



**GLOBALIZATION
AND THE
SUSTAINABILITY
OF CITIES IN THE
ASIA PACIFIC
REGION**

EDITED BY

FU-CHEN LO & PETER J. MARCOTULLIO

Globalization and the sustainability of cities in the Asia Pacific region

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Introduction

Peter J. Marcotullio and Fu-chen Lo

The project planning meeting for the development of this volume was held in Jakarta, Indonesia, in July 1997. Most of the participants, at the time, were bullish on globalization and its growth impact on the region's cities. None understood what exactly was happening at that moment. Within a short time, however, the importance of the growing crisis became clear. Many of the "miracle" Asia Pacific countries underwent an economic crisis of unprecedented proportions. By August of the next year, at the project review meeting, the cracks in the system were clear. As 1998 ended, five of the former "high-performance economies" were on a downward trend. The Republic of Korea, a proud new member of the Organization for Economic Cooperation and Development, required an IMF bail-out. After a decade of annual growth rates of 10 per cent, some economies contracted by as much as 15 per cent. Stock market values were more than halved, Asia's total of bad loans was estimated to be US\$1 trillion, and some currencies lost between 30 and 70 per cent of their value (*FEER* 1999). The crisis provided the unexpected backdrop against which the studies of cities in the region were performed.

The next 18 months were difficult. As a whole, developing Asia's growth slowed down from 5.8 per cent in 1997 to 1.6 per cent, and for the first time in the 1990s it was lower than in Latin America or Africa (Table 1.1). Only China and a few countries in South Asia managed to sustain the growth rates of recent years (UNCTAD 1999).

Aggregate GDP of the four newly industrializing economies (NIEs)

Table 1.1 World output, 1990–1998

Region/country	% change over previous year			
	1990–1995 ^a	1996	1997	1998 ^b
World	1.9	3.3	3.3	2.0
Industrialized countries	1.7	2.9	2.9	2.2
USA	2.3	3.4	3.9	3.9
Japan	1.4	5.0	1.4	-2.8
European Union	1.3	1.6	2.5	2.7
Transition economies	-8.2	-1.5	1.4	-1.4
Developing countries	4.9	5.8	5.4	1.8
Latin America	3.3	3.6	5.4	2.1
Africa	1.1	3.9	2.7	2.9
Asia	6.4	7.1	5.8	1.6
China	12.4	9.6	8.8	7.8

Source: UNCTAD 1999, Table 1.1, p. 4

a. Annual average.

b. Estimate.

Table 1.2 World economic output projections

Country/region/area	Annual % change			
	1997	1998	1999	2000
World	4.2	2.5	2.3	3.4
G7	3.0	2.2	1.9	2.0
Japan	1.4	-2.8	-1.4	0.3
Asian NIEs	6.0	-1.5	2.1	4.5
Developing countries	5.7	3.3	3.1	4.9
Africa	3.1	3.4	3.2	5.1
Asia	6.6	3.8	4.7	5.7
ASEAN-4	3.8	-9.4	-1.1	3.0
China	8.8	7.8	6.6	7.0
Countries in transition	2.2	-0.2	-0.9	2.5

Source: IMF 1999, Table 1.1, p. 2

contracted by 1.5 per cent in 1998, in contrast to an expansion of 6 per cent in the preceding year (Table 1.2). Two of the four NIEs suffered recessions in that year. Taiwan survived the financial turmoil relatively unscathed (Table 1.3), and was able to fight off crisis because of its pre-emptive devaluation and large foreign exchange reserves built up from current account surpluses (UNCTAD 1999). The decline in growth for the economy was contained at 4.8 per cent, against 6.8 per cent growth in

Table 1.3 Growth in selected developing countries, 1990–1998

Country	1990–1995 ^a	1996	1997	1998 ^b
Hong Kong	5.5	4.5	5.3	–5.1
Korea	7.4	7.1	5.5	–5.5
Singapore	8.5	6.9	7.8	1.5
Taiwan	6.4	5.7	6.8	4.8
Indonesia	7.1	7.8	4.9	–13.9
Malaysia	8.7	8.6	7.7	–6.2
Philippines	2.2	5.8	5.2	–0.5
Thailand	8.3	5.5	–0.4	–8.0
China	12.4	9.6	8.8	7.8
Argentina	6.0	4.4	8.0	4.2
Brazil	2.7	2.9	3.8	0.2
Mexico	1.5	5.5	7.1	4.8

Source: UNCTAD 1999, Table 1.2, p. 10

a. Annual average.

b. Estimate.

