Urbanizing Asia

Quick Facts

1. Asia is urbanising rapidly but the region's population is still predominantly rural. However, the urbanization rates vary widely, from 33% in South and South-West Asia and 63 per cent in North and Central Asia to 70 per cent in the Pacific in 2010.

2. While the world population became predominantly urban in 2008, this 'tipping point' will not occur in Asia before 2026.

3. Nearly half the world's urban population now lives in Asian cities which, during the next decade, will absorb two-thirds of the growth in the world's urban population.

4. The number of mega-cities (those with populations of 10 million or more) is increasing around the world and half of the world's mega-cities (12 out of 21) are now found in Asia. Seven of the 10 most populous cities are in Asia.

5. Many urban agglomerations in Asia are evolving into mega urban regions and urban corridors.

6. Sixty per cent of Asia's urban population lives in urban areas with populations under one million.

7. Small- and medium-sized cities act as economic growth centres, but most lack adequate infrastructure and services.

8. Asian cities are characterised by high population densities and decreasing annual growth rates, averaging 2.2 per cent in 2010 (against 3.8 per cent in the 1980s).

Policy Points

1. Governments should encourage balanced urban growth, steering private capital expenditure towards cities of different sizes.

2. Urban and regional infrastructure should be given a higher priority in national development strategies.

3. The ageing phenomenon and reduced fertility rates will affect most Asian countries within one or two generations. Education and urbanisation policies should be better coordinated to address this problem.

4. Full advantage should be taken of the agglomeration effect and economies of scale provided by mega urban regions, which are already the engines of growth in many countries.

5. Since small- and medium-sized cities in the Asia-Pacific region will continue to host around 50 per cent of urban populations in the next two decades, policymakers should focus on their needs regarding infrastructure and basic urban services, and increase urban governance capacities.

6. Local authorities should see the forthcoming slowdown in urban demographic growth rates as an opportunity better to manage cities while maintaining the high densities and limited ecological footprints that characterize Asian conurbations.

▶
Chengdu, China. ©**Mark Henley/Panos Pictures**

2.1
Urbanization trends

▲
Old Dehli, India. Nearly half the world's urban population now lives in Asian cities. ©**Jeremy Richards/Shutterstock**

The process of urbanization in developing countries has captured media attention. This is partly because the year 2008 marked a watershed in world history – the point where more than half the world's population lived in places designated as urban (UN-HABITAT, 2008). With rapid economic growth in many countries, Asia is on a similar path, though with a significant lag. The region is expected to take some 15 years for the urban segment of its overall population to increase from 42.2 per cent in 2010 to 50 per cent at the beginning of 2026.

Asia is the largest of all major regions with 30 per cent of the global land mass and 60 per cent of world's population. With an urbanization rate of 42.2 per cent in 2010, Asia ranked as the second least-urbanized major region of the world after Africa's 40.0 per cent. Asian cities are home to 1.7 billion people, nearly half the urban population of the world. This proportion is expected to increase slightly by 2020, when Asian cities will be host to 2.2 billion of the world's 4.2 billion urban population. Between 2010 and 2020, a total 411 million people will be added to Asian cities, or 60 per cent of the growth in the world's urban population.

Asia's urban population has grown from 31.5 per cent of the total in 1990 to 42.2 per cent in 2010. Due to the region's large size and diversity, urbanization patterns are geographically uneven. It is particularly important to point out that overall trends are dominated by two demographic giants, China and India. These two nations together account for 2.5 billion people and therefore include more than 37 per cent of the world's total population. Moreover, six of the world's most heavily populated countries are found in Asia: China, India, Indonesia, Pakistan, Bangladesh and Japan. Together, these account for 45 per cent of the global population and 77 per cent of all Asians (Biau, 2007).

Why has urbanization been, on the whole, a much slower process in Asia than in most of the rest of the world? Five distinct factors are at work here. First, there are varying definitions of what is 'urban' (see Box 2.1). Second, most countries define a place as 'urban' based on administrative criteria. Thus urbanization and urban population growth rates may be under-reported. On the other hand, there are also cases where municipal boundaries include rural populations. Fourth, where population growth occurs in the urban periphery, which may be beyond municipal or city boundaries, this may not

'Urban' population refers to the *de facto* population living in areas classified as 'urban' according to the criteria used by each area or country. Far from any common, Asian-wide definition of what is 'urban', the variety of criteria is bewildering. For example, of the 26 countries and territories in Asia surveyed by the UN Economic and Social Commission for Asia and the Pacific (ESCAP), 15 define urban areas based on administrative criteria and another four based on population size and/or density; two countries categorize as 'urban' those areas where certain economic functions or infrastructures and services are available, and in the remaining five countries in the sample, 'urban' refers to a combination of administrative boundaries, population size and density (ESCAP, 2008a:17).

Below is a select list of definitions used to classify a settlement as 'urban' in the Asia-Pacific region.
Cambodia: Towns as notified by the government.
China: 'City' only refers to the city proper, as designated by the State Council. In the case of cities with district status, the city proper refers to the whole administrative area of the district if the population density is 1,500 per square

kilometre or higher, or the seat of the district government, and other areas or streets under the administration of the district if the population density is less than 1,500 per sq km In the case of cities without district status, the city proper refers to the seat of the city government and other areas or streets under the administration of the city. As for city districts with population densities below 1,500 per sq km and cities without district status, if the urban construction of the district or city government seat has extended to some part of the neighbouring designated town(s) or township(s), the city proper does include the whole administrative area of the town(s) or township(s).
India: 'Urban' refers to towns (places with a municipal corporation, municipal area committee, town committee, notified area committee or cantonment board). Also considered 'urban' are places with populations of 5,000 or more, a density of no less than 1,000 per sq. m. (or 400 per sq km) with pronounced urban characteristics and at least 75 per cent of the adult male population employed in pursuits other than agriculture.

Indonesia: Places with urban characteristics.
Islamic Republic of Iran: Every district with a municipality.
Japan: A city *('shi')* is host to 50,000 or more, with 60 per cent or more of the houses located in the main built-up areas and 60 per cent or more of the population (including dependants) engaged in manufacturing, trade or other urban type of business. Alternatively, a *shi* with urban facilities and conditions as defined by a prefectural order is considered as urban.
Republic of Korea: Any amount of population living in designated cities.
Malaysia: Formally designated areas with populations of 10,000 or more.
Maldives: Malé, the capital.
Mongolia: The capital and district centres.
Pakistan: Places with a municipal corporation, town committee or cantonment.
Sri Lanka: All municipal and urban council areas.
**Thailand:** Municipal areas.
Viet Nam: Urban districts or quarters and towns. All other local administrative units *('communes')* belong to rural areas.

Source: United Nations, 2005 (footnotes to Table 6)

be reflected in official urban statistics. Finally, many large Asian countries like India, Pakistan and Bangladesh are still predominantly rural, with about one-third of their population living in urban areas. In the largest countries such as China and India, economic growth is a more recent phenomenon and has a significant influence on the region's urban population growth. China is expected to become 50 per cent urban sometime between 2010 and 2014, while India will have to wait until 2044 to reach this mark.

Although Asia's overall urbanization rate is admittedly low, the next two decades are to see unprecedented urban demographic growth. Urbanization in Asia typically comes with the economic transition from low-productivity agriculture to higher-productivity industry and services. Cities have stood at the forefront of the rapid economic growth prevailing in many Asian countries; this is because they have been able to attract manufacturing and services, the concentration of which enhances productivity and growth. These so-called 'agglomeration economies' in Asian cities have facilitated integration into regional and global markets. For all their relatively low rates of demographic growth, the region's cities have made significant economic contributions

CHART 2.1: **GLOBAL URBANIZATION RATES, 1990-2030**
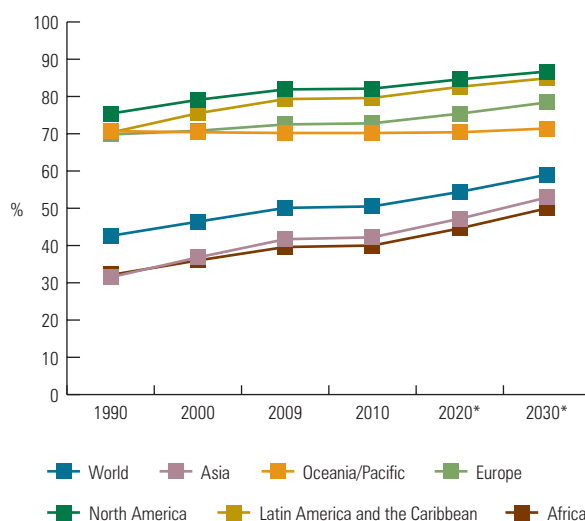
Legend: World, Asia, Oceania/Pacific, Europe, North America, Latin America and the Caribbean, Africa

* Projections
Source: United Nations (2010)

REGION	1990	2000	2010	2020*	2030*
World	42.6	46.4	50.5	54.4	59.0
Asia	31.5	36.8	42.2	47.2	52.9
Oceania/Pacific	70.7	70.4	70.2	70.4	71.4
Europe	69.8	70.8	72.8	75.4	78.4
North America	75.4	79.1	82.1	84.6	86.7
Latin America and the Caribbean	70.3	75.5	79.6	82.6	84.9
Africa	32.1	36.0	40.0	44.6	50.0

* Projections.
Source: United Nations (2010)

to national output (see Chapter 3 for details). For instance in Viet Nam, 30 per cent of the population live in urban areas (2010) but contribute 70 per cent of gross domestic product (GDP). In China, 120 cities contribute as much as 75 per cent of the country's economic production. In the Republic of Korea, the capital area of Seoul produces about half of the country's wealth, while in the Philippines the contribution of Metropolitan Manila and its surrounding areas is about 60 per cent (World Bank, 2007a).

In many Asian countries, economic growth is reflected in rapid urban expansion. In the Asia-Pacific region as a whole, the urban population grew an average 2.8 per cent a year between 1990 and 2010, or higher than an overall (rural plus urban) 2.4 per cent pace. Moreover, this urban population is expected to increase by two-thirds over the next two decades (i.e., between 2010 and 2030), implying that 53 per cent of the world's urban population growth will occur in Asia – an annual addition of 840 million, or a daily increase of 115,000 (United Nations, 2010) see Table 2.1. Managing this transformation will pose enormous challenges to local and national governments.

The diversity of urbanization patterns in Asia

In the past, urbanization patterns in Asia were a function of trade and colonization, with the region already a major contributor to world trade. Settlements developed with trade along the land-based Silk Road and maritime routes within Asia and all the way to the West. Many of these urban settlements later also became seats of political power. Colonization spawned urban processing and trade centres specializing in raw materials and agricultural products. Many settlements developed as harbour towns or administrative centres.

More recently, economic growth on the back of manufacturing and services sector expansion has led to accelerated urbanization in Asia (see Chart 2.2). Both demographic and economic patterns have remained diverse across the region, although up until the 1960s economic growth was concentrated in a few highly urbanized countries, with most others remaining largely rural. Subsequent accelerated growth in the 1980s and 1990s changed Asia's demographic features[1] and four distinct patterns have emerged in the region, as follows:

(i) Well-developed countries combine high rates of urbanization (exceeding 60 per cent) and low urban growth rates, like Japan (see Box 2.2) and the Republic of Korea.
(ii) Other countries, like Malaysia and the Philippines, feature urbanization rates (40 to 60 per cent) and urban growth rates (two to four per cent) that are both moderate to high.
(iii) Some other countries combine low rates of urbanization (under 40 per cent) and fast-growing urban populations, as is typical of China and India.
(iv) Another pattern of urbanization matches low with slow-growing urban populations, as is the case in Myanmar, Nepal (see Box 2.3) and the Lao People's Democratic Republic.

▲
Yangon City, Myanmar. Myanmar features a low urban growth rate.
©UN-HABITAT/ Veronica Wijaya

BOX 2.2: JAPAN: ONE OF ASIA'S MOST URBANIZED COUNTRIES

Japan has a long urban history and currently combines a high degree of urbanization with slow demographic growth. Urbanization and economic development have occurred in tandem, and this bears an important lesson for other Asian countries: high urbanization rates do not necessarily come with high economic, social or environmental costs, provided that the urbanization process is properly managed. In Japan's case, this process today is largely due to natural increases rather than to rural migration; although the urban population keeps increasing, the pace is uneven with a trough in the year 2000, probably reflecting the country's sluggish economic performance at the time.

A number of defining features set Japanese cities apart from their counterparts elsewhere in Asia. First, although the major modern cities have not necessarily proved successful when it came to managing their own expansion, on the whole they can be commended for bringing about stable, well-balanced communities. Much of this success is attributable to high national incomes and a social structure characterised by a narrow gap between rich and poor. This equity-orientated, egalitarian approach is a unique feature of Japanese cities. Starting with the post-war dissolution of the *'zaibatsu'* (family-run conglomerates), a series of equality-orientated policies – including the local tax system and income redistribution through social security schemes, with Keynesian approaches to economic development and public sector management – proved quite successful.

Second, Japanese cities cater well to the basic needs of everyday life such as health care, peace and security. Average life expectancy in the country is 81.9 years, with the infant mortality rate at a very low 0.3 per cent – both of these figures being among the very best in Asia. Thanks to a low crime rate, Japan is also known as one of the safest countries in the world.

Third, Japanese cities promote harmony with the environment. Although they have had their share of problems due to rapid economic growth, they have overcome many of them. For instance, most of the cities that had flourished during the country's economic boom had to face major environmental challenges such as extensive air and water pollution by manufacturing industries. Municipal authorities have responded with a series of well-adapted environmental policies while also deploying more energy-efficient urban configurations.

TABLE 2.2: URBANIZATION IN JAPAN

| Year	Total Population (1,000s)	Urban Population (1,000s)	Urban Population (%)	Average Annual Urban Growth Rate (%)
1990	123 191	77 726	63.1	0.82 (1985-1990)
1995	125 442	81 079	64.6	0.48 (1990-1995)
2000	126 706	82 633	65.2	0.18 (1995-2000)
2005	127 449	84 068	66.0	0.23 (2000-2005)
2010	126 995	84 875	66.8	0.26 (2005-2010)
2015*	125 791	85 527	68.0	0.34 (2010-2015)
2020*	123 664	85 848	69.4	0.42 (2015-2020)

*Projections
Source: United Nations (2010)

▲
Tokyo, Japan. ©**Neale Cousland/Shutterstock**
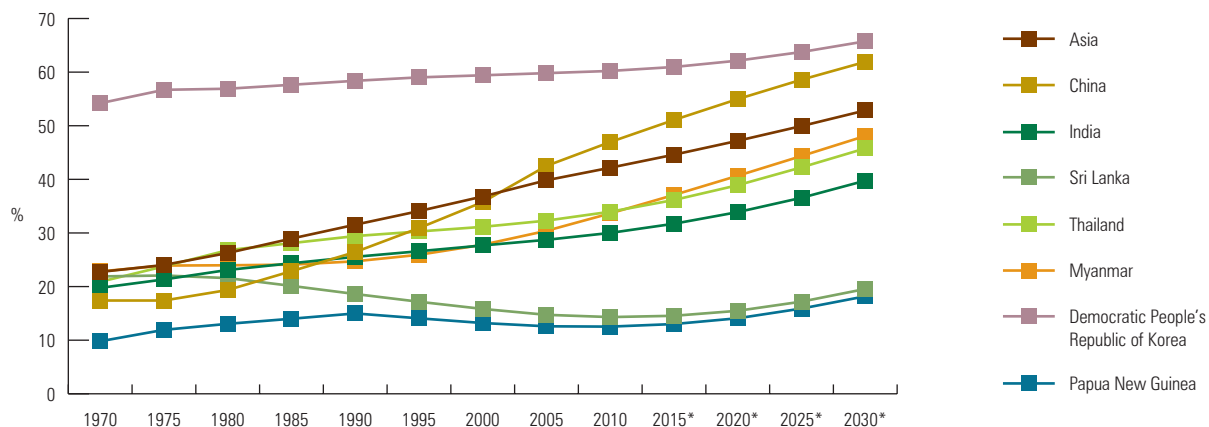
*Projections
Source: United Nations (2010)

BOX 2.3: **NEPAL: ONE OF ASIA'S LEAST URBANIZED COUNTRIES**

Nepal is a small country of 29 million people with a 147,000 sq km surface area. Its elongated territory stretches 500 km east-west and 290 km north-south. From a morphological point of view, Nepal lies in a transitional mountain area between the fertile Ganges plain in India and the arid Tibetan plateau. It ranks among the poorest countries in the world with an annual income per head equivalent of US $290, matched by low human development indicators. A large share of the population has little access to basic social services. Nepal is divided into three regions: Mountains, Hills and Terai (lowland plains). With the country's development centred on the capital, Kathmandu, the valley has experienced rapid urbanization. It is host to five of the country's 58 municipalities and to some 30 per cent of the total urban population. These towns act as economic hubs, attracting huge inflows of migrants. The environmental changes taking place in the Kathmandu Valley are a threat to sustainability. Air pollution and, more specifically the concentration of particulate matter, exceeds national and international standards by a wide margin.

