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An Urbanizing World

by Martin P. Brockerhoff

Nearly all future population growth will occur in urban areas.

Reducing urban poverty is crucial for managing urban population change.

Internet and transportation networks link world cities and enhance urban economic growth.

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An Urbanizing World

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About the Author

Martin P. Brockerhoff *is an associate of the Policy Research Division of the Population Council. He has worked in 22 countries as a demographer with USAID's Office of Population and the U.S. Census Bureau, and as a research consultant on urban issues for international development organizations including the World Health Organization, the United Nations Population Fund, and the United Nations Development Programme. Brockerhoff's current research interests include the demography of the urban poor and migration-health interrelationships. He has published extensively on issues of urbanization in leading population and social science journals.*

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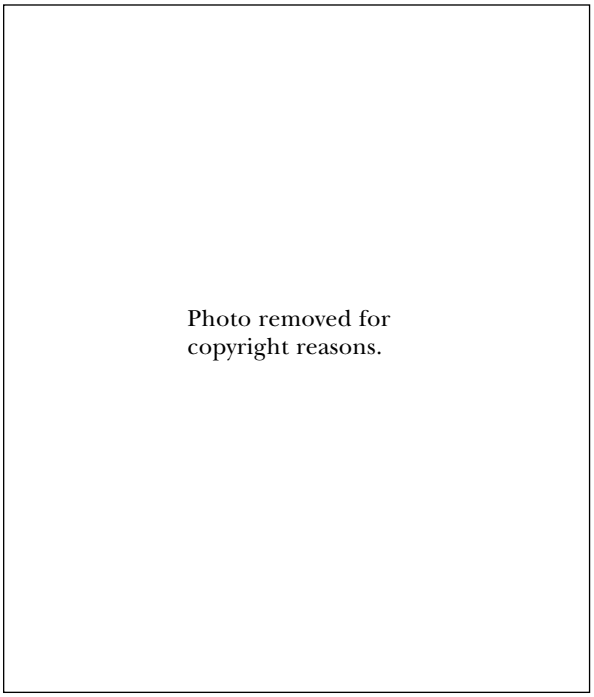
An Urbanizing World

by Martin P. Brockerhoff

Managing urban population change will be one of the world's most important challenges in the next few decades. In less developed countries, where 80 percent of the world's population resides, central issues will be how to cope with an unprecedented increase in the number of people living in urban areas and the growing concentration of these urbanites in large cities with millions of residents. In more developed countries such as the United States, the urban future will involve dealing with complex changes in the composition of urban populations while also containing urban sprawl beyond suburbs into what remains of the countryside.

In Asia, Africa, and Latin America, the unprecedented population growth that characterized much of the 20th century has evolved into unparalleled urban growth. The United Nations (UN) projects that world population will expand from 6.1 billion to 7.8 billion between 2000 and 2025—90 percent of this growth will occur in urban areas of less developed countries.[1] By 2020, a majority of the population of less developed countries will live in urban areas.

The population of less developed countries will become increasingly concentrated in large cities of 1 million or more residents. There were an estimated 292 such "million-plus" cities in less developed countries in 2000. Megacities, with 10 million or more residents, are also becoming more numerous and will play an important role in the world's urban future. Many of the largest cities are likely to absorb enormous population increments. Lagos, Nigeria, for example, is expected to add nearly 10 million people between 2000 and 2015, while Dhaka, Bangladesh, will add 9 million.



Crowded city streets in South Korea offer a preview of the tremendous urban growth ahead. Unprecedented population growth and industrialization in the 20th century sparked an urban demographic revolution that continues in the 21st century.

The tremendous population growth in the urban areas of less de-

Cities have played a crucial role in reducing fertility—and slowing world population growth.

veloped countries can be viewed as a welcome or as an alarming trend. Historically, cities have been the engines of economic development and the centers of industry and commerce. They have spurred innovations in science and technology and in systems of law and government. Cities have facilitated the diffusion of information through interaction among diverse cultures. The density of urban populations has offered significant cost advantages for governments in the delivery of essential goods and services, and for the private sector, in the production and consumption of such items.[2]

Cities have also played a crucial role in reducing fertility, thereby slowing world population growth. In the 19th century, urban residents of Europe and North America were among the first people to widely practice family planning, and they helped spread the idea of fertility regulation to the countryside. Today, fertility levels are invariably lower in urban than in rural areas of less developed countries.[3] The growing concentration of residents in urban areas, where the costs of childrearing are higher, family planning services are more available, and social norms are more conducive to small families than in rural areas, may hasten global fertility decline.

The unprecedented magnitude of urban growth has engendered debate about whether less developed countries and their large cities can accommodate the current volume of urban growth. This dispute echoes disagreements voiced a generation ago regarding limits to the number of people the world can support. Some observers claim that good urban management and governance can overcome population constraints. They note that some big cities in less developed countries are competing successfully on economic terms with their counterparts in more developed countries by offering vast supplies of relatively inexpensive labor. Moreover, there is no evidence of a threshold population size beyond which cities generate more negative than positive effects for their countries. And the information revolution enables struggling cities to improve by adopting "best practices" of successful cities.[4]

Yet experts in other circles are highly concerned about the urban future. Experts in the health sciences, for instance, warn that uncontrolled in-migration and increased density is pushing morbidity and mortality higher in cities than in surrounding rural areas, as was the case in some U.S. cities in 1900.[5] Some environmentalists point out that the unplanned development of big cities is depleting nonrenewable natural resources and contributing to global climate change. Further, many cities in less developed countries are built on ecologically fragile foundations, or are vulnerable to such natural disasters as earthquakes, floods, and destructive storms. Unbridled population growth in these cities increases the risk of catastrophic loss of life.