1997. Hong Kong, on the other hand, experienced its first recession in 13 years. Output declined by 5 per cent that year in contrast to a growth rate of over 5 per cent in 1997. In Singapore, growth fell to 1.5 per cent in 1998 from nearly 8 per cent in 1997, but the city-state was able to fight off a contraction. In both Singapore and Hong Kong, wages and employment were allowed – and in the case of Singapore, forced – to fall in order to maintain an external balance of trade and competitiveness (UNCTAD 1999). The recession in the Republic of Korea was due to the severe contraction of both domestic and external demand, resulting in output falling by approximately 5.5 per cent. Because other countries in Asia were the destinations for about half of Korea's exports prior to the crisis, the fall in external demand was followed by the deepening of the financial crisis in the country.

In ASEAN, income for the group as a whole fell by 9.4 per cent in 1998, in contrast to an increase of 3.8 per cent in 1997. The first to be struck by speculative attack in 1997, Thailand implemented a series of financial and other structural reforms to stem capital outflows. Despite these attempts, the country's economy still suffered an 8 per cent contraction. Indonesia's economy bore the brunt of the crisis as exports and investment collapsed, resulting in a contraction of nearly 14 per cent in output. The country's troubles were exacerbated by the effects of El Niño on agricultural production and continued civil unrest. The economic contraction in the four ASEAN countries reflected the impact of currency depreciation and generalized debt deflation, and produced widespread

insolvencies as a massive reversal of private capital flows ensued. In the Philippines, the relatively low level of financial leverage (about 60 per cent of GDP) and continued strong export demand helped save the country from some of the worst effects of the crisis (ADB 1999): the decline in the Philippine economy was around 0.5 per cent. Malaysia chose a different path, introducing capital controls and expanding the government's economic role in an attempt to shield the domestic economy from the volatility of international capital flows. At first the country appeared to avoid the worst effects of the crisis, but capital outflows brought growth down to -6.2 per cent.

Since that time, however, things have again dramatically changed. Many nations and many cities within these nations have weathered the storm. The authors believe this was due, in large part, to the underlying structures developed within the region by the major metropolitan centres. These structures include, foremost, the development of physical infrastructure and institutions that support the growing interconnectedness of the region's cities. It seems that the worst of the 1997 crisis for many cities is over, and new developments are under way.

The region's urban centres did not survive without problems. The financial stampede followed by nationwide political uprisings deeply and continuously impacted on Indonesia, turning Jakarta from a "global city" to a "city in crisis" (Firman 1999; see also Chapter 11 of this volume).

Notwithstanding this almost miraculous comeback, many challenges remain. Of importance are those threats to the continued "sustainability" of these cities. These issues emerged before the crisis, and no doubt will grow if ignored in the future. They were brought home to the members the Mega-cities project group unexpectedly, at the same time that the group broached the question of sustainability.

While the timing of the study was dramatically appropriate, it was also challenging for the authors as they attempted to understand the transformations that had taken place over the recent past. The main focus of the chapters in this book is the impact of transnational flows. Globalization has been particularly strong in the region, and its impacts have been seen throughout the region's cities. There are three major lessons that can be gleaned from the work presented here. First, globalization processes have created a strong and solid set of linkages among the cities in the region. These connections have weathered a crisis and proven to be structurally sound. It is the authors' belief that the most affected nations were able to bounce back from their economic turmoil because of the regional economic production system. Second, while the contemporary forces of growth have been strong, they do not necessarily promise "sustainability". A sustainable future, in terms of the development of "liveable" cities in all aspects of urban life, must be created, produced,

struggled for. It isn't inevitable. Indeed, globalization has brought with it patterns of social tension and environmental degradation evident in various cities throughout the Asia Pacific region. Lastly, while regulating and controlling the negative aspects associated with rapid development have often been discussed in the context of urban management, there is a limit to the effectiveness of local policies. Cities are not autonomous entities, and therefore their sustainable development must also be approached through global, regional, national, and local policies.