The table shows that urban demographic growth peaked in the late 1990s, suggesting a slowdown in the numbers of rural people moving to towns and cities in search of better conditions. Human development has made progress in Nepal in recent years. Poverty has been reduced over the past decade. During that period, social and human development indicators – life expectancy, infant and maternal mortality rates, adult literacy and primary school enrolment – have all improved. Still, Nepal faces immense challenges on the way to stronger growth and sustainable urban development, in view of a tough topography, poor basic infrastructures and the weakness in institutions and governance.

Source: Basyal & Khanal (2001)

▲
Kathmandu Valley is the most urbanized region in Nepal. **©Shutterstock**

TABLE 2.3: **URBANIZATION IN NEPAL**

Census Year	Urban Population (Million)	Urban Population (%)	Average Annual Urban Growth Rate (%)
1990	1.7	8.9	3.63 (1985-1990)
1995	2.4	10.9	4.15 (1990-1995)
2000	3.3	13.4	4.19 (1995-2000)
2005	4.3	15.9	3.40 (2000-2005)
2010	5.6	18.6	3.14 (2005-2010)
2015*	7.0	21.6	2.95 (2010-2015)
2020*	8.7	24.8	2.76 (2015-2020)

*Projections
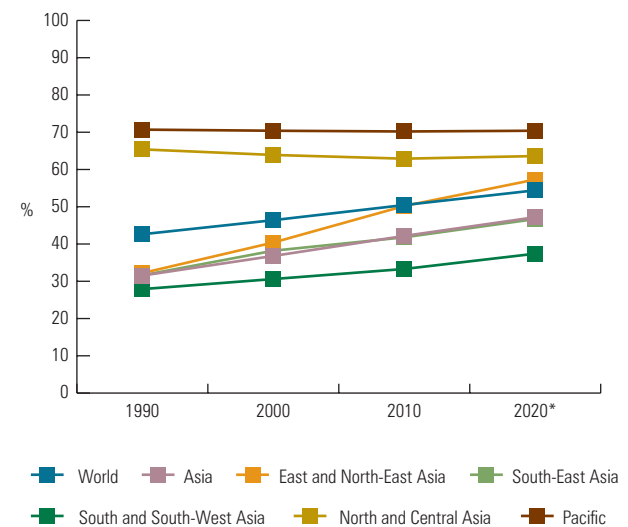Source: United Nations (2010)

▲
Christchurch, New Zealand. Urbanization rates vary considerably across the Asia-Pacific region. ©**Tupungato/Shutterstock**

Sub-regional variations in Asia and the Pacific

North and Central Asia and the Pacific stand out as the most urbanized areas in the whole region (see Chart 2.3 and Table 2.4). In the Pacific, this is largely due to Australia and New Zealand, where more than 85 per cent (2010) of the population live in urban areas. However, among the Pacific island-states, only a few feature large proportions of urban populations while in many others these are very low (under 25 per cent) (ESCAP, 2008a). In North and Central Asia, urban areas are host to over 50 per cent of the population in most countries, with the exception of Kyrgyzstan and Tajikistan, where the proportion remains under 35 per cent. This subregion is the only one in Asia-Pacific where the urban population has not increased over the last two decades, demonstrating patterns more akin to those observed in Europe. In contrast, the East and North-East Asia has urbanized rapidly over the last two decades and has crossed the 50 per cent mark in 2010. South-East Asia's urban growth has closely tracked that of Asia as a whole. South and South-West Asia remain the least urbanized, with under 40 per cent of the population living in urban areas. In the more heavily populated countries of the subregion, like India and Bangladesh, urbanization rates remain very close to 30 per cent.

CHART 2.3: **PERCENTAGE OF URBAN POPULATIONS IN THE ASIA-PACIFIC REGION**

Legend: World — Asia — East and North-East Asia — South-East Asia — South and South-West Asia — North and Central Asia — Pacific

*Projections
Note: The trend-lines for South-East Asia and Asia as a whole track each other very closely.
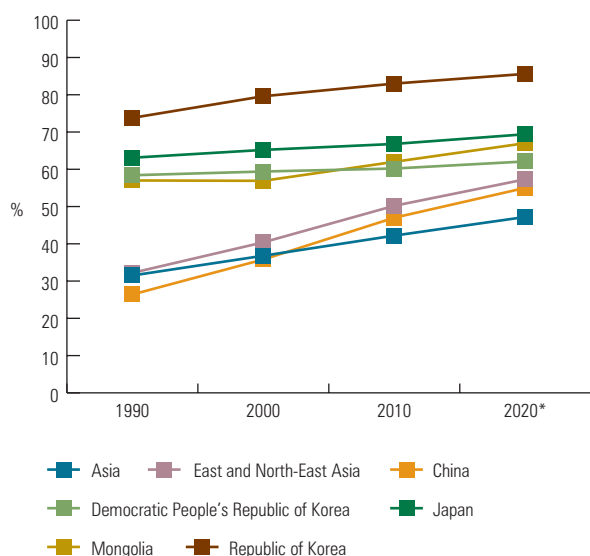*Source: United Nations (2010)*

REGION	Urban Population (1,000s)				Percentage Urban (%)			
	1990	2000	2010	2020*	1990	2000	2010	2020*
World	**2 254 592**	**2 837 431**	**3 486 326**	**4 176 234**	**42.6**	**46.4**	**50.5**	**54.4**
Asia	**1 002 731**	**1 360 900**	**1 757 314**	**2 168 798**	**31.5**	**36.8**	**42.2**	**47.2**
East and North-East Asia	430 533	594 676	784 688	940 684	32.2	40.4	50.2	57.3
South-East Asia	138 996	197 360	246 701	305 412	31.6	38.2	41.8	46.7
South and South-West Asia	351 062	467 323	598 207	765 125	27.9	30.6	33.3	37.4
North and Central Asia	140 475	139 358	137 184	140 435	65.4	63.9	62.9	63.6
Pacific	18 872	21 899	25 059	28 175	70.7	70.4	70.2	70.4

*Projections
Source: United Nations (2010)

CHART 2.4: **URBANIZATION IN EAST AND NORTH-EAST ASIA**

- Asia
- East and North-East Asia
- China
- Democratic People's Republic of Korea
- Japan
- Mongolia
- Republic of Korea

*Projections
Source: United Nations (2010)

2.1.1 Urbanization patterns in Asia-Pacific subregions

East and North-East Asia

East and North-East Asia is rapidly urbanizing. Countries like Japan, Republic of Korea, Democratic People's Republic of Korea and Mongolia are the most urbanized (nearly 68 per cent on average).

The overall degree of urbanization is surprisingly high in Mongolia, despite slow economic growth. Two main factors lie behind the underlying rural migration: (i) rapid conversion from a centrally planned to a market economy, with the attendant dismantling of the agricultural/rural collective and the social services systems, and (ii) a combination of harsh winters and summer droughts in the late 1990s. Mongolia's small urban population is dominated by one city, the capital Ulaanbaatar, which is host to nearly one-third of the country's population. In 2010, the capital was host to 966,000 inhabitants, dwarfing Darkhan the second largest (80,000). In some of the small provincial towns, known as '*aimag*' (country subdivision) centres, populations are shrinking due to migration to Ulaanbaatar.

In the Republic of Korea, too, urban primacy stands out as a defining feature. The Seoul metropolitan area accounts for nearly 25 per cent of the national population, although other urban centres, and especially the port cities of Busan and Ulsan on the south-eastern coast, have grown rapidly over the past two decades.

In China, only 26 per cent of the population was urban in 1990, but recent trends testify to a brisk rate of expansion to 47 per cent in 2010. Such a vast country is bound to feature significant variations across its length and breadth. While the urbanization rate is above 50 per cent in Guangdong province (with Shenzhen and Guangzhou growing rapidly) and Liaoning province (with large cities like Shenyang and Dalian), in the more remote provinces of Yunnan and Tibet less than 20 per cent of the population reside in urban areas. Cities such as Jinan and Qingdao in Shandong province, and Nanjing in Jiangsu province, have experienced rapid demographic growth, but the pace of urbanization remains sluggish in Guizhou and Qinghai provinces. China's rate of urbanization has averaged an annual 3.3 per cent over the last two decades, but is expected to slow down by about 50 per cent over the next 10 years (see Table 2.5).

Thanks to China, East and North-East Asia's population became more urban than rural in 2010. In contrast to China, though, other countries in the subregion feature low to moderate population growth rates, and urbanization has stabilised as a result. In urban Japan, the net reproduction rate is under one per cent, i.e., each generation of mothers no longer has enough daughters to replace themselves in the population. In the Republic of Korea, the urbanization rate has remained high on the back of the rapid expansion of 'city

TABLE 2.5: **URBANIZATION IN EAST AND NORTH-EAST ASIA, 1990-2020***

COUNTRY	Urban Population (1,000s)				Percentage Urban (%)			
	1990	2000	2010	2020*	1990	2000	2010	2020*
Asia	**1 002 731**	**1 360 900**	**1 757 314**	**2 168 798**	**31.5**	**36.8**	**42.2**	**47.2**
East and North-East Asia	**430 533**	**594 676**	**784 688**	**940 684**	**32.2**	**40.4**	**50.2**	**57.3**
China	301 995	453 029	635 839	786 761	26.4	35.8	47.0	55.0
Democratic People's Republic of Korea	11 760	13 581	14 446	15 413	58.4	59.4	60.2	62.1
Japan	77 726	82 633	84 875	85 848	63.1	65.2	66.8	69.4
Mongolia	1 264	1 358	1 675	2010	57.0	56.9	62.0	67.0
Republic of Korea	31 740	36 967	40 235	42 362	73.8	79.6	83.0	85.6

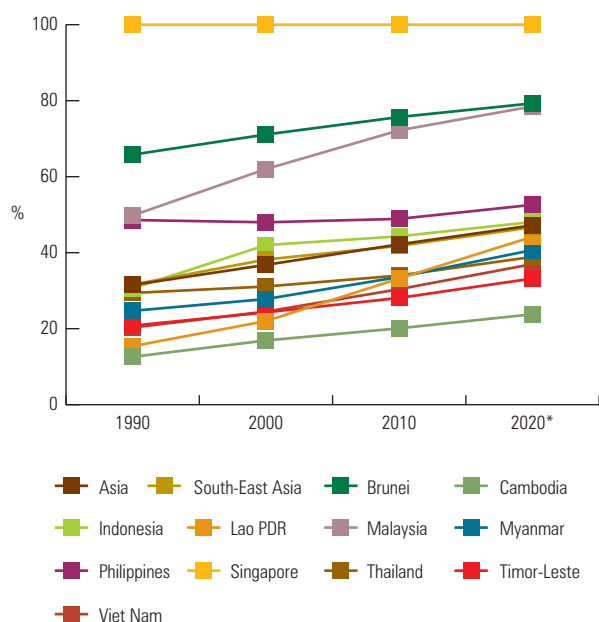*Projections
Source: United Nations (2010)

▲
The Republic of Korea has urbanized rapidly over the past two decades. **©JinYoung Lee/Shutterstock**

Country	Urban Population (1,000s)				Percentage Urban (%)			
	1990	2000	2010	2020*	1990	2000	2010	2020*
Asia	**1 002 731**	**1 360 900**	**1 757 314**	**2 168 798**	**31.5**	**36.8**	**42.2**	**47.2**
South-East Asia	**138 996**	**197 360**	**246 701**	**305 412**	**31.6**	**38.2**	**41.8**	**46.7**
Brunei Darussalam	169	237	308	379	65.8	71.1	75.7	79.3
Cambodia	1 221	2 157	3 027	4 214	12.6	16.9	20.1	23.8
Indonesia	54 252	86 219	102 960	122 257	30.6	42.0	44.3	48.1
Lao PDR	649	1 187	2 136	3 381	15.4	22.0	33.2	44.2
Malaysia	9 014	14 424	20 146	25 128	49.8	62.0	72.2	78.5
Myanmar	10 092	12 956	16 990	22 570	24.7	27.8	33.6	40.7
Philippines	30 333	37 283	45 781	57 657	48.6	48.0	48.9	52.6
Singapore	3 016	4 018	4 837	5 219	100.0	100.0	100.0	100.0
Thailand	16 675	19 417	23 142	27 800	29.4	31.1	34.0	38.9
Timor-Leste	154	198	329	538	20.8	24.3	28.1	33.2
Viet Nam	13 418	19 263	27 046	36 269	20.3	24.5	30.4	37.0

*Projections
Source: United Nations (2010)

CHART 2.5: **URBANIZATION IN SOUTH-EAST ASIA – TRENDS, 1990-2020***

- Asia
- South-East Asia
- Brunei
- Cambodia
- Indonesia
- Lao PDR
- Malaysia
- Myanmar
- Philippines
- Singapore
- Thailand
- Timor-Leste
- Viet Nam

*Projections
Note: The trend-lines for South-East Asia and Asia as a whole track each other very closely.
Source: United Nations (2010)

regions' like Seoul and Busan. Clearly, the high urbanization rates prevailing in East and North-East Asia relative to the rest of Asia is largely due to differences in economic development. Japan, the Republic of Korea and China are the economic powerhouses of the global economy, contributing to over one-third of the world's output.

South-East Asia

South-East Asia is the most diverse subregion in the whole Asia-Pacific area: countries like Indonesia, Malaysia and the Philippines feature relatively high urbanization rates, but urban populations remain relatively small in many others like Cambodia, the Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam.

In Cambodia and the Lao People's Democratic Republic, the pace of urban population growth is brisk, but urbanization rates remain low. In both countries, high urban demographic growth is primarily due to large-scale rural-to-urban migration. In Cambodia, after the 1991 Paris Peace Agreement that put an end to three decades of civil unrest and war, the capital Phnom Penh experienced rapid demographic growth. At the same time, several intermediate-sized cities, such as Sihanoukville (with port, manufacturing and tourism activities), Battambang (with a significant agri-business sector), and Siem Reap (which benefits from tourism at Angkor Wat) are also growing as economically viable settlements.

In a large country like Indonesia the urban population grew at a brisk 4.7 per cent annual pace during 1995-2000, which was nearly twice the rate for the whole of Asia (2.9 per cent) during the same period. This pace of urban growth

The Bangkok Metropolitan Region is host to almost one half of the urban population of Thailand. ©**Alistair Michael Thomas/Shutterstock**

slowed down to 1.7 per cent between 2005 and 2010. In this country the bulk of urban demographic growth takes place on the island of Java, which is currently 65 per cent urban. Within this large island, expansion has been concentrated in the 'Jabodetabek' (Jakarta-Bogor-Depok-Tangerang-Bekasi) metropolitan area, which has a population of 17 million. Five other cities are hosts to over a million population on Java Island. It must be noted that a substantial part of the rise in urbanization in Indonesia has been due to reclassification of areas from 'rural' to 'urban'. The number of rural '*desa*' (villages) classified as 'urban' almost doubled between 1980 and 1990, from around 3,500 to approximately 6,700. There also has been an increase in the lateral extent of cities, along main transport routes radiating out from major urban areas (Hugo, 2003).