Some political scientists maintain that rampant urban growth is increasing urban poverty and inequality, which in turn could spark a weakening of the state, civil unrest, urban-based revolutions, and radical religious fundamentalism.[6] Economists see a shortage of decent income-earning opportunities in cities, while urban planners see a lack of livable spatial forms.

In more developed countries such as the United States, there looms a different urban future: Challenges are arising less from population growth than from changes in the composition and distribution of urban populations.

Urban planners in more developed countries confront problems that date back several decades. Residential segregation remains prominent among these issues. The departure of many affluent residents from central cities to suburbs, a trend experienced in several countries since the 1970s, has been countered by strategies of urban revitalization, the gentrification of inner-city neighborhoods by young professionals, and the return of middle-aged "empty nesters" to cities.[7] These revitalization processes generally help

cities generate sales and tax revenues, but they also tend to widen the disparity in housing costs between neighborhoods and further concentrate low-income minority groups in slums and ghettos. The notion that there is a permanent urban underclass, trapped in the inner-city by inadequate educational and income-earning opportunities, is as relevant today as when it was first raised in the 1960s.[8]

New urban challenges are emerging in more developed countries. As these countries experience population aging, their cities will house an increasing proportion of elderly persons with special needs. Immigration is diversifying the ethnic profile of urban populations in the United States and many other more developed countries, creating exciting opportunities for cultural interaction. But immigration also spurs ethnic clustering, intolerance toward minorities, and increased demands for basic services.

Also in the United States, the continued movement of "baby boomers" away from central cities, beyond suburbs and into "exurbs" that offer access to nature as well as close proximity to city amenities, portends the virtual disappearance of traditionally rural areas in many large regions. Meanwhile, a critical shortage of affordable housing in many cities is forcing some middle-income residents to move into dilapidated housing and others to homelessness.

This *Population Bulletin* examines trends of urban population change in less developed and more developed regions. Among more developed countries, particular attention is given to the United States. The report describes the demographic sources of urban growth in less developed countries, traits that distinguish urban from rural populations in these countries, and some of the critical challenges posed by the urban demographic revolution. Policies to manage cities and urban growth are discussed, incorporating concepts of the city that have recently emerged in urban population studies.

Urban Population Trends

Urban population change is most commonly described by two measures: (1) the level of urbanization, and (2) the rate of urban growth. The level of urbanization represents the share of a country's total population that lives in urban areas (see Box 1, page 6).

The world's urbanization level increased steadily throughout the 20th century. After 1950, the first year for which the UN provides urban data for all countries, the percentage urban rose from 30 percent of world population to an estimated 47 percent in the year 2000. The urban share is projected to reach 58 percent by 2025.

The population of the more developed world was already 55 percent urbanized in 1950, reached 76 percent in 2000, and is expected to be 82 percent in 2025 (see Figure 1, page 7). Because more developed countries are already highly urbanized, their urban share is not projected to increase substantially.

In contrast, the level of urbanization in the less developed countries was just 18 percent in 1950, but it neared 40 percent in 2000, and is projected to be 54 percent in 2025. The less developed world is urbanizing as quickly now as was the United States and other more developed countries during the first half of the 20th century. This rapid urbanization is occurring because there is a large pool of potential migrants to the cities living in the countryside, and because rates of natural increase (an area's birth rate minus its death rate) are not substantially lower in urban than in rural areas. The urban population in less developed areas is expected to nearly double in size between 2000 and 2025 from just less than 2 billion to more than 3.5 billion. It is projected to surpass the rural population by 2020. The rural population in less developed countries is projected to stop growing after 2020, at about 3.1 billion, while the urban population will continue to grow, causing further in-

Box 1

What is Urban?

Because the definition of an urban population varies widely from country to country, urban statistics should be interpreted with caution. Of the 228 countries for which the United Nations (UN) compiles data, roughly half use administrative considerations—such as residing in the capital of the country or of a province—to designate people as urban dwellers. Among the other countries, 51 distinguish urban and rural populations based on the size or density of locales, 39 rely on functional characteristics such as the main economic activity of an area, 22 have no definition of "urban," and eight countries define all (Singapore, for example) or none (several countries in Polynesia) of their populations as living in urban areas.

The UN accepts each country's definition when it calculates urban population estimates and projections. This practice recognizes that governments know best what features distinguish urban from rural places in their own countries. But, this approach hinders comparison of urban population data across countries because no standard definition exists. Burundi, in central Africa, for example, is densely populated, yet it defines as urban only the capital city, Bujumbura, where 8 percent of the national population resided in 1996. In the neighboring Democratic Republic of the Congo (formerly Zaire) "urban" areas include all areas with 2,000 residents or more and having mainly nonagricultural functions. Under this broader interpretation, 29 percent of the Congo's residents were living in urban areas. If these two countries had similar definitions of urban—if Burundi classified residents of large towns as urban, and the Congo excluded the populations living in the dozens of small villages—the two countries might have similar proportions of their populations residing in urban areas (that is, similar levels of urbanization).

Countries sometimes change their definitions of urban places over time, which also makes precise measurement of urban populations problematic. China is a notable example. Since the 1980s, China's urban population figures have been distorted by the establishment of hundreds of new cities and thousands of new urban towns with extensive boundaries. Such reclassification of rural places as urban implausibly raised the official level of urbanization in Fuijan Province, for instance, from 21 percent in 1982 to 57 percent in 1990 and to 84 percent in 1995. For a more realistic picture of the urban population, China's State Statistical Bureau applied a second, more limited definition of urban to 1990 census data. Under this definition, Fuijan Province was 21 percent urban in 1990, as it was in 1982. Yet the practice of urban redefinition continues in provincial China, challenging demographers and statisticians to track urban population change across time.