Themes of the book

The focus on the transnational character of urban sustainability provoked the discussion of a variety of themes by authors. The foremost include globalization, world city formation, the functional city system, and urban sustainability. While each author has his or her own perspective on each of these dynamics, there was still, at a general level, a degree of convergence in thought.

The first note of importance is the definition of the Asia Pacific region. In previous UNU/IAS studies, the Asia Pacific region was defined as the area bordering the Pacific ocean, but exclusively including the Asia continent (Lo and Yeung 1996). As Terry McGee and Chung-Tong Wu (Chapter 4) have pointed out, however, a narrow definition is increasingly harder to defend. This follows the processes of globalization which are making it increasingly difficult to define strictly the limits of this region's (or any other's, for that matter) activities and impacts.¹

The volume includes the nations typically included in a study of the Asia Pacific, as well as Australia and Canada. At first glance it might seem odd to add these nations but not those in South Asia. This can be explained by the increasing cross-regional block movements of people and goods that are examined in several chapters in the volume (see for example Chapters 2, 4, 13, and 14). It is the authors' contention that, while South Asian cities are also increasingly integrated into the Asia Pacific, cities such as Sydney and Vancouver are already intensely linked to the regional urban system.

Globalization

The debate over "globalization" is contentious, with a variety of emerging conceptualizations concerning its history, internal dynamics, and structural outcomes. Potentially, the broadest definition and one that all contributors agreed upon is the "the widening, deepening and speeding

up of worldwide interconnectedness in all aspects of contemporary social life, from the cultural to the criminal” (Held *et al.* 1999: 2). Furthermore, while there are an increasing number and variety of flows that are stretching and widening and increasing their speed around the globe, authors in this volume have concentrated on a select few. Predominately, these include economic (investment, trade, and information) and migration flows. Together the movements of goods, services, people, and information connect the various Asia Pacific nations to the regional and world economy. While this has its drawbacks, as many authors note the importance of other issues – the globalization of media, culture, etc. – the concentration on economic and migration issues is understandable given their importance in shaping the region and the discourse on the subject. Indeed, if not for the growth experienced in the four “tigers” and ASEAN, the concept of globalization would have an entirely different character.

Further, although globalization has a much longer history, the most dramatic impacts of these processes, particularly in the Asia Pacific region, have been experienced during the post-war period. Again, considering the importance of growing interdependency in trade and investment flows within the world and the movement of people during this period in the region, this is not surprising. This is not to say, however, that authors do not appreciate the “long *durée*”, but rather, for the sake of focus and coherence, have concentrated on contemporary transformations.

Underlying the trends in current flows are technological developments in the areas of telecommunications and transportation, among others, often associated with the fourth (or possibly fifth) Kondratieff wave. Increasing cross-border economic integration has been supported by technological developments. Together, the technological advances and increasing importance of cross-border flows are defining the techno-economic paradigm for development.

In their analyses of these trends, many of the authors in this volume subscribed to a variant of the “one-world” analysis. This perspective emanates, but is significantly different, from “dependency” theory. The approach stressed herein concentrates on the international economic transactions among different cities, with the outcome of interdependency. This perspective rejects a country-by-country analysis of social and economic change. Country analyses are piecemeal, so the argument goes, and need to be replaced by a single world society assumption. Within this theory, urban development is therefore a product of the emergence of particular forms of the capitalist mode of production and subsequent transformations in space relations. The new international division of labour (NIDL) is the outcome of the process, and is often mentioned

in terms of “complementarity” as opposed to “exploitation”. One important way that this perspective differs from dependency theory is the view that relationships between developed and developing countries were conceived as interdependent and lack the “core/periphery” distinction (for a different view see Chapter 8 on Hong Kong).

World city formation and the Asia Pacific functional city system

Evidence for the geographical scope of global processes includes the specific locations or nodes within the flows. These “copper pins” to the global economy (Feagin and Smith 1985: 4) include cities among other places, and in the Asia Pacific such cities are largely major metropolitan centres along coasts. It is here, in these locations, where the work of globalization gets done (Sassen 1994).

