This chapter reviews trends and projections related to the rapid increase of people living in cities around the world, as well as some of the consequences of this phenomenon.
Demographics of urbanization and trends

For the first time in history, the majority of the world’s population is living in urban areas, and this proportion continues to grow. It was only a few years ago that the world’s urban population started to outnumber its rural population. One hundred years ago, only 2 in 10 people in the world were living in urban areas. By 2030, 6 out of every 10 people will be city dwellers, rising to 7 out of every 10 people by 2050. According to population growth projections, virtually all global growth over the next 30 years will be in urban areas. The number of urban residents is growing by nearly 60 million every year.1

As humans change, so do their living and working environments. In contrast to agrarian rural settings, cities are characterized by their mass production, service industries and marketplaces. Their scale, density and diversity of social, cultural and ethnic groups also set them apart from rural contexts. It is not only the visible aspects of living and working environments that change, but also their intangible qualities, such as their intellectual assets, creativity, vibrancy and shared identity. Typical urbanites have more choice and opportunity than their ancestors ever had before.

Urbanization refers to the overall increase in the proportion of the population living in urban areas, as well as the process by which large numbers of people have become permanently concentrated in relatively small areas, forming cities.2 While specific definitions of “urban” differ from one country to another, in all regions urbanization has been characterized by demographic shifts from rural areas to cities; growth of urban populations; and overall shifts in the economy from farming towards industry, technology and service.

GLOBAL TRENDS AND PROJECTIONS

Urbanization became more rapid as globalization spread industry and technology to all corners of the world. For example, whereas London took roughly 130 years to grow from 1 to 8 million people, Bangkok took 45 years, and Seoul took only 25 years.3 Globally, urban growth was at its peak during the 1950s, with a population expansion of more than 3% per year.4

By the middle of the 21st century, the urban population will almost double, increasing from roughly 3.4 billion in 2009 to 6.4 billion in 2050. In contrast, rural populations will decline around the world during this same time frame.5

Despite these dramatic increases in the total number of city dwellers, the overall pace of urbanization is not accelerating. On a global scale, the urban population is expected to grow roughly 1.5% per year between 2025 and 2030.5

As the world becomes more urban, people will continue to live in cities of all sizes, with a pattern of city size distribution similar to that which is evident now.6 Currently, around half of all urban dwellers live in cities with between 100 000 and 500 000 people, whereas fewer than 10% of urban dwellers live in mega-cities (defined by UN-HABITAT as a city with a population of more than 10 million).1 In many places, however, cities will merge together to create urban settlements on a scale never seen before. These new configurations will take the form of mega-regions, urban corridors and city-regions, creating a new urban hierarchy and landscape.

Today, mega-regions are amassing larger populations than mega-cities. Mega-regions are natural economic units that result from the growth, convergence and spatial spread of geographically linked metropolitan areas and other agglomerations.7 They are growing considerably faster than the overall population of the countries in which they are located.8 The population of China’s Hong Kong-Shenzhen-Guangzhou mega-region, for example, comprises approximately
120 million people, and it is estimated that Japan’s Tokyo-Nagoya-Osaka-Kyoto-Kobe mega-region will have a population of 60 million by 2015.

In urban corridors, city centres of different sizes are connecting along transport routes. In Africa, the Greater Ibadan-Lagos-Accra urban corridor, spanning roughly 600 kilometres across four countries, is the engine of the regional economy in West Africa. The corridor developing between Mumbai and Delhi in India will stretch about 1500 kilometres from Jawaharlal Nehru Port in Navi Mumbai to Dadri and Tughlakabad in Delhi. Urban corridors are changing the functionality of large and small cities, and even towns, increasing the growth of trade, real estate development and land value along their ribbon-like development areas.

At still another level, city-regions are developing as the result of large cities extending beyond their administrative boundaries to engulf smaller cities and towns, absorbing semi-urban and rural surrounding areas, and in some cases merging with other intermediate cities. Many city-regions have grown enormously over the last 20 to 30 years. 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 more than 17 million. In Brazil, Metropolitan São Paulo already covers 8000 square kilometres, with a population of 16.4 million. The extent of South Africa’s Cape Town city-region, when including the distances from which commuters travel to and from the city every day, reaches up to 100 kilometres.