The Philippines is highly urbanized and over 50 per cent of its population are expected to be living in urban areas by 2015. The Extended Metropolitan Manila area is home to more than 12 million and accounts for over one-third of the country's urban population, the growth of which has been slowing down – from a very rapid 5 per cent annual rate between 1960 and 1995, to some 3 per cent since then. Still, in view of the country's relatively slow economic development over the last three decades, this pace of urbanization is rather brisk. This is partly due to the change in the national definition of urban areas. After decentralization, large tracts of rural areas were included into municipal boundaries. This may have led to an overestimation of the urban population during the 1990s.

In contrast to the Philippines, Thailand has undergone rapid economic expansion but its urbanization rate is surprisingly low, being comparable to those of the Lao People's Democratic Republic and Myanmar. This is largely due to the fact that demographic expansion and economic development in Thailand are concentrated in and around the capital Bangkok. The Bangkok Metropolitan Region (BMR) is host to almost half of the urban population; when the Eastern Seaboard (the area adjoining the metropolitan region) is included, the combined area would account for nearly 80 per cent of the country's urban population. Other factors that contribute to this trend include under-counting of urban populations in nominally rural areas, as well as large numbers of rurally registered migrants in urban areas.

South and South-West Asia

This is one of the least urbanized subregions in Asia and the Pacific. In the two larger countries – India and Bangladesh – seven out of every 10 people still live in rural areas. In 1950, India (17 per cent) was more urbanized than China (12 per cent), but by 2010 China was 47 per cent urban while the proportion in India lagged behind at just under 30 per cent. High concentrations of urban populations can be found in some countries. Dhaka in Bangladesh and Karachi in Pakistan dominate the economic and urban demographic landscapes of their respective countries – one out of three urban dwellers in Bangladesh lives in the capital Dhaka and one in five urban dwellers in Pakistan lives in Karachi, the country's economic capital. In smaller countries like Nepal and Sri Lanka, only one in every five lives in urban areas. These urbanization patterns are comparable to those of many countries in Africa. In recent years, however, many countries in South and South-West Asia have experienced high economic growth. As a consequence, urbanization has been rapid, a pace that is expected to be sustained in future.

Country	Urban Population (1,000s)				Percentage Urban (%)			
	1990	2000	2010	2020*	1990	2000	2010	2020*
Asia	**1 002 731**	**1 360 900**	**1 757 314**	**2 168 798**	**31.5**	**36.8**	**42.2**	**47.2**
South and South-West Asia	**351 062**	**467 323**	**598 207**	**765 125**	**27.9**	**30.6**	**33.3**	**37.4**
Afghanistan	2 277	4 148	6 581	10 450	18.1	20.2	22.6	26.4
Bangladesh	22 908	33 208	46 149	62 886	19.8	23.6	28.1	33.9
Bhutan	90	143	246	348	16.4	25.4	34.7	42.4
India	220 260	288 430	364 459	463 328	25.5	27.7	30.0	33.9
Iran (Islamic Republic of)	31 958	42 952	53 120	63 596	56.3	64.2	70.7	75.9
Maldives	56	75	126	186	25.8	27.7	40.1	51.5
Nepal	1 692	3 281	5 559	8 739	8.8	13.4	18.6	24.8
Pakistan	35 400	49 088	66 318	90 199	30.6	33.1	35.9	39.9
Sri Lanka	3 217	2 971	2 921	3 360	18.6	15.8	14.3	15.5
Turkey	33 204	43 027	52 728	62 033	59.2	64.7	69.6	74

*Projections
Source: United Nations (2010)

India is expected to add 226 million people to its urban areas in the next two decades, with its urbanization rate reaching 39.7 per cent by 2030. Within India, the states of Maharashtra, Gujarat and Tamil Nadu are relatively more industrialised and experience more rapid urban expansion. Their populations are expected to become 50 per cent urban by 2025. However, in those few larger states like Uttar Pradesh, Bihar, Orissa and Assam, where agriculture remains predominant, the proportion of urban to total population remains below 20 per cent.

In Pakistan, Sindh is the most urbanized province with 49 per cent of the population living in towns and cities. The North-West Frontier Province (now formally known as Khyber Pakhtunkhwa) is the least urbanized (17 per cent). Approximately three-quarters of Sindh's total urban population reside in three urban centres: Karachi, Hyderabad and Sukkur (Shirazi, 2006).

Afghanistan has been experiencing rapid growth in its urban population. However, the bulk of this growth has been due to the ongoing political conflict, with rural migrants moving *en masse* to the relative safety of the capital (see Box 2.4). From 6.6 million in 2010, it is expected to reach 10.4 million by 2020. The Islamic Republic of Iran is another country that has experienced rapid urban demographic expansion since the 1980s, to become the most urbanized nation in South and South-West Asia. In the adjacent provinces of Tehran and Qom, as many as 85 per cent of the population live in urban areas. The capital city of Tehran accounts for over 14 per cent (2010) of the country's total urban population; other major cities and smaller urban centres are spread all over the country. Iran's economic growth has been rapid in recent years, mainly due to oil resources. Rapid urban demographic expansion is expected to continue, and by 2020 just under 76 per cent of all Iranians will live in urban areas.

Sri Lanka's urban population seems to be relatively low.

In part, this is due to the definition of 'urban', which in this country only refers to the areas included in cities' administrative boundaries. If Sri Lanka were to apply the concept of 'urban agglomeration' to its dense settlements, as is the case with India and other Asian countries, its urbanization rate might be as high as 48 per cent (Indrasiri, 2005).

The Pacific subregion

The Pacific subregion has been traditionally divided in three distinct geographical areas: Melanesia, Micronesia and Polynesia. It is made up of a diverse set of thinly populated

CHART 2.6: **URBANIZATION IN SOUTH AND SOUTH-WEST ASIA, 1990-2020***
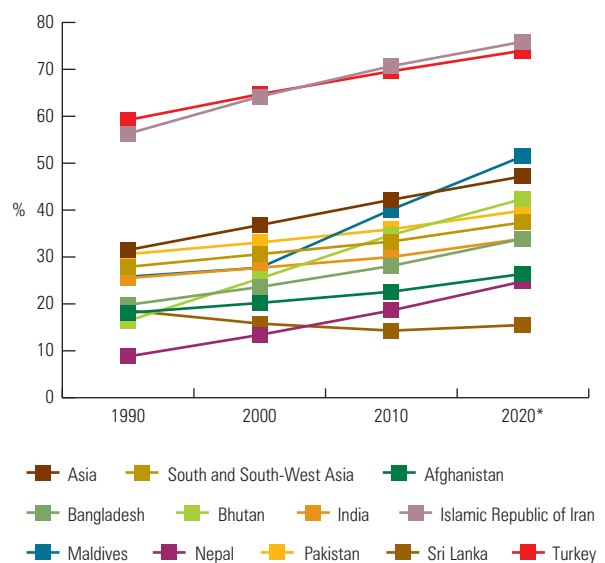
*Projections
Source: United Nations (2010)

Ancient city of Yazd, Iran. ©**Vladimir Melnik/Shutterstock**

islands, stretching from New Guinea to the tiny atolls of Micronesia (Federated States) and Polynesia. Melanesia is the largest area, extending from Indonesia to Fiji, with Papua New Guinea the most populated island. With the rapid growth recently experienced in the capital towns of these island nations, the overall urbanization rate is relatively high at 35 per cent (Connell & Lea, 2002).

Overall, eight of the 22 Pacific countries are now predominantly urban, and by 2020 more than half the population in a majority of these countries will live in towns. Throughout the Pacific, high demographic growth has led to migration from smaller outer islands to larger ones and from rural areas to towns, especially national capitals (World Bank, 2000). Storey (2005:8) captures the overall urbanization trends in this subregion as follows:

"Throughout the Pacific there is a clear trend towards urbanization with very high growth rates in Kiribati and peri-urban areas in Fiji and around Port Vila (Vanuatu). One of the

difficulties is that often this growth is not recorded in 'urban' statistics. Typically official urban growth rates are double those of the national rate of population growth and peri-urban areas are higher still. Though Fiji's urbanization rates are comparatively modest, there has been a substantial shift to cities since 2000 as a result of the expiry of land leases for Indo-Fijians and issues of security following the 2000 coup. This has resulted in a rapid growth in informal settlements, especially evident in Suva and Lautoka".
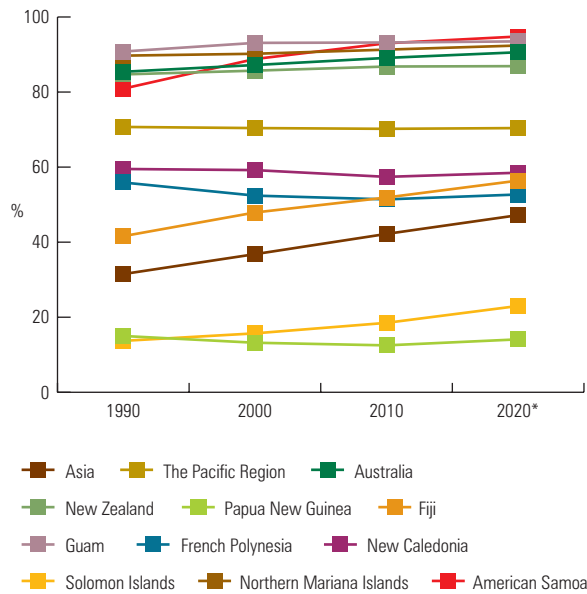
North and Central Asia

In the North and Central Asian subregion, the overall demographic growth rate is very low. This is also reflected in urban population growth rates, which range from quasi-stagnant to less than one per cent. In countries such as Armenia and the Russian Federation, urban populations are shrinking. As for urbanization rates, they range between Russia's 73.2 per cent and Tajikistan's 26.3 per cent. Cities

TABLE 2.8: **URBANIZATION IN THE PACIFIC SUBREGION, 1990-2020***

Country	Urban Population (1,000s)				Percentage Urban (%)			
	1990	2000	2010	2020*	1990	2000	2010	2020*
Asia	1 002 731	1 360 900	1 757 314	2 168 798	31.5	36.8	42.2	47.2
Pacific	19 037	21 932	25 167	28 406	70.7	70.4	70.2	70.4
Australia	14 596	16 710	19 169	21 459	85.4	87.2	89.1	90.6
New Zealand	2 869	3 314	3 710	4 058	84.7	85.7	86.8	86.9
Melanesia	1 093	1 329	1 614	2 110	19.9	19.0	18.4	19.9
Fiji	301	384	443	501	41.6	47.9	51.9	56.4
New Caledonia	102	127	146	169	59.5	59.2	57.4	58.5
Papua New Guinea	619	711	863	1 194	15.0	13.2	12.5	14.1
Solomon Islands	43	65	99	152	13.7	15.7	18.5	23.0
Vanuatu	28	41	63	95	18.7	21.7	25.6	31.0
Micronesia	261	326	390	454	62.6	65.6	68.1	70.4
Guam	122	144	168	188	90.8	93.1	93.2	93.5
Kiribati	25	36	44	54	35.0	43.0	44.0	46.5
Marshall Islands	31	36	45	56	65.0	68.4	71.8	75.3
Micronesia (Federated States)	25	24	25	29	25.8	22.3	22.7	25.1
Nauru	9	10	10	11	100.0	100.0	100.0	100.0
Northern Mariana Islands	39	62	81	96	89.7	90.2	91.3	92.4
Palau	10	13	17	20	69.6	70.0	83.4	89.6
Polynesia	218	253	285	325	40.1	41.2	42.4	44.7
American Samoa	38	51	64	76	80.9	88.8	93.0	94.8
Cook Islands	10	11	15	17	57.7	65.2	75.3	81.4
French Polynesia	109	124	140	160	55.9	52.4	51.4	52.7
Niue	1	1	1	1	30.9	33.1	37.5	43.0
Samoa	34	39	36	38	21.2	22.0	20.2	20.5
Tonga	21	23	24	28	22.9	23.0	23.4	25.6
Tuvalu	4	4	5	6	40.7	46.0	50.4	55.6

*Projections
Source: United Nations (2010)

Legend:
- Asia
- The Pacific Region
- Australia
- New Zealand
- Papua New Guinea
- Fiji
- Guam
- French Polynesia
- New Caledonia
- Solomon Islands
- Northern Mariana Islands
- American Samoa

*Projections
Source: United Nations (2010)

in former Soviet countries and the Central Asian Republics are coping with a unique set of challenges inherited from their centrally planned systems. Urban populations are now shifting away from the planned settlement patterns that prevailed during the Soviet era.

There are a few large cities in the Central Asian Republics. Tashkent (Uzbekistan) is the largest with over two million registered residents. In Uzbekistan and Kazakhstan, urban demographic growth rates exceed the sub-regional average.

Testifying to this expansion is the emergence of new towns in Uzbekistan like Almalyk and Navoi, as well as the demographic growth of historic towns like Samarkand (Uzbekistan). Similarly, the population of Kazakhstan's urban areas has increased 500 per cent over the past eight years. Even though Kyrgyzstan is one of the least urbanized Central Asian country, moderate migration to cities like Bishkek, Osh and Tokmok is now taking place. Migration nowadays takes on more rural-to-urban patterns, causing areas like Bishkek, the Chui Region and Almaty to become ever more crowded.

Economic growth in the North and Central Asia region has been robust in the past decade, largely on the back of rising fossil fuel prices. Continued worldwide demand for oil may sustain a high rate of income growth in the next decade and beyond. Urbanization rates in the oil-rich central Asian countries are also very high. In contrast, non-fossil-fuel-producing and less diversified economies, such as Kyrgyzstan and Tajikistan feature low urbanization rates more akin to South Asia's.