In their studies of the relationship between globalization and urban centres many scholars have concentrated on what have come to be called “world” or “global” cities (see for example, Sassen 1991). Within this perspective, the development of the world system of cities is the spatial outcome of global capitalist development. Cities are important as the locations of concentrated and centralized economic power and as centres for the production and innovation of specialized services. That is, while manufacturing has decentralized to other locations (including suburban areas), cities have become centres for the centralization of command and control functions (headquarters and specialized business service functions), also known as control and management functions (CMF). At the same time they are the sites of innovations in and production of a vast array of services that, in part, provide for the infrastructure of global capability.

Too often, however, cities which are important sites of manufacturing production are left out of this analysis. In the context of this volume, however, the authors consider the entire regional system of cities and the important role of all types of economic functions, including, for example, industrial and amenity functions. Stressing whether a city is “global” is not as important as understanding the processes by which it enhances its international connections. This work follows previous UNU/IAS studies which have argued that economic growth, integration, and the resultant interdependency within the region have led to the emergence of a functional city system, defined as “a network of cities that are linked, often in a hierarchical manner based on a given economic or socio-political function at the global or regional level” (Lo and Yeung 1996: 2).

The functional city typology has been a useful tool in making economic, social, and environmental distinctions among cities within the re-

Table 1.4 Characteristics and roles of cities in the Asia Pacific functional city system

City	Economic characteristics	Functional role
Tokyo	Post-industrial	Central management
Seoul	Industrial/services	Central management
Taipei	Industrial/high tech	Central management
Hong Kong	Entrepôt/finance/regional HQ	Borderless
Singapore	Entrepôt/finance/regional HQ	Borderless
Bangkok	Industrial	Industrial production
Jakarta	Industrial	Industrial production
Shanghai	Industrial	Industrial production
Vancouver	Post-industrial/port/immigration	Amenity
Sydney	Post-industrial/finance/immigration	Amenity

gion, and provides a coherent framework within which the material is presented. Each chapter, or set of chapters, adds elements, based upon the typology, to an understanding of the puzzle of Asian urban development. On the other hand, however, the typology is also limited in that it captures only a few dimensions of each of the enormously complex cities discussed in the text. The authors understand that this formalization remains problematic in its inability to deal with the growing density of international linkages and complexity of domestic conditions both within and among cities.

Notwithstanding these restrictions, the functional city system concept has helped the authors connect globalization processes to local transformations. That is, as cities articulate to this system, they undergo a process of development commensurate with their dominant transnational economic roles. These changes have been referred to as the world city formation process (Friedmann and Wolff 1982). The resultant general patterns of development have been discerned based upon the intensity of the prevailing international currents (Table 1.4). Key to these changes in the Asia Pacific have been infrastructure advancements that enhance transnational flows, such as cargo ports, teleports, and airports, among other developments. Common to the studies in this volume is the identification of key changes within cities as they increase their functional linkages to the world economy.

Urban sustainability

Limiting “globalization” to the study of economic and immigration flows immediately restricts the scope of “sustainability”. The chapters in this

volume have concentrated on economic, environmental, and social issues as, in the authors' perspective, these tend to be the most important challenges urban centres are currently facing.

What came out of the studies was that globalization is a doubled-edge sword bringing both promises and perils in almost everything associated with it (Yeung 1998). In the past it had been argued that globalization, Asian style, was bringing with it social equity (World Bank 1993). The Asian financial crisis, however, a globalization-driven event, displayed that the equitable growth achieved in the region was fragile. For example, Indonesia, which was making strides in lowering the numbers of its poor, saw sharp increases in the number of those in poverty after the crisis (McGee 1998). Even before the crisis, studies have noted that social tensions and conditions within cities needed attention (Schmidt 1998; ADB 1997).

Rapid economic growth in the region has also been achieved at the cost of severe environmental problems (ADB 1997). A series of studies have demonstrated the environmental problems associated with rapid and intensive urban growth, bringing into question the "grow now, clean later" attitude (see Chapter 15). The case study chapters in this volume provide detailed accounts of the growing environmental awareness in cities throughout the region. Yet the issues are not the same in all locales. There are differences in both the quality and degree of environmental degradation. These differences, it is argued, are related in part to the functional role of the city within the regional city system.