Suburbanization, or urban sprawl, is also becoming prevalent around the world. Its hallmark characteristics include a population that is widely dispersed in low-density development; separated residential and commercial areas; a network of roads marked by long blocks and poor access; and a lack of well-defined, thriving activity centres, such as downtown areas. Other features usually associated with sprawl include overdependence on motorized transport coupled with a lack of transport alternatives, and pedestrian-unfriendly spaces. In most cases, sprawl leads to increased public infrastructure costs. Sprawling metropolitan areas consume much more energy than compact cities and require a greater output of materials such as metal, concrete and asphalt because homes, offices and utilities are farther apart.

**URBAN GROWTH IS NOT UNIFORM**

Urbanization trends vary across different parts of the world. Some cities and regions are experiencing rapid growth, whereas other cities and regions are in population decline. Currently, Africa and Asia are the least urbanized regions, with 40% and 42% of their populations, respectively, living in urban areas. Yet by 2050, their urban populations will increase to 62% in Africa and 65% in Asia. Meanwhile, in Europe more than half of all cities are expected to experience population declines over the next 20 years.

Almost all urban population growth in the next 30 years will occur in cities of developing countries. Between 1995 and 2005, the urban population of developing countries grew by an average of 1.2 million people per week, or around 165 000 people every day. By the middle of the 21st century, it is estimated that the urban population of these countries will more than double, increasing from 2.5 billion in 2009 to almost 5.2 billion in 2050. Nonetheless, on average the rate of urban population growth is slowing in developing countries, from an annual rate of roughly 4% from 1950 to 1975, to a projected 1.55% per year from 2025 to 2050.

In contrast, the total urban population in the developed world is expected to remain largely unchanged over the next two decades, increasing from 920 million people in 2009 to slightly more than 1 billion by 2025. Immigration – both legal and illegal – will account for more than two thirds of urban growth in high-income countries. Without immigration, the urban population in these countries would probably decline or remain the same in the coming decades.

Urban growth in developing countries is far from uniform, and this dissimilarity will only increase in the future. While high growth rates are expected in...
around half of urban areas in the next 20 years, another 16% will experience slow growth rates, and 11% will see their populations regress – and, very likely, their economies as well. Cities such as Phnom Penh, Cambodia; Tijuana, Mexico; Marrakesh, Morocco; and Lagos, Nigeria, are expected to continue to grow at annual rates of around 4%, effectively doubling their populations within the next 17 years. Some cities in China, such as Shenzhen and Xiamen, will experience annual growth rates of more than 10%, doubling their populations roughly every seven years.

Meanwhile, other cities in developing countries are expected to experience population declines. These include La Paz, Plurinational State of Bolivia; Belo Horizonte, Brazil; Dengzhou, China; Madurai, India; Bandung; Indonesia; San Luis Potosi, Mexico; Rabat, Morocco; and Manila, Philippines. In these cities, departing residents will leave behind unoccupied houses, vacant commercial sites, idle infrastructure and neighbourhoods in physical decay.

City and regional planning will require new methods and techniques that respond to urban development, expansion and growth management, but also to population decline or outmigration. Smart planning for growth needs to be combined with smart planning for contraction for more sustainable and balanced urban and regional development.

The benefits of urbanization

For both rich and poor, in developed and developing countries, cities offer unique opportunities for residents to increase income, to mobilize for political action, and to benefit from education as well as health and social services. The density of urban settings lends itself to more efficient and environmentally sensitive housing, transport systems and other physical infrastructure.

Urbanization is also linked to economic development. Most urbanized countries have higher incomes, more stable economies and stronger institutions, and are better equipped to withstand the shocks and volatility of the global economy. Conversely, most countries with a high per capita income are among the most urbanized, whereas most countries with a low per capita income are among the least urbanized. In both developed and developing countries, cities generate significant portions of gross domestic product and national wealth, and create development opportunities, jobs and investment. In the coming years, cities are likely to have even stronger roles as engines of growth and key factors of national development – particularly those cities that become parts of urban agglomerations such as mega-regions and urban corridors. In the future, regional and urban development will be linked more strongly, in such a way that successful cities will be located in successful regions.