### 2.1.2 The demographic 'youth bulge'

The population of the Asia-Pacific region is young. A temporary increase in the proportion of young people (age group 15-24) in a population is known as a 'youth bulge.' The phenomenon typically results from a demographic transition that began some 15 years earlier. A youth bulge occurs within a population when large numbers of individuals are born during a short but intense period of increasingly high fertility. Thereafter fertility rates decline rapidly. As a result, a large number of individuals of similar age move through life together, creating a 'bulge' in the nation's population structure, as graphically reflected in age pyramids. In Japan,

TABLE 2.9: **URBANIZATION IN NORTH AND CENTRAL ASIA, 1990-2020***

Country	Urban Population (1,000s)				Percentage Urban (%)			
	1990	2000	2010	2020*	1990	2000	2010	2020*
Asia	**1 002 731**	**1 360 900**	**1 757 314**	**2 168 798**	**31.5**	**36.8**	**42.2**	**47.2**
North and Central Asia	**140 475**	**139 358**	**137 184**	**140 435**	**65.4**	**63.9**	**62.9**	**63.6**
Armenia	2 390	1 989	1 984	2 087	67.4	64.7	64.2	65.7
Azerbaijan	3 876	4 158	4 639	5 332	53.7	51.2	51.9	54.2
Georgia	3 005	2 498	2 225	2 177	55.0	52.6	52.7	54.7
Kazakhstan	9 301	8 417	9 217	10 417	56.3	56.3	58.5	62.3
Kyrgyzstan	1 660	1 744	1 918	2 202	37.8	35.2	34.5	35.7
Russian Federation	108 670	107 582	102 702	100 892	73.4	73.3	73.2	74.5
Tajikistan	1 679	1 635	1 862	2 364	31.7	26.5	26.3	28.0
Turkmenistan	1 653	2 062	2 562	3 175	45.1	45.8	49.5	54.6
Uzbekistan	8 241	9 273	10 075	11 789	40.2	37.4	36.2	37.8

*Projections
Source: United Nations (2010)

Legend:
— South-Eastern Asia
— South-Central Asia
— Eastern Asia
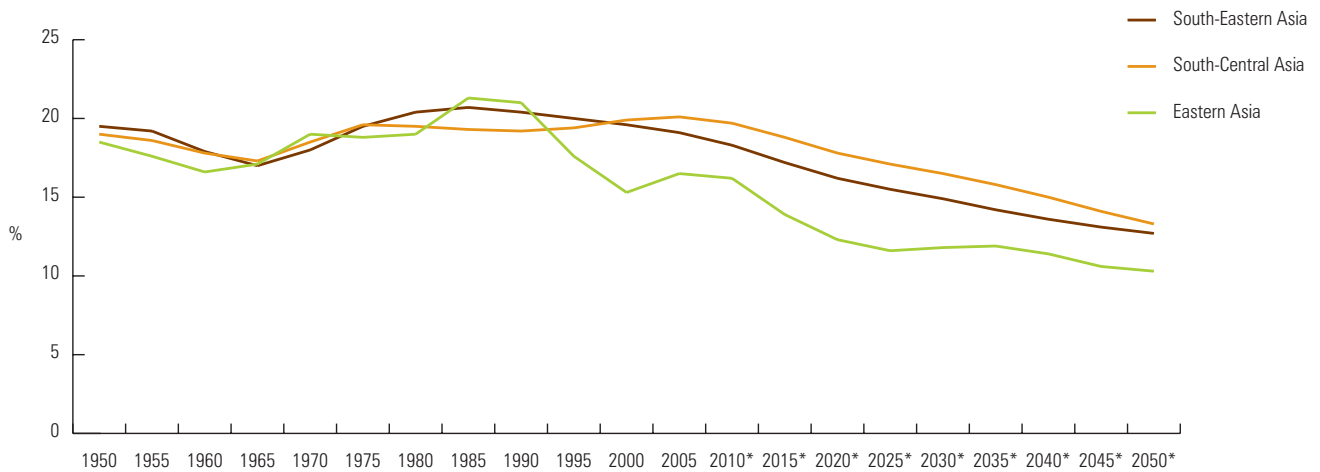
*Projections
Source: United Nations (2009)

the youth bulge occurred during the 1960s; in Singapore and Hong Kong, China, the phenomenon started during the 1970s and peaked by 1980. In contrast, countries like Nepal and Pakistan are only now beginning to experience declines in overall fertility; with this relatively late, incipient demographic transition, the number of young people will not peak until around 2040 (East West Center, 2006). In some countries in South-East and South and Central Asia, as in most of East Asia, the period of rapid expansion in the youth population is already over.

In 1960, 284 million Asians were aged 15 to 24; by 2007, they were 737 million. Over the past 40 years, the proportion of Asia's population in the 15 to 24-year age bracket increased, and then declined – from 17 per cent in 1960 to 21 per cent in 1985 and 18 per cent in 2007. A further decline, to 14 per cent, is projected by 2040.

Countries in Asia have benefited from the youth bulge (i.e., the acceleration in economic growth due to a rising share of working age people in a population). Between 1965 and 1990, approximately one third of East Asia's GDP increase can be attributed to this phenomenon[2]. The extent to which Asian economies will continue to benefit from this demographic trend will depend on how they develop and harness the potential of the younger population. One challenge is that although many young people across Asia are now better prepared than ever before to enter the workforce, many are unable to secure employment.

In the Asia-Pacific region, nearly 11 per cent of people aged 15 to 24 are without a job and looking for one. In South-East Asia and the Pacific, youth are five times as likely as older workers to be unemployed; in South and East Asia, this multiple is 'only' three. In their recent national demographic surveys, Kiribati, Samoa and Vanuatu all reported relatively low rates of youth unemployment, but high rates of youth engaged in unpaid family activities. In contrast, the Marshall Islands and Micronesia (Federated States) reported high

Statue of a student in Ulaanbaatar, Mongolia. ©**UN-HABITAT/Bharat Dahiya**

rates of youth unemployment, i.e., over 60 per cent and 35 per cent respectively. In the latter, the rate was reported as 50 per cent in Chuuk, the largest federated state (Abott & Pollard, 2004). The rates of youth unemployment conceal underemployment and poverty among working youth. Young women find it especially difficult to secure decent work and are more likely to be employed in the informal economy, where they are typically underpaid relative to men. They also perform disproportionate shares of unpaid domestic work (United Nations, 2007b).

Urbanization and globalization have transformed the values and culture of youth in Asia. The openness of Asian economies and the exposure of youth to foreign goods, services and information have encouraged the development of an international youth culture. Rapidly developing communication technologies have enabled many young people from countries large and small to access information that may otherwise have been unavailable. Rapid economic growth and higher incomes have enabled Asian youth to adopt Western consumption patterns and lifestyles. Asian youth more readily challenge traditional authority structures and experience both the disorientation and anomie caused by the day-to-day experience of clashes between traditional and modern norms and values (Yap, 2004).

2.1.3 An ageing population

Many countries in Asia are facing dramatic demographic changes. Some are to expect declines in working populations and concomitant increases in the numbers of aged dependants sometime between 2015 and 2020. All across Asia, the numbers of people aged 65 or more are expected to grow significantly. In the year 2000, the average age in Asia was 29. An estimated 6 per cent of the region's total population were aged 65 or more, 30 per cent were under 15, and 64 per cent were in the working-age group of 15 to 64 years (United Nations, 2001a). It is estimated that by 2050, the proportion under 15 will drop to 19 per cent, and the proportion of those aged 65 or more will rise to 18 per cent. By that time, the average age in Asia will be 40 (United Nations, 2009).

Macroeconomic theory suggests that those economies with large shares of ageing populations are likely to grow more slowly than those with relatively fewer elderly people, largely due to attendant reductions in labour force and output. To some extent, this can be anticipated and mitigated by increases in labour productivity. However, the process of population ageing is occurring much more rapidly in Asia than it did in Western countries, and in some parts of Asia it is bound to occur at a much earlier stage of economic development. Facing an unprecedented pace of population ageing, Asian cities must prepare to cater to the needs of the elderly which will include: (a) housing for the elderly; (b) medical facilities (and attendant financing) for the elderly; (c) changes in building regulations that take into account the needs of the elderly; and, (d) appropriate changes in urban planning standards. This large-scale demographic shift will also have implications for the economic growth of cities, as the urban labour force will increasingly become older (Heller, 2006; East West Center, 2008).

Japan's population is to undergo a protracted period of rapid ageing over the next several decades. Average life expectancy in the country climbed sharply after World War II, and today is the highest in the world. In 2007, life expectancy at birth was 86.0 years for women and 79.2 years for men. Japan's senior population (65 years and over) was approximately 27.5 million, or 21.5 per cent of the total population, and reaching record highs both in terms of absolute numbers and percentage (Government of Japan, 2007). According to UN estimates, in 2010, there will be 34 elderly dependants for every 100 people working in Japan. By 2050, the ratio will rise to 74 retired dependants for every 100 working people. Unless birthrates rise, Japan's total population is to shrink by one half of its current size by 2100. In an ageing society, medical and pension costs increase but the number of workers who pay for the welfare support system decreases. The declining working-age population will arguably affect the country's productivity, economic growth and global competitiveness.

Another country in Asia that is ageing rapidly is China. Unique among developing countries, the phenomenon is extremely fast (United Nations, 2009) and very similar to patterns in more developed Japan, Singapore, the Republic of Korea and Hong Kong, China. The difference is that in China this is happening at a time when the country is still relatively poor. The 'old before rich' phenomenon in China is partly due to the stringent 'one couple, one child' policy that has proved highly effective in stabilising population growth (this policy is now being reconsidered).[3] Over the next few decades, the ratio of elderly dependants to people of working age is to rise steeply, from 10 per cent in 2005 to 40 per cent by 2050. The pace of ageing in China's cities has been much faster than in rural areas, reflecting both sustained lower fertility and higher longevity in urban compared with rural areas. With rapid growth in the urban population expected over the next two decades, Chinese cites are bound to face many critical policy issues regarding care for an ageing society (United Nations, 2008b; England, 2005).

2.2
The factors behind urban growth

Jakarta, Indonesia. Jakarta has experienced significant migration over the past decades.
©**Veronica Wijaya**

Rural-to-urban migration is often viewed as the main factor behind urban demographic growth. Many countries that have experienced rapid urbanization have attempted to reduce rural-urban flows. There is not a single precedent, however, of a country that has succeeded to do that over the long term. Past experience notwithstanding, the major factor behind urban growth in most countries nowadays is the natural increase in the urban population. Another factor is reclassification of areas from 'rural' to 'urban', or expansion of urban boundaries to include the rural periphery and/or to absorb settlements in the urban periphery – a process often referred to as *in situ* urbanization (United Nations, 2001b).

In many countries in South Asia where urban populations are in a minority, natural increase accounted for over half of urban demographic growth during the 1980s. For example, in India estimates suggest that the contribution of net rural-urban migration remained relatively constant at 18 to 20 per cent of total urban growth from the 1960s to the 1980s (Pathak & Mehta, 1995a, 1995b). Reclassification and expansion of urban boundaries was another major factor of urban growth in India. Similarly in Nepal, most of urban growth was due to natural increase and reclassification (United Nations, 2001b).

In East Asia, where urbanization rates are higher than in the southern part of the region, rural-to-urban migration is often the most visible factor behind the ongoing rapid urban demographic growth. This is the case in China, although reclassification is another significant factor, accounting for over 70 per cent of urban growth in the 1980s and about 80 per cent in the 1990s (United Nations, 2001b:31). Reclassification in China occurred alongside two major administrative changes: in 1984, the criteria for township status were relaxed and in 1986, urban areas were encouraged to incorporate adjoining counties. This resulted in significant reclassification of rural into urban areas over the course of the 1980s.

Estimates for Indonesia indicate a steady decline in the contribution of natural increase to urban demographic growth, from nearly 70 per cent in the 1960s to 32 per cent in the 1990s (United Nations, 2008b). The share of migration/reclassification in urban growth rose over this period, from 32 per cent in the 1960s to 59 per cent in the 1980s (United Nations, 2001b). Jakarta and its periphery in West Java experienced significant migration in this period. Urban migration, especially to the national capital Jakarta, started in the 1950s due to civil unrest in other parts of the country. Even after the unrest subsided, streams of people moving to urban centres continued through the 1990s, primarily because of rapid industrialization in and around Jakarta and other major cities (Sarosa, 2006).

Country	1970s	1980s	1990s	2000s	2010s*	2020s*
East Asia	**45**	**58**	**64**	**68**	**72**	**76**
Cambodia	33	24	40	53	57	59
China	45	65	72	76	80	86
Indonesia	53	62	67	66	63	61
Malaysia	45	44	44	41	35	34
Philippines	35	46	48	43	38	37
Republic of Korea	65	65	54	48	61	85
Thailand	41	40	34	47	67	75
Viet Nam	29	28	44	57	65	72

*Projections
Source: World Bank (2007a:64).

More recent estimates of the factors behind urban demographic growth are available from the World Bank (2007a). These estimates are based on a number of assumptions about natural growth rates in select East Asian countries. The residual growth is then attributed to migration and reclassification of rural into urban areas. The findings based on this model suggest that migration and reclassification together account for an increasing share of urban population growth in East Asia, from 45 per cent in the 1970s to a projected 76 per cent in the 2020s (see Table 2.10)[4]. Exceptions to this pattern are Malaysia and the Philippines, where urban demographic growth will be due solely to natural increases.

2.2.1 Internal migration

According to economic theory, individuals migrate from low-wage to high-wage areas seeking to maximize their earnings. Migration is a strategy adopted by rural populations to improve family livelihoods and benefit from better services in urban areas. Migration also enables rural households to ensure against a number of risks and, in the absence of well-functioning credit markets, to fund investment in rural housing and economic activities. Rural migrants with education and skills are often more likely to do well in urban areas. Rural-urban migration is only one component of internal migration, though. Other forms include rural-rural, urban-urban and urban-rural migration. Many migrants to urban areas come from other towns or cities. Furthermore, not all rural-urban migrants are poor; many come to the city because they are educated and cannot find suitable jobs elsewhere. Rural-urban migration is generally beneficial for migrants, including access to better opportunities and remittances for relatives back home.

Rural-urban migration benefits cities as well, as it provides a steady supply of labour for a range of economic activities. Migration opens opportunities for women, giving them access to jobs outside the home, thereby contributing to their empowerment. Maintaining rural-urban links through remittances enables rural households to improve incomes and sustain local development.

Many rapidly expanding Asian economies have seen increases in the rate of internal migration over the past two decades, because of increased opportunities in urban areas. Of these movements, circular migration – where trips vary from daily commutes to those lasting several months and where urban migrants retain strong links to rural areas – appears to be emerging as a dominant trend for poorer groups. This is partly because rural migrants are unable to find permanent jobs in cities. Circular migration is a coping mechanism, enabling them to keep families in rural areas and migrate to the city during lean agriculture periods.

While most Asian countries do not impose any barriers to internal population movements, some have adopted mechanisms to regulate migration to urban areas. Reducing or even reversing the flow of rural-urban migrants has been the most common policy goal pursued by governments bent on changing the spatial distribution of the population. Most governments have sought to control rural-urban flows through a combination of rural employment creation programmes, anti-slum drives and restricted entry to urban areas. While some have relaxed restrictions recently, others continue to design policies and programmes that discourage people from moving.

For example, in China internal migration is predominantly temporary and from rural to urban areas. In 2006, the National Bureau of Statistics estimated at 132 million the number of rural-to-urban migrants in the country. Another phenomenon is a continuous outflow of labourers from agricultural areas to industrializing regions in China. A majority of these are circular migrants (known as the "floating population") (ODI, 2006). Migration affects and is also affected by the *hukou* [household registration], which is essentially a migration regulatory system in force over the past half century (Chan, 2008). The *hukou* system, directly and indirectly, remains a major barrier preventing China's rural population from settling in the city.[5]

In Viet Nam, people have traditionally migrated from north to south and from rural to urban areas. Still, migrants need residency permits to work in cities. Temporary permits are now granted to ensure a steady supply of labour. Surveys

Dhaka, Bangladesh. Circular migration appears to be emerging as the dominant trend for poorer groups. **©Manoocher Deghati/IRIN**

have shown that after the economic reforms of the late 1980s, temporary migration to urban areas and rapidly industrialising zones became a major form of spatial mobility. Every year, Ho Chi Minh City receives around 700,000 new registered temporary migrants; these include so-called 'KT3' migrants with temporary registration for a period of six months and more; and 'KT4' migrants with temporary registration for a period of under six months (ODI, 2006).

In Cambodia, rural migration has emerged in response to the pressures of a rapidly growing labour force in search of livelihoods. Increasing numbers of migrants are also (informally) moving to neighbouring Thailand. Currently, the top destination for rural migrants is Phnom Penh, which alone receives about one third of all inter-provincial migrants in Cambodia. Alternative destinations include Kandal, Banteay Meanchey and Koh Kong (which together account for another 30 per cent of total migrants). Phnom Penh and Kandal are the main urban destinations, while the two rural

provinces of Koh Kong and Banteay Meanchey feature large average farm sizes and low population densities. Therefore, Cambodians move to locations where they find potential for employment (Acharya, 2003).