Notwithstanding the rebound of many of the economies in 2000, a new era in development thinking is emerging (McGee 1998; Douglass 1998). These changing conditions require a new urban and regional theory paradigm. One way forward is to incorporate "sustainable development" into globalization discourse. The two concepts of globalization and sustainability are not incompatible, and can be used together to prescribe a development strategy that attempts to tackle some of the problems associated with globalization-driven growth alone. Their combination implies, for cities, reaching way beyond administrative borders. While there is much that cities can do to control their internal environments (see for example Chapters 8 and 9 on Hong Kong and Singapore), solutions must also be sought at the international level.

There is a growing body of literature that approaches urban sustainability from the international scale (see, for example, Harris 1992; Stren, White, and Whitney 1992; Burgess, Carmona, and Kolstee 1997; Low *et al.* 2000). Within this corpus of literature on "sustainable cities", however, there are limited international comparative studies available. Indeed, in a recent compendium of seminal writings on urban sustainability,

David Satterthwaite (1999) noted this lacunae in current research. The authors hope that the attempts in this volume begin to fill this need, and in doing so generate new thinking concerning the management of cities.

Construction of the book

The first set of chapters in the text outline the general processes that the authors believe are important to understanding the growth and sustainability of the entire regional city system. These chapters are followed by a series of case studies divided by the type of city suggested by the functional city system concept (Table 1.4). Each of these case studies identifies how the city region has been articulating to the regional system and how, in turn, the linkages have impacted on development. Most of the case study authors have also focused on the most relevant social and environmental constraints to urban growth in their specific contexts. The final chapter in this section attempts to summarize the results of the studies by placing urban sustainability into an international context.

The overview chapters start out with a map of the trajectory that globalization forces have taken in the region and the development of the functional city system. Fu-chen Lo and Peter J. Marcotullio's Chapter 2 argues that urban development in the region has been underpinned by economic globalization, started by Japanese investment in the region during the 1980s (first in the NICs and later in ASEAN). Following the Japanese were the NICs, Korea, Taiwan, Singapore, and Hong Kong, and thereafter were the ASEAN four, Indonesia, Malaysia, the Philippines, and Thailand. This "wild flying geese" model of development was accompanied by growing interconnectedness of cities as they carved out a variety of functions. Thus the growth of coastal cities precipitated the emergence of a massive urban corridor, or functional city system, that stretches from Tokyo to Jabotabek and then out to Sydney and Vancouver.

An examination of the role of foreign direct investment (FDI) in the region follows this analysis. In Chapter 3, Sung Woong Hong describes the importance of these flows, their impact on receiving countries, and how the financial landscape has changed with the advent of the financial crisis of 1997. While encouraging the continuation of FDI flows, he warns of the dangers of "hot money" and short-term loans. These aspects of financial globalization, according to Hong, have had negative impacts on nations and cities throughout the region. As FDI remains an important vehicle for development, he discusses how countries now must emphasize a variety of factors to attract investment, including "created assets", such as human capital, and urban infrastructure and promotion policies.

This leaves open the question of how the creation of these assets will be financed.

In Chapter 4, the last of the overviews, Terry G. McGee and Chung-Tong Wu describe the importance of international migration flows to urban development in the region. They focus on the main features of the region's immigration flows, and analyse these movements by using a topology based upon sources and destinations. Importantly, they point out a series of four challenges that have accompanied these trends: the changing role of governments, the integration of migrants into city regional economies, building liveable residential communities, and creating social harmony with increasing diversity. In their conclusions they identify policy areas that, arguably, could provide a means to tackle these issues and make cities in the region more liveable. A high priority is "social sustainability", related directly to the continuing rising trends in international migration. This, they argue, can only be accomplished by implementing policies at both international and local levels.