Urbanization is not only a positive force for economic development, but also one that can confer desirable social and health outcomes. Urban populations are generally better off than their rural counterparts: they tend to have greater access to social and health services, literacy rates are higher and life expectancy is longer.

Numerous cities around the world have capitalized on the opportunities presented by urbanization to create healthier environments. Healthy Cities networks are being established in all World Health Organization (WHO) regions. Initiated by the WHO Regional Office for Europe in 1986, the networks now include thousands of cities, towns and regions in dozens of countries around the world. Some networks are country specific, whereas others are regional. Typically, each network develops its own approach based on local needs and concerns (Box 1.1), but all have a common root in the concept of the city as a key setting for health promotion; a place where environments support health; where municipal, regional, provincial and national governments develop and implement policies that are good for health; and where citizens are engaged in the process of creating healthier neighbourhoods and cities by increasing control over their health and its determinants.
The challenges of rapid, unplanned growth

Despite their opportunities and benefits, many cities have generated inequalities, various forms of exclusion and marginalization, and serious environmental problems.

Rapid population growth can strain municipal capacity to regulate air and water quality, provide sanitation, ensure food availability, protect food safety and safeguard the quality of health care provided by both the public and private sectors. Unhealthy housing, problems with food and water safety, congested traffic, air pollution and crime are common consequences.

Often, growth occurs so quickly that municipal planners do not know how many people are residing in their cities, where they are living or what kind of support they require. This lack of
basic information creates situations in which public resources fail to reach those who are most in need.

Rapid, unplanned urbanization also contributes to urban poverty, which is becoming a severe, pervasive and largely unacknowledged feature of urban life. Poverty can be found in all parts of the world, including cities in Sweden, the United Kingdom and the United States.\textsuperscript{20} In many low- and middle-income countries, the urban poor are most visible in large-scale slums.

Today, an estimated 828 million people live in slum conditions, representing around one third of the world’s urban population. The vast majority of slums – more than 90\% – are located in cities of developing countries. It is often the fastest-growing cities that have the highest concentrations of these informal settlements.\textsuperscript{14}

Slum dwellers often experience difficult social and economic conditions that manifest different forms of deprivation – material, physical, social and political (see Box 1.2 for a description of slums in Nairobi, Kenya).\textsuperscript{21} They live in overcrowded, poorly constructed housing, often with insecure land possession. Reduced access to safe food and water, poor sanitation, a breakdown of traditional family structures, high crime and high unemployment rates affect slum dwellers’ health. Slums are home to a wide array of infectious diseases (including tuberculosis, hepatitis, dengue fever, pneumonia, cholera and malaria), which spread easily in highly concentrated populations. Despite the tremendous need, health-care services are generally difficult to access in these areas.

Slums are no longer just marginalized neighbourhoods housing a relatively small proportion of the urban population. In many cities, they are the dominant type of human settlement (Figure 1.1), carving their way into the fabric of modern-day cities, and making their mark as a distinct category of human settlement that now characterizes so many cities in the developing world.

Cities, especially those in wealthier areas, have been significant contributors to climate change. Collectively, cities account for 75\% of global energy consumption and a similar proportion of all waste. According to latest estimates, urban areas contribute directly to more than 60\% of greenhouse gas emissions.\textsuperscript{22} It is no coincidence, therefore, that climate change has emerged at the forefront of international debate at precisely the same time that the planet has become predominantly urban.

Ironically, cities will also be among the areas most affected by climate change. If sea levels rise by just 1 metre, many major coastal cities will be under threat, including Buenos Aires, Argentina;
FIGURE 1.1
WHERE DO CITY DWELLERS LIVE IN SLUMS?