As an indirect way of controlling the movement of people out of rural areas, India has recently introduced the National Rural Employment Guarantee Act (NREGA). The policy promises 100 days of wage labour for one adult member in every rural household who volunteers for unskilled work. The NREGA ranks among the most powerful initiatives ever undertaken for the transformation of rural livelihoods in India. The unprecedented commitment of financial resources is matched only by its imaginative structure, which promises a radically fresh programme of rural development. The NREGA effectively enshrines the right to work in Indian law. This development-orientated initiative focuses on critical public investments and durable assets, short of which the growth processes will not gather momentum as required in

▲
Roadside settlements in Karachi, Pakistan. **©Asianet-Pakistan/Shutterstock**

the most backward regions of rural India. The emphasis on water conservation as well as drought and flood-proofing is also critical, underscoring water security as the pre-requisite and foundation for rural transformation. The legislation does not allow any middlemen or contractors to interfere in the implementation of this policy, and transparency and accountability are highly emphasized (Ambasta *et al.*, 2008).

For all the restrictions on migration flows and rural development programmes such as NREGA, however, rural populations continue to move to cities. By comparison with rural areas, cities *seem* to offer better choices for employment, access to better social services, such as health and education, and higher social status. However, many migrants remain in the urban informal sector for long periods of time. Their informal status excludes them from the wider benefits of economic growth in cities. Across Asia, large numbers of temporary migrants and others intending to stay permanently, but who have moved without formally

acquiring a house or a job, are regarded as illegal. In some countries, however, migrants without formal housing and jobs do obtain legal registration and can even vote. The informal sector is discussed further in Chapter 3.

2.2.2 International migration[6]

Along with international flows of capital, information and technology, international migration is one of the major forces of change in the world. Many emigrants move to urban areas abroad. The number of international migrants in Asia nearly doubled between 1960 and 2005, growing from an estimated 28 million in 1960 to more than 53 million in 2005. In the Pacific area, the number increased from two to five million over the same period. In 2005 and relative to the total population, international migrants represented 15 per cent of the population of the Pacific subregion. In contrast, they accounted for less than 2 per cent of the total population in Asia. The Asia-Pacific region currently hosts over 30 per cent

of the world's estimated 191 million international migrants (ESCAP, 2008b).

In the region, flows of people across borders, especially to neighbouring countries, have been prevalent for a long time. As in the case of internal migration, people move across borders in search of better economic opportunities or safety, although such movements face more restrictions than domestic migration, through national migration policies. However, movement of people across countries in the region has become easier, especially within the Association of Southeast Asian Nations (ASEAN) and other sub-regional economic groupings. Cross-border emigration in Asia is propelled by various 'push' and 'pull' factors, including persistent inter-country disparities in development, stronger regional economic integration and divergent demographic dynamics. Changes in labour markets combine with technical progress and economic inter-linkages to create new demand for both skilled and less skilled migrant workers. Cross-border emigration is also influenced by government policies, existing migration networks and private agencies that recruit migrant workers. The 'push' factors behind cross-border emigration include, *inter alia*, protracted natural disasters, wars and internal conflicts. For example, war and drought have triggered cross-border emigration from Afghanistan into Pakistan and Iran, as has internal conflict from Myanmar into Thailand (ESCAP, 2008b).

The Asia-Pacific region is a major source of permanent emigration to Australia, Canada, Europe, New Zealand and the United States. Several labour-surplus countries in Asia are actively involved in promoting labour emigration. However, the limited role of governments in the process of recruitment has led to widespread commercialization of migrant labour flows. Asian countries like China, India and the Philippines rank among the top 10 sources of immigrants to those more developed countries. Several others in the region report large-scale outflows in the form of contractual labour. Over the past few decades, the Philippines has remained at the top of the list of major source countries of migrant workers (UNHCR, 2006).

Between 1990 and 2005, annual labour emigration from Bangladesh more than doubled from 103,000 to 252,000, soaring beyond 800,000 in 2007, with the Middle East and Malaysia as the main destinations. From 1992 to 2002, labour migration from India to the Middle East averaged about 355,000 per year. In 2006, some 712,000 Indonesians left to work abroad. Between 2000 and 2006, an average 204,000 labour migrants left Sri Lanka every year, the majority to destinations in the Middle East. While these figures are high, they remain estimates and the actual numbers of migrant workers from the region are likely to be greater, since unknown numbers do not register with national authorities.

Human trafficking is a pernicious form of irregular migration that involves elements of deception, coercion, exploitation, abuse and violence. The economic vulnerability of the victims is often compounded by physical and psychological abuse, exposure to life-threatening conditions including sexually transmitted diseases and HIV/AIDS, as well as abuse at the hands of authorities. Human trafficking has been a growing category of transnational crime and a major issue of concern for many governments in the Asia-Pacific region. Initiatives have been taken by the South Asian Association for Regional Cooperation (SAARC) and the Association of South East Asian Nations (ASEAN) to combat human trafficking in their respective regions (ESCAP, 2008b).

Some countries like Thailand and Malaysia are both receivers and senders of international labour. For instance, Thailand exports labour to places such as Singapore and Taiwan, Province of China, and imports labour from Cambodia and Myanmar. The main reason for importing labour is the continuing need for a cheap workforce, in order to be able to produce goods and services in countries where economic development has already reached, or is on the threshold of reaching, industrialized status. Another reason is the depletion in the number of people amenable to agricultural and manual work in many receiving countries, which creates opportunities for foreign low-skilled workers. Exporting labour occurs where unemployment is growing and through expansion of local business abroad. The complex system of recruitment and deployment of migrant workers is in itself an industry that supports the economic growth of the region.[7]

In the mid-1990s, 400,000 people from the Pacific subregion lived abroad. While not very significant relative to the sub-regional population as a whole (six million), the figure matters to the small countries and territories across that area, including Polynesia and Micronesia (Federated States). For instance, emigrants account for 75 per cent of the Polynesian population. As many as 30 to 40 per cent of the population of Samoa and Tonga are estimated to be living abroad. Most are in New Zealand (170,000), where between 1992 and 1997 the three Pacific island countries of Samoa, Fiji and Tonga were among the top 10 countries of origin for immigrants (Connel, 2003).

A major benefit of international emigration is the flow of remittances to the home countries. In 2007 in the Asia-Pacific region, migrant remittances totalled US $121 billion (World Bank, 2008a). This is equivalent to nearly two-thirds of all foreign direct investment in developing countries. In India, China, Pakistan, Bangladesh and the Philippines, remittances are a major source of foreign currency holdings. At the household level, remittances improve economic security on top of providing income for investment, savings and entrepreneurial activities. Emigrant remittances have boosted the urban real estate market, as housing and property are safe and profitable forms of investment. For example, in the state of Kerala, India, and in many cities in the Philippines, the urban real estate market is driven largely by remittances from migrants in the Middle East. Although the average value of remittances per emigrant is small, the cumulative impact on land and house prices is quite tangible.

Forced migration due to conflicts and natural disasters

Forced migration is a general term that refers to the movements of refugees and internally displaced people (those displaced by conflicts, by natural or environmental disasters and by development projects). Since the year 2000, the world has witnessed over 35 major conflicts and some 2,500 disasters. Over two billion people have been affected, and millions have been forced to migrate. Many displaced persons move towards cities in the hope of finding shelter and basic support. It happens often that displaced persons do not return back to their homes for fear of insecurity. As a result, destination cities experience demographic bulges (UNHCR, 2006).

Many Asian countries have seen sudden increases of migrants in their urban areas, mainly in the capital cities, as a result of conflict. For example, and as a result of forced migration, the population of Kabul has more than doubled in the last 15 years from 1.6 million in 1995 to 3.7 million in 2010 (see box 2.4).

Natural disasters have already caused considerable displacement in recent years in Asia. The impact of a disaster is not determined entirely by the magnitude of the event itself, but also by communities' ability to respond. In many instances, the poor are the hardest hit. The late 2004 Asian tsunami affected 14 countries after an earthquake off Indonesia. The tsunami accounted for 37 per cent of all recorded fatalities from natural disasters since the year 2000. The 2005 earthquake in the mountains of Pakistan garnered significant media attention because of the scope of the disaster. Almost 75,000 people died and 3.5 million were left homeless at the onset of winter. Cities near disaster-affected areas are usually the destination for many of the displaced persons (UNHCR, 2006). The number of forced migrants to cities in connection with global environmental and climate change ('eco-refugees') is likely to increase in the future (see Chapter 5 for more details).

Asian cities lack the capacity to deal with forced migrants. Forced migration leads to sudden rises in local populations, putting inordinate pressure on already inadequate urban services and infrastructure. Furthermore, in the short run, with more low-skilled workers available in the local labour market, wages decline, especially in the construction sector. Sudden large inflows of forced migrants also pose security risks in cities. For example, internal conflict has become the predominant threat to the security and stability of many of the small island nations in the Pacific, and particularly Melanesia. Since the late 1980s, social conflicts of varying nature and intensity have occurred in Papua New Guinea, Fiji, Vanuatu and the Solomon Islands. In the latter, ethnic conflict has led to deterioration in law and order and a flight of foreign investment from the capital and tourist hub Honiara. Whereas in rural areas a majority of the population lives on customary land and therefore retains access to food, the consequences of social and economic breakdown are most apparent in urban centres. Rapid population growth, poor infrastructure and inadequate labour markets have led to a crisis in urban governance (Talbot & Ronnie, 2007).

BOX 2.4: THE CHALLENGE OF RECONSTRUCTION AND DEVELOPMENT IN KABUL

▲
Kabul, Afghanistan. **©Manoocher Deghati/IRIN**

As the internal strife of the previous decades abated somewhat, since 2002 3.5 million Afghan refugees have returned from neighbouring countries, of which one million to the Kabul area. In addition, many internally displaced persons (IDPs) have also moved to the capital. As a result, Kabul's population grew by as high as 17 per cent per year between 1999 and 2002, before slowing down to about 5 per cent for the past few years, making the city one of the fastest growing in the world for its size class. The current population of Kabul is 3.7 million (2010), or 56.7 per cent of the country's total urban population.

As the capital and the largest city in the country, Kabul has a critical role to play in economic development and poverty reduction. At the same time, however, the challenges are daunting. For instance, basic services remain scarce due to massive wartime destruction, poor investment in infrastructure and rapid population growth. As a result, more than 50 per cent of the drains are not functional, with wastewater often over-flowing on the roads; only 10 per cent of households have the benefit of piped water supply, less than 5 per cent of households are connected to the sewerage network, and only about 50 per cent of solid waste is collected and transported to dumpsites. The extent of the damage to the city's infrastructure, combined with a rapid increase in the population due to refugees and internally displaced people over the past five years, places an additional burden on central and local government, increasing the scale of reconstruction and development needed in the city.

Source: Pushpa Pathak, Senior Urban Adviser to Kabul Municipality

2.3
Urban corridors, mega-cities and mega urban regions

▲
Kobe, Japan. ©**J. Aa/Shutterstock**

Mega-cities

Mega-cities in developing countries have long been the focus of media attention. In popular writings on cities of the developing world, the largest receive the most attention. It may be a natural thing, when considering Asian conurbations, that those the size of Tokyo, Mumbai, Bangkok or Shanghai come readily to mind. The reasons are obvious and related to economic and social conditions. In 2005, the world's 30 most productive cities generated 16 per cent of global output. The top 40 mega urban regions, which make up about 18 per cent of the world's population, produce 66 per cent of goods and services and 86 per cent of patented innovations (UN-HABITAT, 2010a; World Bank, 2008b; Montgomery *et al.,* 2004; da Silva, 2008).

The number of mega-cities is increasing around the world and half of the world's mega-cities (12 out of 21) are now found in Asia. In 1975, Tokyo stood out as the only mega-city in Asia. By the year 2000, the region housed 9 of the world's largest urban agglomerations and by 2020, the number of such mega-cities might increase to 16 (see Table 2.11 and Chart 2.9). Mega-cities share common features like very large populations (from 10 million in Istanbul to 36 million in Tokyo, as in the year 2010), extensive geographic sprawl, and economic and social dominance over regions or even countries (see Box 2.5). Two Asian mega-cities (Tokyo and Osaka-Kobe) are located in a technologically advanced country where they play significant global roles. Tokyo is the largest city in the world (see Box 2.6) and will remain so for the next three decades. Cities in rapidly growing Asian economies – Delhi,

Mumbai (formerly Bombay), Shanghai and Kolkata (formerly Calcutta) – are on the list of the top five Asian mega-cities (2010). Those in China (Shanghai, Beijing and Tianjin) have grown after decades of governmental attempts to limit their size. Initially, this took the form of outright controls on internal migration; but after liberalization, Chinese economic modernization policies effectively opened up many cities to the outside world, particularly those on the eastern seaboard. In South Asia, internal migration and natural increases contribute to high rates of population growth in Delhi, Mumbai, Kolkata, Dhaka (see Box 2.7) and Karachi. Two Asian mega-cities are national capitals (Istanbul and Metro Manila) and primate cities. They are the seats of national political power and significantly larger than other cities in the national urban hierarchy. The governance of mega urban regions is discussed in Chapter 6.

Some studies suggest that the United Nations underestimates the populations of mega-cities. For example, the UN estimates the population of Seoul at 9.8 million (2010), which is consistent with municipal boundaries. Others, however, have estimated the city's population at between 17 to 23 million, depending on the way the urban agglomeration is defined. Likewise, the UN figure for Manila's population is 11.63 million (2010), based on official boundaries and include Manila city together with 16 other municipalities. If the surrounding suburban expansion is included, however, the city's population reaches 19 million. On the other hand, both Shanghai and Beijing rank as 'Special Municipalities' with the status of provinces, and include rural counties within their borders. In these cases, UN population numbers refer to

BOX 2.5: ASIA'S NEW URBAN CONFIGURATIONS

Kuala Lumpur, Malaysia. ©**Ronen/Shutterstock**

As the world becomes more urban, new residents will continue to be distributed across cities of all sizes and much along the current prevalent pattern. In many instances, though, cities are merging together to create urban settlements on a scale never seen before. These new configurations take the form of mega-regions, urban corridors and city-regions. *Mega-regions* are natural economic units that result from the growth, convergence and spatial spread of geographically linked metropolitan areas and other agglomerations. They are polycentric urban clusters surrounded by low-density hinterlands, and they grow considerably faster than the overall population of the nations where they are located. *Urban corridors*, on the other hand, are characterized by linear systems of urban spaces linked through transportation networks. Other dynamic and strategic cities are extending beyond their administrative boundaries and integrating their hinterlands to become full-blown *city-regions*. These are emerging in various parts of the world, turning into spatial units that are territorially and functionally bound by economic, political, socio-cultural, and ecological systems. All of these new urban configurations—cities in clusters, corridors and regions—are becoming the new engines of both global and regional economies.

Mega-regions today are accumulating even larger populations than any mega- or meta-city (defined by UN-HABITAT as a city with a population over 20 million), and their economic output is enormous. The population of China's Hong Kong-Shenzhen-Guangdong mega-region, for example, is about 120 million, and it is estimated that Japan's Tokyo-Nagoya-Osaka-Kyoto-Kobe mega-region is likely to be host to 60 million by 2015. Although more widespread in North America and Europe, mega-regions are happening in Asia and other parts of the world as cities converge apace, with the typical huge demographic concentrations, large markets, significant economic capacities, substantial innovative activities and high skills that come with them. Recent research shows that the world's 40 largest mega-regions cover only a tiny fraction of the habitable surface of our planet, and are home to fewer than 18 per cent of the world's population, even as they account for 66 per cent of global economic activity and about 85 per cent of technological and scientific innovation.

Urban corridors, in contrast, present a new type of spatial organization with specific economic and transportation objectives. In urban corridors, a number of city centres of various sizes are connected along transportation routes in linear development axes that are often linked to a number of mega-cities. New developments in fringe areas experience the fastest growth rates and the most rapid urban transformation. An example is the industrial corridor developing in India between Mumbai and Delhi, which will stretch more than 1,500 kilometres from Jawaharlal Nehru Port (in Navi Mumbai) to Dadri and Tughlakabad (in Delhi). Another good example is the manufacturing and service industry corridor in Malaysia's Kuala Lumpur, clustered within the Klang Valley conurbation that stretches all the way to the port city by the same name. The best illustration of a mature urban corridor is the 1,500 kilometre-long belt stretching from Beijing to Tokyo via Pyongyang and Seoul, which connects no less than 77 cities with populations of 200,000 or more. Over 97 million people live in this urban corridor, which, in fact, links four separate megalopolises in four countries, merging them into one as it were.