The United States has also modified its definition of urban over time. The earliest classification, published in 1874, was based on incorporated places (cities, towns, boroughs, and villages) of 8,000 or more residents. This limit was lowered to 4,000 in 1880, and to the present minimum size of 2,500 in 1906. In 1970, unincorporated places and settlements of less than 2,500 people in "urbanized zones" on the fringes of extended cities were officially included as part of the urban population. This definition was applied to the 1990 Census.

The Chinese and U.S. examples illustrate several important points about the measurement of urbanization. First, tracking change in urban populations can be complicated because of changes in urban boundaries or in the definitions of urban areas. For the many countries that change their definitions of urban areas between censuses or other enumeration efforts, the UN and most government statistical agencies usually apply the most recent definition to earlier population counts to get credible trends of urban population change. However, UN and government estimates for these countries should not be considered as exact.

Second, national definitions of urban areas often encompass populations in relatively small settlements. Uganda, for example, classifies locales with as few as 100 residents as urban. Areas this small

Tracking population change can be complicated by changes in urban boundaries or definitions.

typically have few of the characteristics that one associates with "cities," such as nonagricultural activities or modern infrastructure. Thus, it is not appropriate to use the terms "urban" and "city" synonymously. Generally, a city is considered a place with a relatively large population that has a certain legal status, granted by the national or provincial government, and that is associated with specific administrative or local government structures. Third, an urban agglomeration (or metropolitan area in U.S. terms) may include cities, urban areas, suburban fringes, and densely settled nonurban territory. These areas often encompass substantial amounts of rural land. In Japan and the Philippines, for example, large numbers of people who live in essentially rural areas are included within the boundaries of officially urban areas.

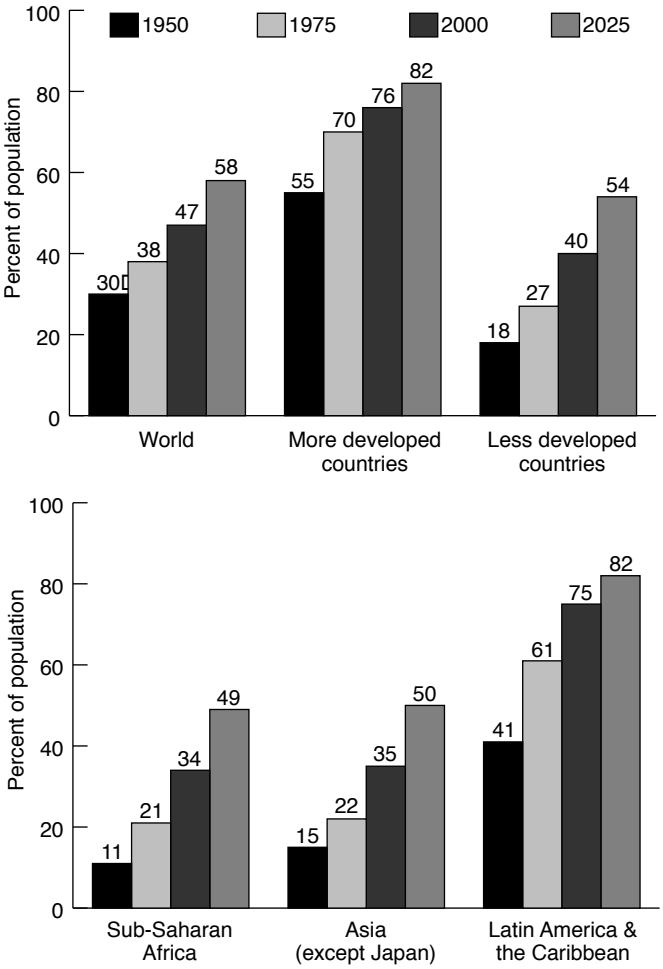
In the United States, population is classified as living either in metropolitan or nonmetropolitan areas for political, legal, and administrative purposes. While metropolitan generally refers to urban populations, and nonmetropolitan applies primarily to rural populations, these overarching categories can include both urban and rural populations. An urban area may be located outside of a metropolitan area, but a metropolitan area contains at least one urban area.

References

United Nations, *World Urbanization Prospects: The 1999 Revision* (New York: United Nations, 2000); Judith Banister, "China: Internal and Regional Migration Trends," in *Floating Population and Migration in China: The Impact of Economic Reforms*, ed. Thomas Scharping (Hamburg, Germany: Institut für Aseinkunde, 1997): 72-97; Henry S. Shryock, Jacob S. Siegel, and Associates, *The Methods and Materials of Demography*, Condensed edition, ed. Edward G. Stockwell (New York: Academic Press, 1976); U.S. Census Bureau, Geographic Areas Reference Manual Files, Urban Rural Classifications, Chap. 12. Accessed online at: www.census.gov/geo/www/GARM/Ch12GARM.pdf, on July 25, 2000; and World Bank, *World Development Report 1999/2000* (New York: Oxford University Press for The World Bank, 1999): 127.