The chapters following these overviews are case studies of individual cities, divided along the lines of the major economic functions of various cities. The first set of case studies is from the main capital exporters of the region, including such cities as Tokyo, Seoul, and Taipei. In Chapter 5 on Tokyo, Tetsuo Kidokoro, Takashi Onishi, and Peter J. Marcotullio discuss some of the transformations and the planning responses to those trends within Tokyo, as it became a "global" city. Given this background, they criticize the newest national capital regional development plan. In terms of international competitiveness, environmental protection, and development policy, they find that the plan falls short of providing an appropriate guidance tool. This mis-specified set of policies was created, according to the authors, by an imbalance in the decision-making processes, which lacked citizen participation during the formulation of the plan. The preparation of the region's plans in the future should therefore include more than just the national government, as there are an increasing number of other stakeholders (private-sector TNCs, non-profit organizations, and local and prefectural governments) emerging within Japanese society.

In Chapter 6 Won-yong Kwon discusses how globalization processes within Seoul have sharpened the conflicts between the urban "haves" and "have-nots" and negatively impacted on the environment. He describes and analyses what Seoul is and how it has come to be, focusing on globalization and the growth of the metropolitan area. The impact of the recent crisis has encouraged decision-makers within the city to reconsider growth in the light of sustainable development. Particularly important and previously unmet challenges for the local citizenry include transportation congestion, the green belt, and solid waste management. In his

conclusion Kwon gives five lessons from Korea's experience in policy responses to globalization.

In Chapter 7, Ching-lung Tsay discusses the growth of Taipei in relation to the economic development of Taiwan. Through an examination of the urbanization process in Taiwan the author describes how a national system of cities that approximates to the ideal rank-size distribution developed. Within the Taipei metropolitan area, deconcentration helped the city avoid some of the problems that would have occurred otherwise. Tsay notes that the continuation of the growth of the city has been relatively smooth, and the population has continued to distribute itself throughout the country despite the increasing externalized linkages of its economy.

Next the section provides two chapters on *entrepôt* or borderless cities: Singapore and Hong Kong, once both "city-states". Their special status has enabled a unique type of growth. In Chapter 8, Victor F. S. Sit discusses the growth of the Hong Kong extended metropolitan region (EMR), and how this development was intimately related to the city's articulation with the global economy and the penetration of economic and social pressures into the city region. He uses Castells's (1977) phrase of "dependency urbanization" to describe the various aspects of urban development in the Hong Kong, Macau, and Pearl river delta area. In so doing, he attempts to reveal the spatial pattern of urbanization and functional division of labour in different parts of the Hong Kong EMR. At the macro level he points out the various aspects of global flows, while at the local level he insists upon the importance of the dual forces of polarization and dispersal. As a result of this type of development, the author argues that the city of Hong Kong has been able to move smoothly to a "sustainable future", but the peri-urban and peripheral areas have developed severe pollution, environmental, and infrastructure problems. Sit provides some policy recommendations to help ease the problems and move towards more regionally coordinated sustainable development.

Chia Siow Yue's Chapter 9 on Singapore argues that the city-state has become a regional hub and global city, and highlights how the physical and economic constraints of being a small island nation were overcome by careful physical planning and the strategy of integration with the region and global economy. The city-state's efforts have been successful, as Singapore has undergone rapid growth and development and now has a per capita GDP higher than that of the USA (World Bank 1999). As a regional and international city it hosts 5,000 foreign multinationals and international companies, giving it one of the highest FDI penetrations in the world. Importantly, Chia points out that while the nation has borders, its economy has become borderless.

At the same time, the author stresses that Singapore has become a

“garden city” with high environmental standards. She argues that several factors have facilitated the city’s ability to grow and yet remain clean and green. For example, Singapore does not face the rural-urban migration problem that confronts other city planners; migration is essentially cross-border and subject to border controls, making it easier to project population size. Its Land Acquisition Act gave the government legal power to acquire land speedily and at low cost early on, and has enabled Singapore to implement its public housing, urban renewal, urban infrastructure, and industrialization projects. Further, Chia suggests that the limited land area has made Singapore policy-makers and planners highly conscious of the need to balance economic development with environmental protection and conservation. Lastly, the author points out some of the key elements of Singapore’s environment management strategy: long-term planning and preventive control; strict environmental legislation and effective enforcement; comprehensive monitoring of environmental quality; provision of environmental infrastructure; and use of appropriate environmental technology. A close look at Singapore’s experience with environmental management demonstrates that despite rapid population growth, urbanization, and industrialization, negative impacts on the environment can be effectively controlled and managed in the core area of a growth triangle through appropriate policy planning and implementation. The author does not, however, mention the conditions in the neighbouring areas of Johore, Malaysia, and the Riau islands of Indonesia.