BOX 1.3
SPOTLIGHT ON CITIES VULNERABLE TO SEA LEVEL RISE

Cities at risk from sea level rise include:

COTONOU, BENIN. Benin’s largest urban centre, with around 700,000 residents, is in danger from sea level rise and storm surges. Most of Cotonou’s population live in slums, making them especially vulnerable to these changes. Beaches, roads and buildings have already been destroyed.24

ALEXANDRIA, EGYPT. Along Egypt’s Mediterranean coast, a sea level rise of 50 centimetres would force more than 2 million people to abandon their homes. World-famous historical, cultural and archaeological sites would also be lost.25

DHAKA, BANGLADESH. Dhaka, the capital of Bangladesh, is home to more than 13 million people. Like other parts of the country, Dhaka is highly vulnerable to flooding because of its situation among river basins. Its most urbanized areas are only 6 to 8 metres above sea level. With a long history of catastrophic floods, it is projected that the city will experience flooding more frequently due to the melting of glaciers and snow in the Himalayas, and increasing and more concentrated rainfall associated with climate change. Waterlogging and drainage congestion will add to the gravity of the situation, affecting infrastructure, the economy and public health. National and local authorities have undertaken measures to manage floods and address drainage congestion, while improving environmental quality and reducing greenhouse gas emissions.26

VENICE, ITALY. Now less than 1 metre above the level of the Adriatic Sea, Venice is threatened by land subsidence and sea level rise due to climate change. Both factors have contributed to a total relative sea level rise of about 25 centimetres in the 20th century (13 centimetres due to subsidence and 12 centimetres due to sea level rise). Severe damage to its urban heritage has occurred as a result. Mobile barriers installed to curtail flooding are considered by experts to be inadequate to safeguard the city in the wake of further, forthcoming climate-induced sea level rise.27
Rio de Janeiro, Brazil; Shanghai, China; Cairo, Egypt; Osaka-Kobe and Tokyo, Japan; Lagos, Nigeria; and Los Angeles and New York City, United States. Box 1.3 contains information about other cities vulnerable to sea level rise.

The urban poor – and chief among them, the nearly 900 million slum dwellers – will probably be the most affected by climate change. They live in vulnerable locations – along beaches prone to flooding or on slopes prone to landslides. The buildings in which they live are often of poor quality and would not withstand major weather events such as hurricanes.

At the same time, cities have the potential to play significant roles in reducing greenhouse gas emissions and mitigating climate change. Urban centres can be more energy efficient than rural areas if their population density is capitalized upon to create energy-efficient housing, transport systems and other physical infrastructure. Additional information on climate change and its relationship to urban health is contained in Annex C to this report.

**Cities of the future**

What lies ahead for our urban world, and for the cities that comprise it?

Looking to past trends is a useful way of imaging the future, but unforeseen events are inevitable and will certainly shape the future of cities in ways that cannot be predicted fully. Cities will differ from one another based on several factors. Their access to information, technology and the global marketplace will shape them, as will the ways in which they are governed. Migration will continue to influence the size and nature of their populations. Climate change impacts and new disease pandemics could trigger mass migration at an unprecedented scale, altering demographics within countries and cities, changing borders or generating conflicts.

Cities without adequate planning or proper governance will find it increasingly difficult to provide affordable land, decent housing, adequate transport and public services. As a consequence, their political legitimacy will, sooner or later, begin to erode. Nongovernmental organizations or the private sector may attempt to fulfil roles previously held by local authorities, and fragmentation will ensue. In this scenario, slum dwellers and the urban poor will continue to be overlooked, and disparities within cities will continue to grow.

At the same time, cities present substantial opportunities for the future. The most prosperous cities will be those that design sustained, comprehensive visions, and create new institutions, or strengthen existing ones, to implement this vision. This will bring them to look for new methods of close cooperation with regional and central governments and other actors such as the private sector, all the while ensuring an equitable distribution of opportunities and sustainable development.

**CHAPTER SUMMARY**

This chapter has outlined trends and projections related to urbanization. It has revealed that virtually all global population growth over the next 30 years will be in urban areas; by 2050, 7 out of 10 people will be living in cities. Urbanization is not inherently positive or negative. Historically, it has produced both desirable and adverse outcomes: while urbanization has been a positive force for countries’ economic development, large inequalities have emerged between city dwellers, and urban slums have become a feature of many cities. Urbanization has also contributed significantly to global greenhouse gas emissions, although this need not be the case if cities commit themselves to sustainable development. As the next chapter shows, the underlying drivers of urban health can be traced back to common determinants.