Figure 1

Percent of Population Living in Urban Areas in Major World Regions, 1950, 1975, 2000, and 2025



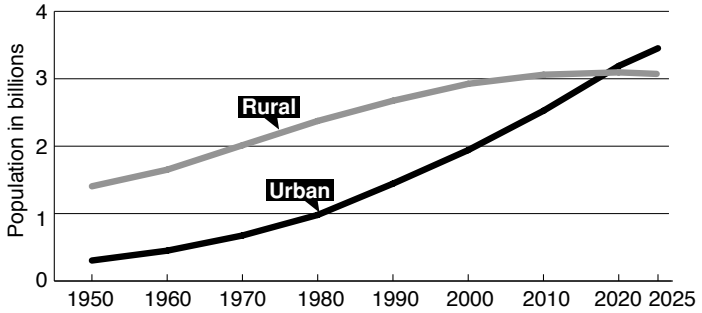
Source: United Nations, *World Urbanization Prospects: The 1999 Revision* (2000).

creases in the level of urbanization (see Figure 2, page 8).

Over the next quarter century, increases in urbanization will be almost entirely attributable to sub-Saharan Africa and Asia. Urbanization is projected to increase from 34 percent to 49 percent in sub-Saharan Africa, and from 35 percent to 50 percent in Asia (excluding Japan). In Latin America and the Caribbean, 75 percent of the population already resides in urban centers so the future pace of urbanization will be slow.

Figure 2

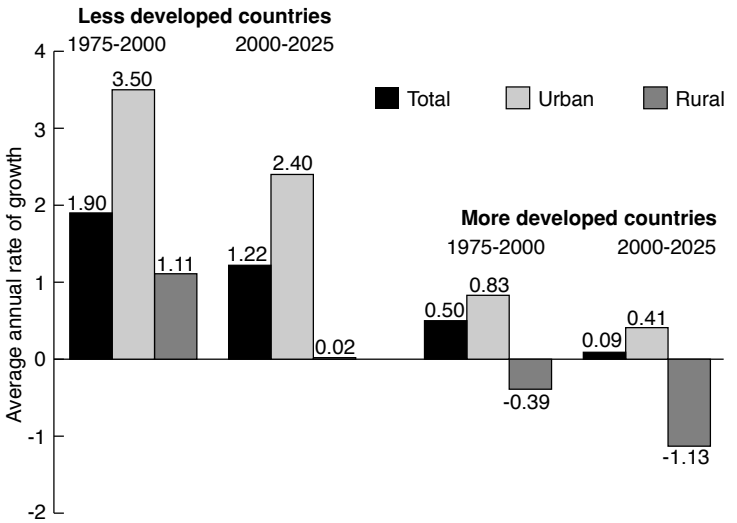
Urban and Rural Population, Less Developed Countries, 1950 to 2025



Source: United Nations, *World Urbanization Prospects: The 1999 Revision* (2000).

Figure 3

Population Growth Rates in Urban and Rural Areas, Less and More Developed Countries, 1975 to 2000 and 2000 to 2025



Source: Derived from United Nations, *World Urbanization Prospects: The 1999 Revision* (2000).

Europe and other regions of the more developed world are expected to become slightly more urbanized in the near future, even though some countries may see their total populations decline. The UN projects that the population of Southern Europe will decline from 144 million to 136 million between 2000 and 2025, for example. The urban population is projected to rise from 96 million to more than 100 million over the period, while the rural population is projected to fall from 48 million to 34 million. As a result, the level of urbanization in Southern Europe will increase from 66 percent to 75 percent.

The rate of urban growth is the other measure commonly used to compare countries over time and among each other. The rate of urban growth indicates the number of persons added to an urban population during a year per 100 urban dwellers. The average annual rate of urban growth has fallen precipitously in more developed countries, from 1.99 percent between 1950 and 1975, to 0.83 percent between 1975 and 2000. The average rate is projected to fall to 0.41 percent during the first quarter of the 21st century (see Figure 3). Although average urban growth rates are falling in less developed countries, they remain well above those in more developed countries.

Urban growth in less developed countries will account for a large majority of world population growth in coming decades. The rural population of more developed countries has been declining for decades—from 370 million in 1950 to an anticipated 215 million in 2025—while the rural population of less developed countries is expected to add only another 170 million before starting to decline slowly around 2020. A small fraction of world population growth will occur in urban areas of more developed countries, mainly the United States (see Figure 4).

Although urban areas are growing at slower rates in less developed countries now than in the 20th century, the number of people added each year continues to rise because the rates are applied to an ever-increasing population base. The average annual growth rate from 1975 to 2000 was 3.5 percent, which, applied to the 1975 urban population of 810 million for less developed countries, meant an increase of 1.13 billion urbanites

during the period. Although the annual urban growth rate projected for the next quarter century is much lower, 2.4 percent, it will be applied to a larger urban population base of 1.94 billion, and is projected to expand the urban population by 1.60 billion people between 2000 and 2025. The number of persons added to the urban population in less developed countries probably better indicates the challenges faced by governments, urban planners, nongovernmental service providers, and urban residents than does the rate of urban growth.

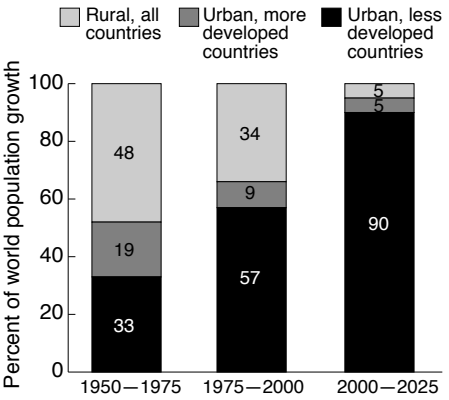
The world's urban population is rapidly concentrating in very large cities. By 2015, the number of cities with more than 1 million residents is projected to be about 564, up from 195 cities in 1975. Asia, Africa, and other less developed regions have seen the most dramatic increase in the number of cities with 1 million or more residents and in the proportion of the total population concentrated in these "million-plus" cities. In more developed countries, including Japan and the United States, the number of cities with at least 1 million inhabitants increased modestly between 1975 and 1995, from 85 to 114, and is expected to reach 138 by 2015, the latest year for which individual city projections are available (see Figure 5). By contrast, between 1975 and 1995, the number of million-plus cities in less developed countries soared from 110 to 250, and is expected to surpass 425 by 2015.