Thereafter are descriptions of some of the region’s industrial centres. This category includes Shanghai, Jakarta, and Bangkok. While these cities have undergone tremendous globalization-driven growth over the last few decades, they have also become highly polluted urban centres. Ning Yuemin’s Chapter 10 on Shanghai covers the most contemporary aspects of the globalization process. As China was isolated from the world economic system from the 1950s to 1978, it has only recently been opened to outside investment and Shanghai has taken up its former position as one of the country’s premier industrial cities.

Ning describes in detail the processes by which the city has grown, paying particular attention to the latest phases of development and social and environmental issues affecting Shanghai. He points out that since the 1980s the government has loosened the household registration system and a large floating population has appeared, moving in search of employment. Within the city, this non-native floating population has contributed to the economic development of the city, but has also brought many social problems. He suggests that the management of this floating population has become one of the most important issues for Shanghai’s social sustainability.

Other important issues, according to the author, include strengthening

population control and mediating environmental pollution. Ning goes to great lengths to emphasize that one of Shanghai's greatest challenges is to maintain sound environment quality. He states that for a long period of time the environmental quality in Shanghai was satisfactory, but over the last few decades the city has developed a multitude of environmental problems, including air and water pollution and growing solid waste production. The good news is that, as Ning reports, Chinese leaders are responding to these challenges with strategies of sustainable development. While these are major positive steps, Ning provides some further suggestions as to what the city needs in the future.

Budhy T. S. Soegijoko and B. S. Kusbiantoro's Chapter 11 describes the positive and negative aspects of globalization in an Indonesia city and identifies the economic, social, and environmental consequences to the city region of Jabotabek. The chapter illustrates the various impacts of the globalization process on Jabotabek by demonstrating the relationship between global flows of goods, services, FDI, people, and information and the spatial and functional transformation of the region. After identifying how the processes of globalization developed within the mega-urban region, the authors provide a detailed description of how the Asian financial crisis has impacted on the city and the necessity to turn towards sustainable development. Their description of the impacts of the Asian financial crisis is a chilling portrayal of the dark underside of the process.

Among environmental and social issues they highlight growing water supply and air pollution issues, accompanied by high levels of poverty and increasing social unrest (due to the increasing disparity of quality of life for the urban region's citizens). Finally, the authors give general strategies that will arguably minimize negative impacts of the globalization process through emphasizing the competitive (product/output) over comparative advantages of the city region.

In Chapter 12, Sauwalak Kittiprapas discusses the overall trends in urban and regional development in Thailand and the recent changes to the extended Bangkok region (EBR). Urbanization pressures, globalization forces, and the financial crisis have provided strong impetus for change, and Kittiprapas recommends specific policies in that regard. The author presents an overview of the internal and external factors impacting on spatial development and urban transformation in Thailand, while also addressing problems resulting from the current economic crisis. Thereafter, Kittiprapas examines the migration and industrial location trends over the recent past, noting that while firms have moved out of Bangkok proper, they are still largely concentrated in the extended Bangkok region. After discussing both recent and future urbanization trends in Thailand and the EBR, she focuses on the impacts of linkages to the global and regional economy. In her concluding sections, she presents

some policy responses for sustainable development and a discussion of policy options.

The last set of chapters cover what have been termed the “amenity cities”. From these studies it can be concluded that some cities linked to the regional city system are growing in ways that include environmental awareness. Peter A. Murphy and Chung-Tong Wu, in Chapter 13, describe the relationship between globalization and ecological sustainability in Sydney. The city represents the challenges present for Australia’s urban system as it strives to achieve sustainability. Sydney is unique because of its size and physical setting, which highlight the importance of environmental issues. The natural amenity of the city is tied to its position within the regional city system, and the authors describe how the citizenry are increasingly aware of the environment. The authors present, in their conclusions, a framework for how globalization has impacted on the capacity and willingness of governments to implement ecologically sustainable development objectives in metropolitan Sydney. They suggest, however, that Sydney’s increasing articulation to the global web of flows has blocked managerial objectives of urban governance, concluding that globalization has been an obstruction to the maintenance and improvement of Sydney’s environmental quality.