Urban corridors are changing the functionality of cities and even towns both large and small, in the process stimulating business, real estate development and land values along their ribbon-like development areas. They are also improving inter-connectivity and creating new forms of interdependence among cities, leading to regional economic development growth. In some cases, however, urban corridors can result in severe urban primacy and unbalanced regional development, as they strengthen ties to existing economic centres rather than allowing for more diffused spatial development.

City-regions come on yet another, even larger scale as major cities extend beyond formal administrative boundaries to engulf smaller ones, including towns. In the process, they also absorb semi-urban and rural hinterlands, and in some cases merge with other intermediate cities, creating large conurbations that eventually form city-regions. Many such city-regions have grown enormously over the last 20 to 30 years, owing to the effects of agglomeration economies and comparative advantages. The extended Bangkok Region in Thailand, for example, is expected to expand another 200 kilometres from its current centre by 2020, growing far beyond its current population of over 17 million. Some of these city-regions are actually larger in both surface area and population than entire countries like Belgium, the Czech Republic or the Netherlands.

Mega-regions, urban corridors and city-regions are creating a new urban hierarchy. The scope, range and complexity of issues faced by these regional urban systems require innovative coordination mechanisms for urban management and governance. The World Bank* has identified the three main issues that these configurations face, namely:

- *Coordination,* "conceiving the development of cities in parallel with the development of regions and subregions, rather than isolated nodes in economic space", a process that calls on metropolitan, regional and even national planners to work together;
- *Broader plans for regional planning/development,* "requiring dispersion of specific urban functions (i.e., solid waste treatment, airports, skills and training centres) within a continuous region, rather than crowding them in a large city"; and
- *Coping with horizontal fiscal disparities,* and more specifically "designing mechanisms to transfer fiscal resources among urban governments in a region."

* Indermit & Homi. An East Asian Renaissance: Ideas for Economic Growth. Washington, D.C.: World Bank, 2007

Source: UN-HABITAT (2010a)

TABLE 2.11: **ASIAN CITIES WITH POPULATIONS OF 10 MILLION OR MORE**

1975			2000			2010			2020*		
Ranking	City	Pop. (mil.)	Ranking	City	Pop. (mil.)	Ranking	City	Pop. (mil.)	Ranking	City	Pop. (mil.)
1	Tokyo	26.61	1	Tokyo	34.45	1	Tokyo	36.67	1	Tokyo	37.09
			2	Mumbai	16.09	2	Delhi	22.16	2	Delhi	26.27
			3	Delhi	15.73	3	Mumbai	20.04	3	Mumbai	23.72
			4	Shanghai	13.22	4	Shanghai	16.58	4	Shanghai	19.09
			5	Kolkata	13.06	5	Kolkata	15.55	5	Dhaka	18.72
			6	Osaka-Kobe	11.17	6	Dhaka	14.65	6	Kolkata	18.45
			7	Dhaka	10.28	7	Karachi	13.12	7	Karachi	16.69
			8	Karachi	10.02	8	Beijing	12.38	8	Beijing	14.30
			9	Moscow	10.00	9	Manila	11.63	9	Manila	13.69
						10	Osaka-Kobe	11.34	10	Istanbul	11.69
						11	Moscow	10.55	11	Moscow	11.66
						12	Istanbul	10.52	12	Osaka-Kobe	11.37
									13	Shenzhen	10.59
									14	Chongqing	10.51
									15	Guangzhou	10.41
									16	Jakarta	10.26

*Projections
Source: United Nations (2010)

these special municipalities, and therefore overestimate their populations (Richard *et al.*, 2006).

Mega-cities account for only 11 per cent of Asia's urban population (see Table 2.13), but like all those around the world they act as dominant forces in the regional and global economies on top of significant contributions to their respective countries. They are also knowledge centres, often concentrating the best national educational and research institutions, as well as cultural centres, allowing a variety of cultures to coexist and thrive.

Many of these mega-cities have grown on the back of concentrations of manufacturing industries. Over time, the top segments of the services sector have come to concentrate in these cities, too, in order to benefit from agglomeration economies. Many mega-cities are also the seats of power, either as national capitals or as major economic or financial centres. People, infrastructure and capital are concentrated in mega-cities, and so is the political and social power that reinforces their role as powerful engines of national development. Media concentrations in mega-cities enable these to influence sub-national and national policies. Public investment in infrastructure is substantial and this, in turn, fuels urban agglomeration economies. The services sector is particularly prone to agglomeration and typically prefers central city locations.

The spin-offs from the concentrations of manufacturing and services in mega-cities are enormous and further attract people and capital. This continued expansion defeats efforts to move business away from the core of these cities. As the populations and surface areas of Asian mega-cities kept expanding, inadequate infrastructure in the peripheries caused densification of the core, since people prefer to remain in the inner city where infrastructure is relatively better. The compact form of Asian mega-cities results from these high

densities and has also promoted mixed uses. While this may make streets more congested and chaotic, the flip side of urban density is enhanced efficiency through reduced commuting between residence and work places.

The economies of mega-cities are often as large as those of some countries and, as is the case in Asia, their pace of growth can outstrip the national average. The problem is that the benefits of high economic growth are not necessarily shared by all residents. Indeed, Asian mega-cities display such stark inequalities in residents' conditions that they seem to be

CHART 2.9: **THE TOP 10 ASIAN MEGA-CITIES**
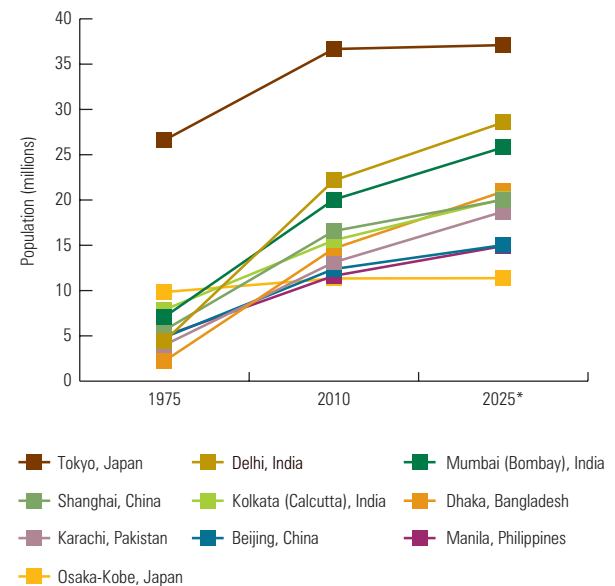
*Projections
Source: United Nations (2010)

BOX 2.6: TOKYO, THE WORLD'S LARGEST MEGA-CITY

The greater Tokyo region, including the prefectures of Chiba, Kanagawa and Saitama, is the most heavily populated metropolitan region in the world with over 35 million. The Tokyo Metropolitan Region consists of 23 wards, 26 cities, five towns and eight villages. It is home to 26 per cent of Japan's total population. The Japanese capital is one of the world's three leading financial centres along with New York and London. Tokyo's metropolitan economy is the largest in the world, with a total gross domestic product equivalent to US $1,191 billion in 2005. Tokyo also serves as a hub for Japan's transportation, publishing and broadcasting industries.

The history of the city of Tokyo stretches back some 400 years. Originally named Edo, the city started to flourish after Tokugawa Ieyasu established his shogunate there in 1603. As the centre of politics and culture in Japan, Edo grew into a huge city with a population of over a million during the 18th century. The Edo Period lasted for nearly 260 years until the Meiji Restoration in 1868, when the Tokugawa shogunate ended and imperial rule was restored. The Emperor moved to Edo, which was renamed Tokyo.

Like many other cities in Japan, Tokyo is prone to earthquakes and flooding. In September 1923, the city was devastated by the Great Kanto Earthquake. During the rebuilding process, suburban districts were developed with rail connections to the city centre. In 1941, the dual administrative system of Tokyo-*fu* (prefecture) and Tokyo-*shi* (city) was abolished and a metropolitan structure was established with a governor as head of the city administration. Tokyo expanded dramatically after World War II. By the 1980s, the city had become a major centre for global business, finance, technology, information and culture.

Being home to a relatively wealthy and homogenous population, the city is composed of narrow building plots and closely packed commercial districts such as Shibuya, Shinjuku, Ginza or the new Roppongi Hills development. The Greater Tokyo area is a consistently dense and multi-centred urban region that is well-served by an integrated system of trains, underground and buses used by nearly 80 per cent of daily commuters. For all its scale and complexity, Tokyo provides a highly efficient urban model and is now seeking to make greater use of its assets based on denser development clusters near the centre, and regenerating the under-used waterfront along Tokyo Bay.

Rapid developments in the Tokyo region have led to a slew of urban problems such as environmental degradation, traffic congestion and deficient disaster preparedness. From 1986 onwards, land and stock prices spiralled upwards, a phenomenon known as a 'bubble'. While development spread to the suburbs, urban infrastructure such as drainage and the road network did not catch up with the rapid increase in housing construction. Restricting demographic growth to the outskirts has become difficult; associated problems such as excessive demographic concentrations, heavy congestion of railways and roads, and the deterioration of the urban environment in residential areas, remain major challenges.

split between a rich and a poor city, with large proportions of the poor living in slum and squatter settlements. Chapter 4 focuses on poverty and inequality in Asian cities.

A consequence of the large size of mega-cities is that they are also plagued by a variety of problems. One of the more common of these has to do with highly competitive land markets that drive the poor, as well as long-established businesses, away to the periphery, resulting in longer commuting distances. This phenomenon calls for efficient, high-speed transit systems, which many Asian mega-cities lack. As a consequence, all roads to the city centre are congested during the morning and evening peak commuting hours. Congestion leads to long delays, air and noise pollution. These types of nuisance have cascading effects on the costs of transport and on health, not to mention those, of a longer-term nature, on the environment. High concentrations of activities in mega-cities also put infrastructures and services under severe strain.

However, multiple business and other connections with the rest of the world are not the sole privilege of mega-cities. Some medium-sized cities also play significant roles in global trade through product specialization. For example, in Pakistan, Sialkot produces sports and medical goods, and Faisalabad specialises in apparel, like Bandung in Indonesia. In India, Jaipur produces gems, as does Kanchanaburi in Thailand. These urban centres compete in the global market and command major shares of trade in these specialty items. The problems they face are similar to those of mega-cities, albeit on an admittedly smaller scale.

'Mega' urban regions and urban corridors

These are very large urban areas the size of fully-fledged regions and are often referred to as Extended Metropolitan Regions (EMR). Many such mega-urban regions have emerged in Asia. For example, the "bullet train" corridor making up the Tokyo-Yokohama-Nagoya-Osaka-Kobe-Kyoto backbone of Japan's development, and the Beijing-Tianjin-Tangshan-Qinhuangdao transportation corridor in Northeast China, are huge mega-urban regions characterized by almost unbroken urban, built-up areas. The Manila-centred mega-urban region in the Philippines nearly spreads over the whole island of Luzon. In Indonesia, the so-called 'Jabodetabek' (Jakarta-Bogor-Debok-Tangerang-Bekasi) area stretches all the way to the medium-sized city of Bandung. In southern China, the population of the urban cluster made up of Shanghai, Nanjing, Suzhou, Changzhou, Zhenjiang, Nantong, Yangzhou, and Wuxi is estimated at more than 73 million, while the Guangzhou-Shenzhen-Hong Kong-Macao-Zhuhai region in the Pearl River Delta is host to 150 million.

These mega urban regions are important for national economies. They make major contributions to national output and are homes to large proportions of a country's population. For example, Tokyo's extended metropolitan region is host to 40 million, or almost one-third of Japan's total population, and almost one in two South Koreans live in Seoul. In Taiwan, Province of China, 37 per cent of the population reside in Taipei. It often happens that in mega urban regions, demographic growth at the core is much

Mega Urban Region	Population 1990 (1,000s)	Population 2000 (1,000s)	Average Annual Increase (%)
Bangkok (BMR)	5 882	6 320	0.72
Rest of BMR	2 707	3 760	3.30
BMR	8 590	10 080	1.60
Thailand	54 549	60 607	1.05
Jakarta	8 259	8 385	0.16
'Botabek'[1]	8 876	12 749	3.70
'Jabotabek'[2]	17 135	21 134	2.10
Indonesia	179 379	202 000	1.20
Metropolitan Manila	7 945	10 491	2.90
Manila outer zone	6 481	9 458	3.90
Manila EMR[3]	14 426	19 949	3.30
Philippines	60 703	72 345	1.80

[1] *Short for the conurbation including Bogor, Tangerang and Bekasi*
[2] *Short for the conurbation including Jakarta, Bogor, Tangerang and Bekasi*
[3] *Short for Extended metropolitan region*
Source: Jones (2001)

slower than in the periphery. Many rural settlements and small or medium-sized towns on the periphery of mega urban regions are growing rapidly (see Table 2.12). In the Bangkok Metropolitan Region, between 1990 and the year 2000, the core population grew at less than one per cent per year, compared with 3.3 per cent in the peripheral area. A similar pattern prevailed in Jakarta during the same period. In Manila, however, the population in both the core and the periphery grew at similar rates during that same decade.

Mega urban regions and urban corridors are part of the restructuring of urban territorial space that comes with globalization. While the concentration of economic activities in these large urban areas stands out as one of the positive outcomes of agglomeration economies, the sheer size of these areas also generate diseconomies of scale. For instance, the mega-cities at the core of mega urban regions are beset with high real estate prices, traffic congestion and poor environmental quality. These negative externalities drive firms and households away from core city locations to the periphery with cheaper land and better environmental quality. Such developments usually occur along transportation corridors, which link the small and medium-size cities along the corridor and help form the mega urban region. These connections relieve pressure on land and services in the core city, promote growth in the rural hinterland, and enable small and medium-sized towns in the mega urban regions to partake in the economic growth process.

BOX 2.7: **DHAKA: MANAGING GROWTH IN A POOR MEGA-CITY**

Dhaka is one of the fastest expanding mega-cities in the world, with its population growing an average 5.6 per cent per year. In 2010, its population is 14.6 million that is projected to grow to 18.7 million in 2020. The capital of Bangladesh receives an estimated 300,000 to 400,000 new migrants every year. The Centre for Urban Studies at Dhaka University estimates that around 140,000 'eco-refugees' (i.e., affected by floods) move to the city every year. Most come from rural areas in search of opportunities for new livelihoods. The migrants' contribution to Dhaka's economic growth is significant, as they provide much-needed labour for manufacturing, services and other sectors. However, this migration also adds tremendous strain on an already crowded city, with only limited scope for any expansion of habitable land due to Dhaka's peculiar topography (being located on the lower reaches of the Ganges Delta).

The attractions of Dhaka to migrants come as no surprise – it is a dynamic city and has attracted substantial industrial investments, particularly in the readymade apparel industry, with the attendant demand for workers and services. However, the city is increasingly characterized by large slums, poor housing, traffic congestion, water shortages, and poor urban governance, which results in mounting law and order problems. The poor mainly live in slums scattered throughout the city, of which nearly 80 per cent are located on privately-owned land that is devoid of basic services. In the poorest quintile of Dhaka's population, only 9 per cent of households are connected to the sewerage network, and only 27 per cent obtain water through piped supply (compared with 83 per cent of the wealthiest quintile). Spatial mapping shows that only 43 of the 1,925 identified slums have a public toilet within 100 metres. Many slum settlements are

within 50 metres of the river and are exposed to frequent flooding.