In more developed countries, the proportion of the population living in these large cities is anticipated to grow from 23 percent in 1975 to 30 percent in 2015 (see Figure 6, page 11). Even more rapid concentration is projected for the urban populations of less developed countries: The share living in million-plus cities is projected to rise from less than 10 percent in 1975 to more than 20 percent by 2015. Thus, the future will bring not just an urbanizing world but, perhaps more significantly, a world in which people are more likely to be residents of very large cities (see Box 2, page 10).

Trends in Less Developed Regions

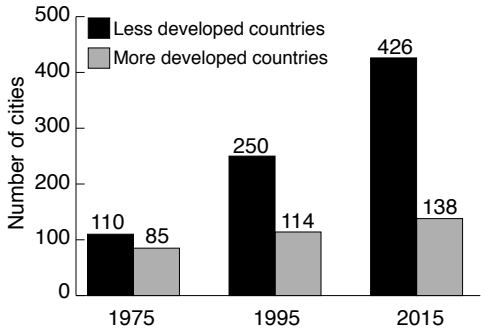
The levels of urbanization in less developed countries lag 75 years behind those of the more developed countries. In Europe, North America, and other more developed regions, urbanization increased from 26 percent to 40 percent between 1900 and 1925. Urbanization levels rose by a similar margin in less developed countries

Figure 4
Share of World Population Growth in Urban and Rural Areas, 1950 to 2025



Source: Derived from United Nations, *World Urbanization Prospects: The 1999 Revision* (2000).

Figure 5
Number of Cities With 1 Million or More Residents, 1975, 1995, and 2015



Source: United Nations, *World Urbanization Prospects: The 1999 Revision* (2000).

Box 2

Megacities: Decline, Growth, and Changing Locations

The number of people added is a more valuable guide for urban planning than the urban growth rate.

The United Nations (UN) coined the term megacities in the 1970s to designate all urban agglomerations with a population of 8 million or more. In the 1990s, the UN raised the population threshold to 10 million, following the practice of institutions such as the Asian Development Bank. The UN estimates that there are 19 megacities in the world at the beginning of the 21st century.

Megacities have captured public interest because cities this large are unprecedented in history, and because of the popular perception that human well-being will decline in such dense concentrations of people. Not long ago, it was unimaginable that cities might house more than 20 million people, yet these totals are projected for Mumbai (formerly Bombay, India), Lagos (Nigeria), and São Paulo (Brazil) by 2015. Indeed, in 1900 only London had as many as 5 million residents. The unfavorable living conditions during the Industrial era in such English cities as London and Manchester and such U.S. cities as Chicago and New York were vividly described in the novels of Charles Dickens, Theodore Dreiser, Stephen Crane, and others. The images of urban life plagued by child labor, crime, class tensions, and prostitution were imbedded in Western cultural consciousness. The large cities in poor countries today suffer from many of the same problems, but on a much larger scale and accompanied by high levels of motor vehicle pollution, illicit drug use, and other modern-day maladies. Preserving decent standards of living in these teeming cities is a formidable task for urban planners and municipal authorities.

By some measures, population growth appears to have slowed in megacities in recent decades. The UN estimates that average annual growth rates plummeted in Mexico City between the 1960s and the 1980s—from 5.1 percent to 0.9 percent. Annual population growth rates also slowed considerably in the megacities of São Paulo (from 5.4 percent to 1.9 percent), Calcutta, India (2.3 percent to 1.8 percent), and Beijing (2.6 percent to 1.8 percent) over the period. And in cities in more developed countries, annual growth rates fell from 1.3 percent to 0.3 percent in New York and from 4.1 percent to 1.7 percent in Tokyo between the 1960s and 1980s.

Despite the slower pace of growth, cities in less developed countries are adding more new residents each year now than in the 1950s and 1960s because the growth rate is applied to an expanding population base. The average annual growth rate declined in Cairo, over the last 50 years. But Cairo added 4.6 million to its population between 1975 and 2000, about 1 million

World's Largest Megacities, 1970 and 2015

	Population (in millions)			
	1970		**2015**	
1.	Tokyo, Japan	16.5	Mumbai (Bombay), India	28.2
2.	New York, United States	16.2	Tokyo, Japan	26.4
3.	Shanghai, China	11.2	Lagos, Nigeria	23.2
4.	Osaka, Japan	9.4	Dhaka, Bangladesh	23.0
5.	Mexico City, Mexico	9.1	São Paulo, Brazil	20.4
6.	London, England	8.6	Karachi, Pakistan	19.8
7.	Paris, France	8.5	Mexico City, Mexico	19.2
8.	Buenos Aires, Argentina	8.4	Delhi, India	17.8
9.	Los Angeles, United States	8.4	New York, United States	17.4
10.	Beijing, China	8.1	Jakarta, Indonesia	17.3

Source: United Nations, *World Urbanization Prospects: The 1999 Revision* (2000).

more than were added between 1950 and 1975.

Because most megacities in less developed countries underwent a similar period of explosive growth in the 1950s and 1960s followed by a slowdown in rates (but not numbers added) in the last quarter century, urban policymakers and administrators often find that the number of people added to a population is a more valuable statistic to guide city planning than growth rates.

