in the mind of the average Japanese, the quality of the urban environment is to be achieved by contributions arising from the individual, communities, and the government. Technologically, urban infrastructure, especially in transportation, is the best in the region. Japanese urban planning is also, according to some specialists, ahead that of the West, because it consciously incorporates traditional values with technological advances (Golany et al., 1998).

This paper has not touched on the subject of appropriate energy policies and utilization in mega-cities, an issue that is growing in relevance and importance in Asia, as more people live in such cities and as standards of living continue to rise. The rapid increase in the use of and demand for energy in mainland China, propelled by growing industrialization and urbanization, the popularization of the automobile, and changing consumer tastes, has become a national concern. Scholars in India have argued that Indian cities should conserve resources and maximize energy supplies. Urban mismanagement is another issue that has to be tackled (Dua, 2001). These are pertinent and important issues not only for mega-cities in South Asia, but for Asia as a whole.

This paper has attempted to piece together some conceptual and empirical evidence to show that Asian mega-cities have, at the onset of the new century, become a global phenomenon that will affect the pace and nature of regional and global change. As the fastest growth region in the world, Asia will continue to depend on its mega-cities to power economic growth and improve the lives of its people. We have argued that Asian mega-cities have grown faster economically than socially. Urban

economic sustainability must go hand in hand with social sustainability. Asian mega-cities must be made more livable. Only when our cities become socially sustainable can we consider our transition to a better life for all to be complete.

In pondering issues of social sustainability in Asian mega-cities, and before concluding this paper, I wish to revisit some of the distinct impressions I gained from my participation in the second United Nations Conference on Human Settlements (Habitat II) in Istanbul in 1996. Several eminent speakers at the conference called attention to the plight of the downtrodden. It was alleged that the world cannot have solidarity with half of its people living in misery, many in its teeming cities. Human solidarity must include subways of communication to the deprived, women, children, and other excluded sections and population groups, in addition to the digital superhighways that have mushroomed. The challenge is to redefine the modern world in a new kind of solidarity based on diversity. Humankind must be built with a new kind of cultural spirit. At present, Asian cities consist of mosaics of population groups, not melting pots to nurture common goals in life. Cities and nations must be based on ideas and beliefs with integrity. It is time for the humanization of the earth, a time for extraordinary changes after the end of the Cold War, the demise of communism, and the new challenges and opportunities that have come with globalization. We must learn to negotiate deeply divided world views, cultural backgrounds, and religious beliefs to create a common humanity. We need to create cities that can become crucibles of our minds. Asian mega-cities are eminently qualified to begin this journey.

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Enhancing the Livability of Asian Mega-cities

Abstract

Worldwide, Asian mega-cities stand out because of their numerical dominance and because they are foci of rapid economic transition. Yet these cities have grown more quickly economically than socially. It is argued that their livability and, specifically, their social sustainability must be promoted alongside economic growth.

The paper is divided into three parts. In the first, the recent rapid growth and status of Asian mega-cities are surveyed, and the problems confronting them are noted. Second, the question of the quality of life in Asian cities is addressed, with specific examples cited of how cities have attempted to measure this dimension of urban life. Finally, some major issues and policies regarding the strengthening of the social sustainability of these cities are reviewed. The paper concludes with a plea to begin the task of strengthening the social well-being of Asian cities.

亞洲超巨城市可居性的提升

楊汝萬

（中文摘要）

亞洲的超巨城市在世界上很特出，這是因其數目凌駕其他地區，亦因其成為急速經濟轉型的聚焦點。但這些城市在經濟方面的增長遠比社會發展迅速，因此有意見認為，在經濟成長的同時，要設法改善這些城市的可居性，特別是要提高其社會可持續發展。

本文分為三部分，首先是總覽亞洲超巨城市近期的急速發展和地位，以及其所面對的問題；其次為探討亞洲城市的生活素質，並舉出實例，說明此等城市如何嘗試測度其生活素質；最後，就如何加強此等城市的社會可持續發展，本文檢視數項主要的問題和政策，並以開展工作，以增進亞洲城市的社會福祉此一呼籲作結。