In Chapter 14, Terry G. McGee emphasizes the liveability of cities as a prime goal of urban development in Vancouver, a “sub-global” urban region. His study demonstrates that city regions can develop strategic planning processes which provide liveability and reinforce the competitive strength of an urban region. As the city’s growth increasingly relies on tourism as opposed to exports, the tension between growth and the environment has heightened, with the resultant plans promoting growth management and liveability. Yet here, as in the previous chapter, McGee is concerned that the push for “global” status and efficient land usage will severely degrade the current beautiful environment. From the conclusions of these two chapters, it is far from clear that increased globalization will bring environmental quality, even in cities that theoretically use their high and abundant amenity as part of their comparative advantage.

In Chapter 15, Peter Marcotullio attempts not only to draw together some of the ideas and conceptual lessons provided in the preceding chapters, but also to provide a framework within which globalization forces in the region can be connected to urban, social, and environmental sustainability. This chapter is not so much a conclusion as a conceptual piece that points to a specific research agenda. Globalization and environmental and social urban conditions in the Asia Pacific region are distinguished through the usage of the functional city typology. While Chapter 2 describes a framework within which globalization-driven economic development in the region can be understood, this chapter at-

tempts to use this framework to understand the environmental and social challenges within the cities. Rather than being a definitive statement, however, this chapter only sketches out some interesting relationships that need further exploration. The conclusion is that globalization is not only driving the growth of cities in the region, but also impacting on their social and environmental conditions. To deal with challenges in these areas, the author suggests, will take more than good management and local policies. It will increasingly require national, regional, and global policies and institutions.

Notes

1. The major trade and economic organization in the region, the Asia Pacific Economic Cooperation (APEC), created in response to the growing interdependence among Asia Pacific economies, includes the Asian countries mentioned in the text along with Canada, Australia, New Zealand, the USA, Mexico, Chile, and Peru.

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E-mail: sales@hq.unu.edu
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Globalization and the Sustainability of Cities in the Asia Pacific Region

Edited by **Fu-chen Lo** and **Peter J. Marcotullio**

In this volume, scholars from around the region analyze the impacts of globalization on cities in the Asia Pacific. This collection of essays forms a useful, comprehensive, and ambitious study, focusing on the region's specific urban concerns and on broader theoretical issues surrounding social and environmental conditions in major metropolitan centers.

The first part of the book examines globalization, foreign direct investment, international migration, and the question of cities and their changing patterns and meanings. Each chapter provides a broad set of dynamics that cuts across the world and finds particular instantiations in the Asia Pacific region. The second part focuses on particular types of cities. First among these is the post industrial capital exporting city, with Tokyo, Seoul, and Taipei as examples. The second is the borderless or *entrepôt* city, citing Hong Kong and Singapore whose special status as city-states has allowed a unique type of growth. The industrial city is exemplified by chapters on Shanghai, Jabotabek, and Bangkok, cities that have experienced very high globalization driven growth but also have become highly polluted environments, in sharp contrast with Singapore and the central area of Hong Kong. The final section focuses on amenity cities. Sydney and Vancouver are the two cases examined. These chapters demonstrate how environmental awareness can be part of urban growth and provide evidence that globalization is not promoting urban environmental and social sustainability.

Globalization and the Sustainability of Cities in the Asia Pacific Region demonstrates the growing interconnections among cities in the region that have come about as a result of globalization. It raises implications for the study of social and environmental conditions as well as economic growth in cities. Sustainable urban development requires more than good management and local politics; increasingly it demands national, regional, and global interventions.

Fu-chen Lo is the former Deputy Director of the United Nations University Institute of Advanced Studies, Tokyo. He is currently the Taipei Economic and Cultural Representative to Japan. **Peter J. Marcotullio** is a Fellow and Urban Programme Manager at the United Nations University Institute of Advanced Studies, Tokyo.

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