The number of megacities is growing rapidly. There were just eight megacities in 1985, but the number more than doubled to 19 by 2000. The UN projects an additional 15 new megacities by 2015—all in less developed countries. Just six megacities will be in the more developed world in 2015—the same number as in 1985. These six are: Los Angeles, Moscow, New York, Osaka (Japan), Paris, and Tokyo. In 1970, just four of the world's 10 largest cities were in less developed countries. By 2015, eight of the 10 largest cities will be in less developed counties (see table).

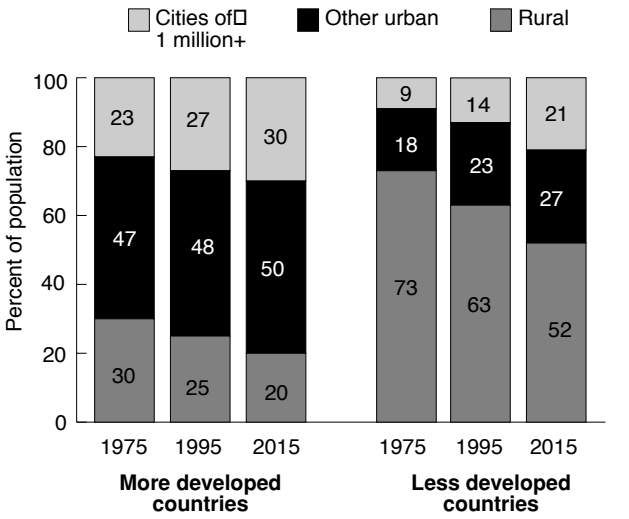
The world's population has become increasingly concentrated in megacities. In 1975, less than 2 percent of the global population resided in cities of 10 million or more residents. The proportion now exceeds 4 percent, and is projected to top 5 percent by 2015, when megacities will house almost 400 million people. Between 1975 and 2000, the growing population concentration in megacities characterized both more and less developed regions, but future growth will be concentrated in the cities of the less developed world.

References

United Nations, *World Urbanization Prospects: The 1999 Revision* (New York: United Nations, 2000); and The Asian Development Bank, "The Asian Development Bank on Asia's Megacities," *Population and Development Review* 23, no. 2 (June 1997): 451–59.

Figure 6

Percent of Population in Large Cities, Other Urban, and Rural Areas, 1975, 1995, and 2015



Source: Derived from United Nations, *World Urbanization Prospects: The 1999 Revision* (2000).

between 1975 and 2000.[9] Yet urbanization in most less developed countries today differs from the early 20th-century trends in Europe and the United States in at least five key respects: It is taking place at lower levels of economic development; it is more dependent on changes in the international economy; it is based on lower mortality and higher fertility; it involves many more people; and governments have intervened to modify it.[10]

Urban change in less developed regions is so diverse that it defies generalization. Even so, a look at the commonalties and dissimilarities among these regions provides insight into the challenges associated with the urban development and spatial transformation of different regions as they enter the 21st century.

In much of Asia and Latin America, the new global economy—based on the rapid flow of information and capital—is blurring urban-rural administrative boundaries. Urban scholars refer to this process as "mega-urbanization." Prosperous, interconnected cities emerging in East and Southeast Asia increasingly resemble cities in

North America's northeastern corridor (see Figure 7). High-speed transportation and telecommunications links are encompassing cities such as Manila-Cebu City in the Philippines, Seoul-Pusan in Korea, Jakarta-Surabaja in Indonesia, Bangkok-Chiang Mai in Thailand, and cities of Guangdong Province in Southern China. As the transportation and communications networks spread, rural and small urban areas located between cities of this region face two prospects: being engulfed by city sprawl or being bypassed.[11]

Figure 7

The World's 100 Largest Cities in 2000, and Selected Other Cities

Many sub-Saharan African cities have fallen into disrepair.

Although Latin America and the Caribbean already match the urbanization level of the United States, with three-quarters of the population living in cities and towns, the region's urban landscape resembles that of much-less urbanized Southeast Asia. International economic competition has compelled Latin America's manufacturing plants to pursue cheaper land and labor in increasingly distant places, often beyond metropolitan boundaries. In Mexico City and São Paulo, Brazil, for example, industrial plants are as far as 200 kilometers from the central cities.[12] Urban populations are becoming more geographically dispersed and are encroaching on agricultural land. Despite this urban sprawl, accommodating population growth in large cities remains a pressing concern.

Most cities that contain 2 million or more residents will likely have to absorb at least an additional half-million residents by 2015. Growing economic interdependence with the United States—through NAFTA (North American Free Trade Agreement) in Mexico and new enterprise zones of free trade in the Caribbean, for example—portends that smaller cities may grow in national importance and become more closely linked with the largest cities, as is happening in Southeast Asia.[13]

Urban population change in sub-Saharan Africa provides a stark contrast to the trends in much of Asia, the Caribbean, and Latin America. In sub-Saharan Africa, urban change is largely a product of exclusion from the global economy. Until recently, most African countries have been dominated by a single city rather than by a network of cities. Although many of these cities were small by international standards, they contained a disproportionate share of their countries' wealth. Yet, many sub-Saharan African cities have fallen into a serious state of disrepair since the 1970s under the strain imposed by rapid population growth, scarce foreign investment, and government mismanagement.[14] Progressive decay in basic infrastructure such as piped water, electricity, sewerage, and roads have

Note: African cities in italics are not among the 100 largest in 2000, but are mentioned in the text or figures. Cities with an asterisk are national capitals.

Source: United Nations, *World Urbanization Prospects: The 1999 Revision* (2000).