Urban management in Dhaka is a major challenge. As many as 40 different agencies are involved, with little coordination or planning. As a result, major gaps characterize services and infrastructure. The poorer segments of the population are particularly affected as they lack the resources to find alternative ways of meeting their basic needs. Dhaka has not been able to keep up with the needs of a rapidly growing population. The environment has deteriorated at a sustained pace. The city is prone to frequent flooding, especially during the rainy season. Traffic congestion causes serious air pollution. A large slum population and poor quality housing have combined with water shortages, poor sanitation and inadequate drainage to lower the quality of life in Dhaka to a significant degree for the average resident.

Sources: World Bank (2007b), UNEP (2005)

2.4
Small and medium-sized cities

▲
Port Vila, Vanuatu. Small and medium-sized cities in the Pacific pose unique development challenges. **©Brian Philips**

Urbanization in Asia is broad-based rather than concentrated in just a few cities. The urban population is distributed over a range of city sizes. Nearly half the urban population of Asia lives in small and medium-sized cities of less than 500,000.[8] The distribution of settlements in many Asian countries conforms to the 'rank-size rule'.[9] Cities of all sizes are often well distributed over the geographic expanse. There are, however, some exceptions to this rule. Some countries (e.g. Afghanistan, Cambodia, Mongolia and Thailand) exhibit clear signs of urban primacy, with Kabul, Phnom Penh, Ulaanbaatar and Bangkok accounting for over 50 per cent of the urban population of their respective countries.

In Asia, urban settlements with fewer than 500,000 inhabitants have maintained that 'primate' share of around 50 per cent in recent decades, and are expected to keep it over the next two decades (see Chart 2.10). Countries for which more details are available suggest that small and medium-sized towns account for significant proportions of the urban population. For example, in India, around 50 per cent of the 285 million urban dwellers live in towns with populations under 100,000. The demographic growth rates of many of these small towns are not very different from

those of large cities. In China's mega urban regions along the coast, small towns with populations under 100,000 have expanded rapidly, too, in a sharp contrast with the declining demographic growth rates in small towns in the hinterland.

Small and medium-sized towns typically perform a variety of roles. They serve as local 'growth centres', i.e., markets for rural products and urban services. In a rapidly growing economy, where major activities are concentrated in large urban centres, small and medium-sized cities play an important role, providing indirect links between the rural and the global economy through connections to large cities. This is especially true of those small cities located in the mega urban regions, which have grown far more rapidly than those of the same size in rural areas. Many small towns also serve as administrative headquarters for district or sub-district administration.

Small and medium-sized cities often serve as temporary 'stepping-stones' for rural migrants on their way to further destinations. In many countries, these subsequent urban-to-urban migration streams are as significant as rural-to-urban flows. The bulk of urban-to-urban migration is from small and medium-sized cities to larger ones. In mega urban regions, this may also involve migration from large to small or medium-sized cities in the periphery.

Despite their significant role as links between rural and urban economies, small and medium-sized cities feature poor infrastructure – unpaved roads, inadequate water supply and sanitation, poor telephone and Internet connectivity and erratic power supply. Hewett and Montgomery (2001) show that smaller cities are less well served than larger ones. Far from negligible as they can be on occasion, these intra-urban differences are not as large as urban-rural differences in access to services. India's smaller towns, and particularly those with populations under 50,000, typically feature low incomes per head and high incidence of poverty. This incidence is inversely proportional to the size class of cities, i.e., the smaller a town, the poorer it will be. The percentage of households that are deprived of access to basic amenities, such as drinking water, toilets and electricity, is also inversely proportional to the size of urban centres in India (Kundu & Bhatia, 2002). Smaller cities also typically benefit from fewer human, financial and technical resources. These deficiencies constrain economic growth in small towns, which as a result often remain as service centres for the rural hinterland.

Most Asian countries have deployed policies to strengthen the role of small and medium-sized towns, but it is generally agreed that these schemes have not worked well. One frequent reason was that such programmes were designed at national level, and therefore failed to recognize the factors specific to each urban centre. Moreover, in many countries, government control over agricultural prices did not provide adequate stimulus for agro-processing in small towns. Another factor was that industrialization policies were not often targeted at small enterprises (Satterthwaite & Tacoli, 2003).

What seems to have worked in favour of small and medium-sized town development, though, is the trend toward decentralization in Asian countries. In many of these, smaller cities have begun to benefit from incipient political and administrative decentralization, under which national governments are devolving some of their powers, including revenue-raising, to local authorities. The smaller of these have found that devolution opened up fresh opportunities to become financially stronger and exercise the powers devolved on them (see Box 2.8). Better resourced, more adept and

CHART 2.10: **THE DISTRIBUTION OF SETTLEMENTS IN ASIA**
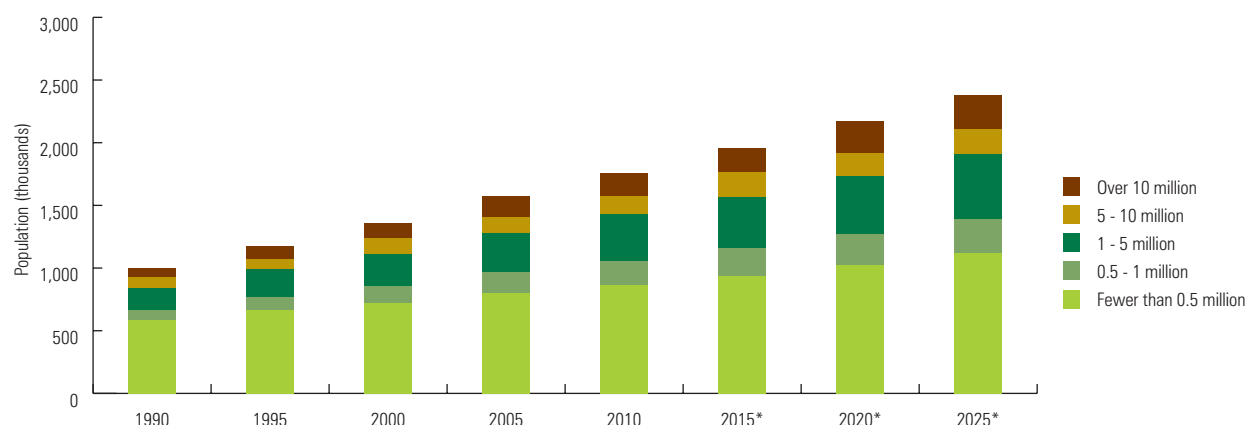
*Projections
Source: United Nations (2010)

TABLE 2.13: **POPULATION DISTRIBUTION IN ASIA, 2010**

Size Class of Cities	Population		
	Number of Agglomerations	Combined Population (1,000s)	Urban Population (%)
10 million or more	11	184 642	11
5 to 10 million	20	145 062	8
1 to 5 million	191	372 490	21
500 000 to 1 million	275	190 525	11
Fewer than 500 000	-	864 595	49
Total urban	-	1 757 314	-
Total rural	-	2 409 427	-
Total	-	4 166 741	-

Source: United Nations (2010)

accountable local authorities in smaller urban centres are able to compete with larger cities for new investment, and help retain added value from local productions that hold the best promise for more decentralized urban systems. However, due to their poor management capacities, local authorities have not been able fully to benefit from the opportunities afforded by decentralization (Tacoli, 2003).

In many Asian countries, efforts are underway to support infrastructure development in small and medium-sized towns. India, for instance, launched an Urban Infrastructure Development Scheme for Small and Medium Towns in late 2005. Beyond improved infrastructures, the objective is to "help create durable public assets and quality-orientated services in cities and towns, and promote planned integrated development" (GoI, MoUD, 2009:3).

In China, small town development policies have resulted in a massive effort to build small cities across the country, in a bid to absorb excess rural populations that were surplus to requirements on farms. This 'rural urbanization' policy is encapsulated in the slogan, "Leave the land, but not the countryside; enter the factory, not the city". The aim is to channel agricultural labourers into new towns and small cities that are close to the countryside. Small market towns and townships are upgraded into incorporated towns, and major towns are being developed into small cities (Gale & Dai, 2002).

▲
Feng Huang Cheng (Phoenix Town), Hunan Province, China. ©**Henry Tsui/Shutterstock**

Density and the pace of urbanization

Mumbai is the densest city in the Asia-Pacific region. **©Sapsiwai/Shutterstock**

2.5.1 Urban densities in Asia-Pacific

Unlike their counterparts in other regions, Asian cities are very dense from a demographic point of view. Average urban densities range from 10,000 to 20,000 per sq. km, which is almost double the rates in Latin America, triple those in Europe, and 10 times those found in US cities. This comparison across continents clearly suggests that although many Asians do not live in cities, those who do are crowded into relatively small areas (World Bank, 2007a).

Of the top 20 densest cities in the world, 16 are in Asia (see Chart 2.11), the other four are Bogotá, Kinshasa, Lagos and Lima. A good way of gauging the demographic density of Asian cities is to compare them with others in the world – London, Moscow and Tokyo have approximately the same density, but Mumbai is six times denser. Densities in New York and Paris are lower by half than those found in Bangkok. Shanghai accommodates six million people within a seven km. radius, but Seoul hosts just as many within a 10 km radius and Paris within a 14 km radius. Still, the geographic expanse of a city is not the only factor affecting demographic density: also at play are complex interactions among land markets, transportation systems, local culture and government decisions.

At the moment, the inner cities of Asia's urban areas are undergoing major spatial transformations, the origins of which are of a cultural nature.

"The production of *globally orientated spaces* in the inner city cores can be seen in the massive and continuing construction of office and hotel space mostly by transnational corporations… The production of *consumption spaces* can be observed by the immense conversion of living space into commercial space in the city cores…[which] are increasingly developing into a place of consumption, with modern supermarkets, fancy restaurants, and posh coffee and retail shops…in the urban periphery, large shopping complexes have been established" (Douglass & Huang, 2007:22).[10]

Asian cities have been dense for centuries. Beijing's *hutongs,* Hanoi's Old Quarter (the '36 streets'), Delhi's *Katras* and Ahmedabad's *Pols* provide glimpses of how dense these cities already were in medieval times. In modern Asian cities, demographic densities vary significantly within built-up areas, with high concentrations in some locations. The pattern of densities within the built-up area is an important factor in land use efficiency (Bertaud, 2007). In general, a city's land use is considered more efficient when the pattern of densities reduces daily commuting distance, with employment concentrated in or around the centre or in a few specific areas. Higher densities towards the centre and lower densities in the periphery is the pattern prevailing in most cities of the world.

Density in cities is affected by the modes of transport available to commuters. In high-density cities, the commuting
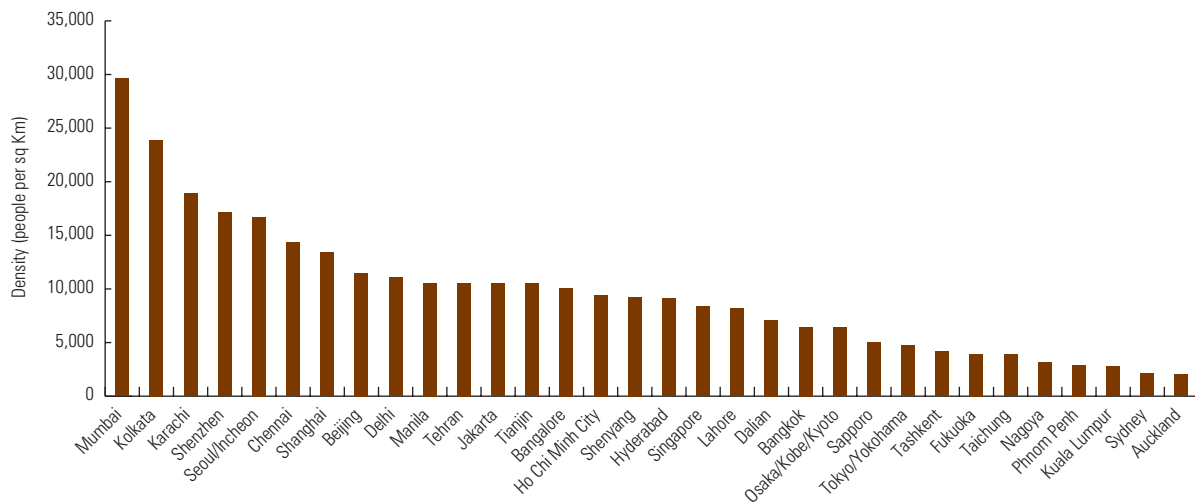
Source: http://www.citymayors.com/statistics/largest-cities-density-125.html [11]

population typically resorts to the proper public transport services available rather than to personal vehicles, and the situation is the reverse in low-density cities. High-density cities are not suitable for high rates of private car use, as road capacity per person is low. Moreover, private automobiles take up large amounts of space when in motion and for parking, and these two types of congestion can become very serious in dense cities even when only a small proportion of the resident population own cars. Still, in some high-density cities like Tokyo, Singapore, Mumbai and Hong Kong, China, public transport systems work well and carry millions of commuters daily. These tend to be the exception, though, as many Asian cities lack well-functioning public transport systems and commuters have little alternative but personal vehicles. This creates major traffic congestion and results in longer commuting times. Such cities must plan for lower densities in central areas; they must also spend more on public transport (Bertaud, 2007), as some Asian cities have done in recent years: Delhi and Bangkok now have underground railway and skytrain networks, and both Manila and Kuala Lumpur have introduced light rail transit (LRT) systems.

Walking or cycling is an efficient mode of individual transport, and one that is compatible with high densities, including the narrow streets of the old quarters of Asian cities. In Viet Nam, the contrast between two dense cities is very visible. The capital Hanoi has retained its character, with traditional old residential buildings and shops in the central area. While bicycles remain a major mode of transport, motorcycles and electric bikes are becoming the preferred form, and cars are the exception. One of the defining features of Ho Chi Minh City, on the other hand, is a more modern make-up, including wide boulevards and increasing numbers of automobiles. The commercial core of the city is crowded and as in so many Asian cities, it has become increasingly difficult to travel there by foot or bicycle. Chapter 4 (on poverty and inequality in

Asian cities) further discusses urban transport.

Land markets in high-density cities reflect the growing demand for land in central urban areas. Scarce supply drives up land prices in prime locations. The business districts in Mumbai, Shanghai and Hong Kong, China, command higher property values than those in London, New York or Tokyo. Of the world's top 10 expensive cities in terms of property prices, four are in Asia – Tokyo, Singapore, Mumbai and Hong Kong, China, with Mumbai being the only one in 10 located in a developing economy. Residential apartment prices in Hong Kong, China, range from US $10,490 to US $14,780 per sq. m., compared with US $7,600 to US $11,870 in Tokyo, up to US $11,500 to US $13,340 in Singapore and US $8,600 to US $10,300 in Mumbai. By comparison, Chinese cities are significantly cheaper by global standards. Prices of flats in Shanghai range between US $2,870 and US $3,540 per sq. m. while those in Beijing are priced at US $2,100 to US $2,330 per sq. m. In South-East Asia, the price of a 120 sq. m. condominium in Jakarta is around US $1,073 per sq. m., i.e., cheaper than in Kuala Lumpur (US $1,400), Manila (US $1,969) or Bangkok (US $2,819).[12]

As a market response to land demand, high density results in more efficient use of space. It acts as a cure for urban sprawl as it makes cities more compact and hence more efficient from the perspective of infrastructure investment. Government actions, through planning regulations and investments in infrastructure, can also have a significant impact on densities and prices. Density is measured with the floor-area ratio (FAR), i.e., the ratio between the total built-up space and the plot area, which assesses the intensity of land use. For instance in New York City, the floor-area ratio varies from 15 in the Wall Street district to 0.4 in suburbs. In some Asian cities like Bangkok and Shanghai, the maximum authorised floor-area ratio is 10, i.e., total built-up space can be up to 10 times the plot area. In market economies, local floor-area ratios are

Region	1990-1995	1995-2000	2000-2005	2005-2010	2010-2015*	2015-2020*	2020-2025*	2025-2030*
World	2.4	2.2	2.2	1.9	1.8	1.8	1.7	1.5
Asia	**3.2**	**2.9**	**2.8**	**2.3**	**2.2**	**2.0**	**1.9**	**1.7**
Oceania/Pacific	**1.5**	**1.4**	**1.5**	**1.3**	**1.2**	**1.2**	**1.2**	**1.1**
Europe	0.3	0.1	0.3	0.4	0.4	0.3	0.3	0.2
North America	1.7	1.7	1.4	1.3	1.2	1.1	1.0	0.9
Latin America and the Caribbean	2.5	2.2	1.9	1.6	1.4	1.2	1.0	0.9
Africa	3.8	3.4	3.4	3.4	3.3	3.1	3.0	2.8

*Projections
Source: United Nations (2007a)

▲
Residential apartments in Hong Kong, China, range from US $10,490 to US $14,780 per sq. m. **©Oksana.perkins/Shutterstock**

closely linked to local demand for floor space: high demand means high ratios. When local planning laws restrict floor-area ratios in order to control densities, the resulting shortages in the supply of built-up space lead to higher property prices. While there is no ideal floor area ratio, urban planning in Asia must recognize that demand for land is bound to grow in rapidly expanding cities, a phenomenon which planning laws must facilitate rather than constrain.