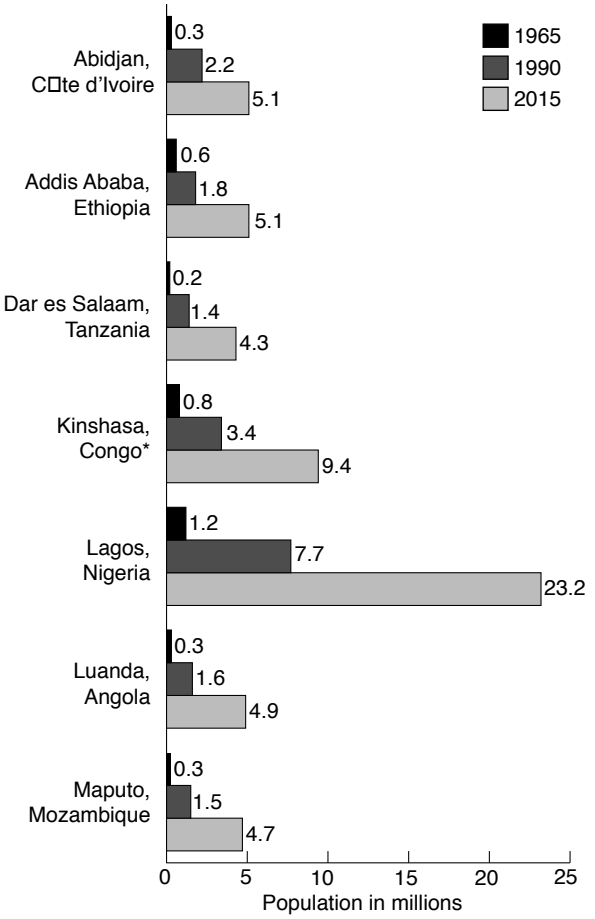
prompted people in large African cities like Addis Ababa, Ethiopia, to move to unplanned settlements on the urban periphery where land is cheapest.[15] People escaping political conflicts in the rural areas and smaller cities of such countries as Liberia and Mozambique have contributed to big-city growth rates exceeding 7 percent a year over long periods—a rate at which the population would double in just 10 years. The projected increase of many African cities by several million or more people between 1990 and 2015 (see Figure 8, page 14) suggests that problems of big cities may worsen in the absence of sustained economic growth and political stability.

Another source of concern especially to some international development and relief organizations is the proliferation of "urban villages" in sub-Saharan Africa. These are once-rural settlements that have burgeoned into small cities of 200,000 to 400,000 residents, and that typically lack the most basic requirements for a decent standard of living.

In Central Africa in the 1990s, political conflict generated massive and rapid population flows that created another widespread urban form: refugee cities.[16] In 1994, for example, ethnic-based violence in Rwanda forced hundreds of thousands of people from the country within a few weeks. One refugee camp sprung up

Figure 8

Population of Selected Large Cities in Sub-Saharan Africa, 1965, 1990, and 2015



*Democratic Republic of Congo

Source: United Nations, *World Urbanization Prospects: The 1999 Revision* (2000).

across the border in Tanzania that attracted 250,000 inhabitants within a few days and became Tanzania's second largest city. These spontaneous urban settlements often are plagued by food shortages and a high incidence of sexual violence. While the number of small cities is unknown, the UN anticipates that most urbanites in Africa in 2015 will still reside in centers with less than 500,000 residents, making urban development planning for small cities a top priority.

The urban challenge facing countries of South Asia—including Bangladesh, India, and Pakistan—is of unparalleled scale (see Figure 9). India, where one-sixth of the world's population resides, is more than 70 percent rural, yet by 2030 the urban population of India is expected to approximate the combined total populations of the United States, Russia, and Japan, or more than 600 million. Even though large countries of South Asia are less urbanized than most African countries, they already contain many of the world's largest urban agglomerations, including Calcutta, Delhi, and Mumbai (formerly Bombay) in India, Karachi in Pakistan, and Dhaka in Bangladesh—all with estimated populations of at least 11 million in 2000. The UN projects that these large cities, like Jakarta in Indonesia, each will absorb 5 million or more additional residents in the next 15 years. Cities with historically more vibrant economies and good management, such as Calcutta, are more likely to make this transition successfully than cities without these qualities, such as Mumbai.[17]

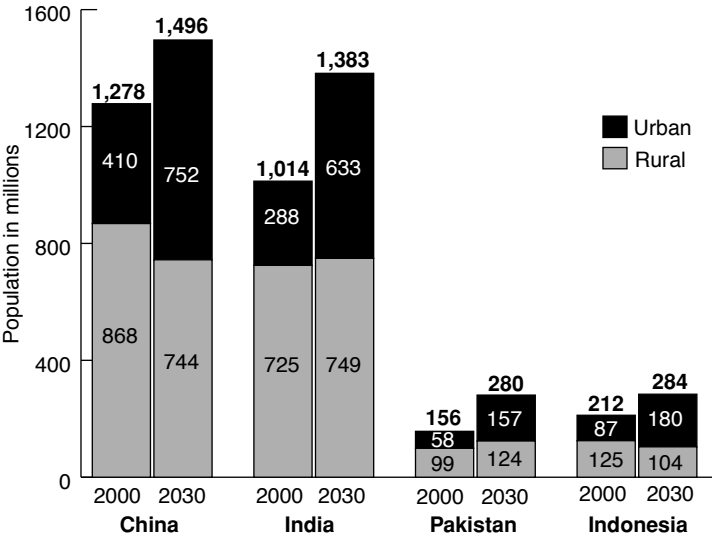
South Asian countries also contain thousands of small- and medium-sized towns and cities, where, in fact, about 90 percent of the urban population will continue to reside in 2015. As in Africa, the growth of these small urban centers has been fueled less by economic dynamism than by high fertility levels and by rural poverty that propels rural residents to move to cities. Indeed, South Asia's urban population maintains an essentially "rural" character, since most of these urban centers achieved their designation simply because they incorporated minor administrative functions, served as market towns, or formed a junction of road or rail networks. The urban population of South Asia is projected to reach nearly 1 billion by 2030. Transforming this population into one that is as economically advanced as, for example, South America, and that is linked to the international economy, will be a major challenge for the countries of South Asia.