2.5.2 Pace of urbanization in Asia-Pacific

The high density of Asian cities is also often seen as a result of their own rapid expansion. Together with lack of serviced land, inadequate infrastructure in the periphery leads to higher concentrations of people in and around city centres. Cities' ability to invest in infrastructure in response to expanding populations has a direct bearing on densities.

Although the growth in the Asia-Pacific region's urban population is faster than in Latin America and the Caribbean and the world average, it is slower than in Africa. In Asia, urban population growth is projected to slow down from an annual 3.2 per cent rate during 1990-1995 to 2.2 per cent between 2010 and 2015 (see Table 2.14). Within the Asia-Pacific region, this slowdown is clearly visible since the early 1990s (see Chart 2.12).

The pace of urbanization is dependent on many factors, and simple projections based on past trends may not be correct. For example, Kolkata, Seoul and Chennai (formerly Madras) had fewer residents in the year 2000 than was forecast by the United Nations in 1985. In many Asian countries, the prospective 'tipping point' of 50 per cent urban populations has been pushed back due to the above-mentioned slowdown in urban demographic expansion. For instance, India's 2001 census showed that urban population numbers were much lower than predicted earlier. On a worldwide scale, the growth rate of the urban population is expected to slow down over the next few decades.

Asia's 20 fastest-growing cities are listed in Table 2.15. All had populations above 500,000 in 2005, and as many as 15
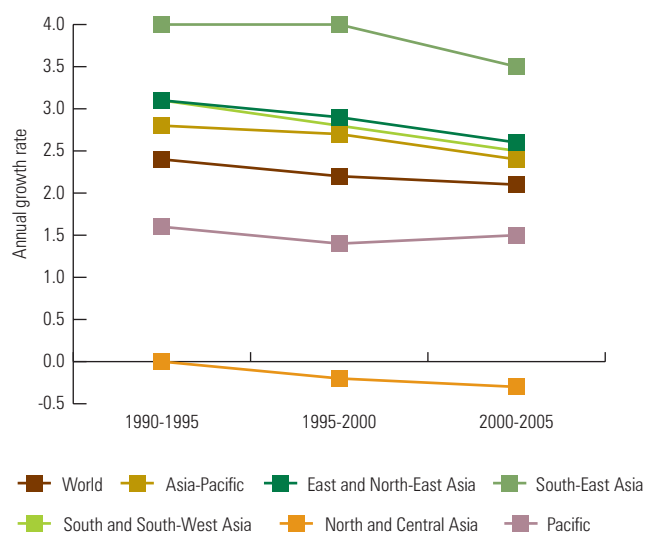
Source: ESCAP (2010)

were located in China. All but one on the list have grown rapidly on the back of economic expansion. The exception is Kabul, where demographic growth is largely due to migration of internally displaced people. Many Chinese cities on the list are in the rapidly growing Pearl River Delta region. Others on the list are near major mega-cities, e.g., Ghaziabad (near Delhi) and Goyang (near Seoul). Surat, western India, is a major national centre for diamond polishing and textiles. If these cities continue to grow at the same rates as in the last decade, some stand to double their populations in less than 10 years.

These prospects raise a critical question, which has to do with the capacity of Asian cities to accommodate such demographic growth. Many cities in China have plans for major capital investment in infrastructures and therefore seem to be in a better position to cater to the needs of business and people. In contrast, a city like Kabul (see Box 2.4) struggles to cope with a rapidly expanding population that does not come associated with economic development.

TABLE 2.15: **ASIA'S FASTEST GROWING CITIES, 1995-2005**

Rank	Country	City	Urban Population 1995 (1,000s)	Urban Population 2005 (1,000s)	Urban Population Growth Rate (% /Year)	Population Doubling Time (Years)
1	China	Shenzhen	2 304	7 233	11.44	6.4
2	China	Suzhou, Anhui	623	1 849	10.88	6.7
3	China	Shangqiu	574	1 650	10.56	6.9
4	China	Xinyang	571	1 450	9.32	7.8
5	China	Nanyang, Henan	753	1 830	8.88	8.1
6	China	Xiamen	1 124	2 371	7.46	9.6
7	China	Wenzhou	1 056	2 212	7.39	9.7
8	China	Luzhou	706	1 447	7.18	10.0
9	China	Nanchong	1 029	2 046	6.87	10.4
10	China	Fuyang	376	726	6.58	10.9
11	China	Zhuhai	518	963	6.20	11.5
12	Afghanistan	Kabul	1 616	2 994	6.17	11.6
13	China	Quanzhou	745	1 377	6.14	11.6
14	India	Ghaziabad	675	1 237	6.06	11.8
15	Malaysia	Klang	466	849	6.00	11.9
16	India	Surat	1 984	3 558	5.84	12.2
17	Republic of Korea	Goyang	493	859	5.55	12.8
18	China	Shaoxing	426	731	5.40	13.2
19	China	Dongguan, Guangdong	2 559	4 320	5.24	13.6
20	China	Yantai	1 188	1 991	5.16	13.8

Source: United Nations (2007a)

2.6
Urbanization in Asia: Diagnosis & policies

Asia is home to nearly two-thirds of the world population, and to the world's three most heavily populated nations. Many Asian countries have benefited from the 'demographic dividend' in the form of cheaper labour as well as the large pool of qualified technicians required for rapid economic growth.

The basic diagnosis based on the foregoing analysis is that urbanization in Asia is inevitable. According to the latest available figures from the United Nations, by early 2026 half of Asia's population will live in urban areas. This is inevitable because urbanization comes hand in hand with economic development. Historically, the relationship between urbanization and economic development is seen as an 'S' shaped curve. Low levels of development typically go hand in hand with low urbanization rates and moderate urban demographic growth. The more sustained development phase of a country is characterised by rapid urban population growth (largely through migration and reclassification). In more mature economies, urban demographic growth tapers off and urbanization stabilizes at high rates. This is the path that countries in other regions of the world have trodden, and this is the path the Asia and the Pacific region is to follow in turn.

Various Asian countries find themselves on different trajectories of economic development and demonstrate different urbanization patterns. Many are still classified as 'low income' and consequently, are less urbanized than others. Thus while on the whole, the Asia-Pacific region is less urbanized as compared with others, many countries there are gradually catching up and are expected to cross the tipping point of '50 per cent urban' in the next two decades.

What, then, makes the Asian urbanization process different from other continents? Asian cities are in a constant state of flux and a major difference lies in the scale of the demographic expansion. Over the last two decades (1990 to 2010), Asia's urban demographic expansion amounted to the combined populations of the USA and the European Union. No other continent has experienced any increase this size and in such a short time span.

A second defining feature of urban Asia is high densities – indeed, the highest in the world, ranging between 10,000 to 20,000 residents per sq km. This is due not just to modern skyscrapers and high-rise residential buildings, but also to the myriads of small, low-rise, high-density buildings that are typical of the traditional layout of older areas. As one might expect, high densities come with average spaces per head – both open and residential – that are among the lowest in the world.

The third defining feature of Asian cities comes under the form of mixed land-use development. More specifically, residential areas sit next to commercial activities, just as traditional buildings stand alongside modern skyscrapers, and formal and informal activities take place in the same space.

This diagnosis clearly suggests that the scale of Asia's urban population growth calls for significant increases in infrastructure investment. Short of this, the growth and prosperity of Asian cities could be seriously jeopardised. Given the continent's large population and rapid economic growth, it is imperative to ensure that urban development in Asia is 'green' and low-carbon. Chapter 5 discusses the urban environment further.

In the past, adequate investment in urban infrastructure has been lacking as policy-makers did not view urbanization as a process that was compatible with economic development. More specifically, the notion prevailed that urbanization *per se* did not contribute to development, and instead came only in response to poor economic and living conditions in rural areas. Public policy was regarded as biased towards cities which, in turn, increased the attraction of rural people to urban areas. The dominant policy paradigm was to prevent urbanization and encourage potential migrants to remain in rural areas. In many countries this was evident in restrictive policies regarding rural to urban movements of people, combined with a lack of funding for urban infrastructure development. A survey by the United Nations (2008:12) reports that:

"Faced with the numerous opportunities and challenges associated with urbanization, many Governments have consistently considered their population's spatial distribution as a concern. In 2007, 85 per cent of Governments expressed concern about their pattern of population distribution, a percentage comparable to that recorded in the 1970s... Among developing countries, 56 per cent wished to make a major change in the spatial distribution of their populations, whereas 32 per cent desired a minor change. Among developed countries, 37 per cent desired a major change and 39 per cent a minor change. Dissatisfaction regarding patterns of population distribution was highest in Africa (74 per cent of its countries desired a major change) and Asia (51 per cent desired a major change). In Latin America and the Caribbean, Oceania and Europe, about 40 per cent of Governments considered that major changes in spatial distribution were desirable."

For example, in Papua New Guinea, opposition to urbanization has continued from both urban authorities and influential leaders. In the mid-1990s, the prime minister of Morobe province sought to expel all illegal settlers from the

coastal capital city Lae. Similar policies in other centres in Papua New Guinea have continued throughout the decade. In Vanuatu, too, slum settlements have been seen as blighted places from which people had to be removed. Pervasive opposition to urbanization is not specific to the Pacific island countries, though. Policymakers in many other countries have held similar notions.

The turning point in many Asian countries came during the 1990s with a shift of focus in national policies that clearly linked urbanization and economic growth. This came with a recognition that economic growth required links between national and global economies and that this could be achieved through urban development. Subsequently, many Asian countries have implicitly promoted urbanization, though political rhetoric may have stated otherwise.

In Viet Nam, the *Doi Moi* process[13] which the government endorsed in 1987 effectively ended a period of urban neglect. The policy changes that accompanied *Doi Moi* made cities more acceptable and attractive as centres for formal and informal business and opportunity. Controls on official migration continued but were less strictly enforced over time. It became politically and socially acceptable to move to a town or city, although government policies to this day still seek to balance development and capital investment between urban and rural provinces.

In China since the 1990s, controls on population movements have become weaker, and recently many rural people have been able to migrate to cities. Nearly 100 million rural Chinese did so over the course of the 1990s. China also took to granting city or town status to many settlements, with

the attendant prestige and other benefits. Although freedom of movement remains restricted somehow in China, the need to urbanize is widely accepted by now. In anticipation of rapid urban expansion, major investments in urban infrastructure are taking place. For example, throughout the 1980s, Shanghai spent five to eight per cent of its GDP on urban infrastructure and redevelopment. Beijing and Tianjin now spend more than 10 per cent of their respective GDPs on roads, water and sewerage networks, housing construction and transportation (Yusuf & Saich, 2008).

Many Asian countries have benefited from the 'demographic dividend' and have achieved rapid economic growth. Far from being considered a drawback, demographic size is now seen as providing major benefits such as cheaper labour, large pools of skilled technical staff and more generally the ability to tap the enormous potential of the Asian population. The positive benefits deriving from urbanization include a diverse and strong economy, together with the potential for poverty reduction. Thanks to economies of scale, demographic concentrations in urban areas greatly reduce the unit costs of good quality services, healthcare, education and cultural activities (Satterthwaite, 2002).

Most Asian countries are still in the early stages of urbanization. This gives them an opportunity to prepare for urban expansion. If they are able to plan and pave the way for such expansion with proper infrastructures, they will find themselves in a better position to alleviate the negative aspects of urbanization, such as congestion, pollution and slums. For this to happen, urban policies must become part and parcel of national development policies.

ENDNOTES

1 The only exception to this region-wide pattern was the Philippines. Most of the country's urbanization occurred between 1980 and the year 2000 but real GDP per head changed little over the period. It is unlikely that a single factor can fully explain this phenomenon, but the highly concentrated nature of the country's urbanization, coupled with the haphazard fashion in which it has been occurring (and possibly a fragmented geography, too), may offer some clues, as mentioned in World Bank (2007a - East Asia and Pacific update).

2 According to Bloom, Canning & Jamison (2004), declining mortality and fertility rates in Asia between 1960 and the year 2000 led to a rise in the ratio of working-age people (15–64) to the dependent population (0–14 and 65 plus), from about 1.3 to over 2, resulting in substantial increases in worker productivity and GDP per head.

3 Shanghai's Municipal Population and Family Planning Commission has launched a public information campaign to highlight exemptions to the country's otherwise uniform one-child policy. For instances, those couples whose members were both only children are now allowed a second child (BBC News, 2009).

4 It is not possible to split the 'migration' and 'reclassification' components of these estimates.

5 *Hukou* is the household registration system in China under which some changes of permanent residence are subject to approval from one or more authorities. Movement within urban or rural areas is free. However, permits are required for changes from rural to urban areas or from a smaller to a larger city. The "floating population" *(liudong renkou)* is a unique concept in China that is tied to the *hukou* system. Individuals who are not living at their *hukou* location are considered "floating". This concept is based on the notion that the *hukou* location is where one belongs and that migration is not considered official and permanent until the migrant's *hukou* location is also changed (Chan, 2008; Fan, 2008).

6 This section is based on ESCAP (2008b and 2008c).

7 The source of this information is Osaka (1996). This situation appears to have held even in recent years.

8 *World Urbanization Prospects 2007* does not provide information on settlements with populations below 500,000. For the purpose of this section, the small and medium towns are referred to as towns below 500,000, although for some countries in Asia this may not be an adequate assumption.

9 The rank-size rule, or Zipf's law, refers to the distribution of cities by size within a system. Cities are listed in descending order of population and given a rank, with the city of highest population as rank one, and the next city as rank two etc. The Zipf's law states that the size of the city ranked second is roughly half of the one ranked first, and the size of the one ranked third is roughly half that of the one ranked second, etc. (see Soo, 2004).

10 Waibel, M. (2006) "The production of urban space in Viet Nam's metropolis in the course of transition". *Trialog* 89(2): 43-48, as quoted in Douglass and Huang (2007).

11 The boundaries of the cities in the chart may not match those in the UN *World Urbanization Prospects,* resulting in discrepancies in density figures.

12 The figures are based on the average price of a 120 sq. m, good-condition, high-end apartment in the city centre, i.e., where most foreigners are likely to buy. Data were collected during 2008. The US dollar exchange rate is as at January 27, 2009 *(Global Property Guide, 2009).*

13 The *Doi Moi* process was an economic reform and poverty eradication programme which the Government of Viet Nam launched in 1986. The comprehensive scheme enabled the country's transition from central planning to a market-orientated economy.

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