In most countries of North Africa and the Near East, urban change

since the 1970s has been related to political turmoil and dependence on exports or imports of oil and labor. From 1970 to 1990, net exporters of oil, such as Kuwait, Libya, Oman, Qatar, Saudi Arabia, and the United Arab Emirates, experienced more rapid urban growth than elsewhere in the world. In some of these countries, the urban growth rate exceeded 10 percent a year, largely because of the influx of international migrant labor from poorer, more populous neighboring countries such as Egypt, and from Southeast Asian countries such as the Philippines. A glut in the world oil market reduced labor demand in most of these countries in the 1990s, which lowered urban growth rates by roughly one-half. Wars have distorted trends of urban growth in this region in the past, and could do so in the future. The Gulf War in the early 1990s, for example, contributed to an average urban population loss of -4.5 percent annually in Kuwait between 1990 and 1995. At the same time, the largest cities in nearby countries—Amman in Jordan and Sana'a in Yemen, for example—experienced a temporary upward surge in growth as labor moved out of Kuwait.

Figure 9

Projected Urban and Rural Populations, Selected Asian Countries, 2000 and 2030



Note: Figures within bars may not add to totals because of rounding.

Source: United Nations, *World Urbanization Prospects: The 1999 Revision* (2000).

Trends in More Developed Regions

In almost all more developed countries, the shifting distribution of population within urban agglomerations, rather than between urban and rural areas, is the most significant source of urban population change. The United States and the countries of Western Europe illustrate the phenomena of counter-urbanization and reconcentration since the 1970s. Counter-urbanization indicates population loss in a city's central core and in surrounding suburban rings. The city core generally experiences more rapid decline than the rings. Some countries have recently experienced reconcentration after a period of counter-urbanization, a process by which population increases in the city core and closer-in suburbs, with the most rapid increase in the core.[18]

Decentralization, or the movement of people and jobs away from central cities toward suburbs of major metropolitan areas, has been the most prominent feature of urban population change in the United States since the 1960s. In 1950, almost 70 percent of the population of metropolitan areas lived within the boundaries of central cities. By 1990, this figure had declined to less than 40 percent.

The flight of more affluent city residents to suburbs has been attributed to numerous social, political, and economic factors. These factors include racial tension in cities, superior educational and recreational facilities in suburbs, low government investment in central-city infrastructure and industry, and the construction of highways (which facilitated movement between suburban homes and central-city jobs).[19] Decentralization has made many U.S. metropolitan areas more sparsely populated. Between 1970 and 1990, for instance, metropolitan areas

incorporated more land area almost four times faster than they added population in a phenomenon known as urban sprawl.

Since the 1980s, however, suburbanization has slowed, or even reversed, in some areas. A booming national economy in the 1980s and 1990s improved the demographic fortune of many central cities. Between 1980 and 1996, two-thirds of the country's 539 central cities experienced population growth, a notable contrast to years of declining population in central cities.

Suburbs have become burdened by urban sprawl.

Suburbs continue to grow more rapidly than central cities in most U.S. metropolitan areas, but their share of metropolitan growth declined from more than 95 percent in the 1970s to 77 percent between 1980 and 1996. Between 1990 and 1996, 14 of the country's largest 30 cities continued to lose residents, but more slowly than in the past. Central Detroit, for instance, lost more than 30 percent of its population between 1970 and 1990, but lost less than 3 percent in the next six years as its unemployment rate shrank from 17 percent in 1992 to 7 percent in 1998. Although some small central cities have lost significant population numbers since 1980—a 27 percent loss in Gary, Ind., for example—some larger ones grew (by 4.4 percent in New York City).[20]

Suburbs, meanwhile, have generally become burdened by urban sprawl. Suburban sprawl is characterized by a proliferation of extended low-density commercial and residential settlements, increased use of private automobiles, outward expansion of new subdivisions that leapfrog over rural or undeveloped land, and segregated use of land according to activities.

Problems that were once associated with central cities—traffic congestion, overcrowded schools, and the loss of recreational opportunities and open space—have emerged even in newer suburbs, motivating some dwellers to move to "exurbs" or the rural fringe. Meanwhile, many "inner-ring" suburbs that were developed in the 1950s and 1960s, such as Euclid and Garfield Heights in Cleveland, and Southfield and Oak Park in Detroit, are experiencing more severe problems, including crime, job loss, and disinvestments. Such older suburbs are losing population in many cities. Between 1980 and 1996, the population of Highland Park, the first suburb north of Detroit, declined from 28,000 to less than 20,000. Mekeesport, a suburb of about 30,000 southeast of Pittsburgh, lost 25 percent of its residents during these same years.[21]

Since at least the 1970s, many countries in Western Europe, as in the United States, have experienced decentralization from their "urban cores," a statistical unit comparable to the U.S. central city.[22] Some European countries show a reversal of this pattern more recently, but others do not. Between 1971 and 1981, for instance, 60 percent of urban core areas lost population to surrounding areas in the Benelux countries (Belgium, Netherlands, and Luxembourg), as did 78 percent of urban core areas in Germany and 56 percent in Italy. But these percentages declined to 40, 35, and 17, respectively, in these countries between 1981 and 1991.

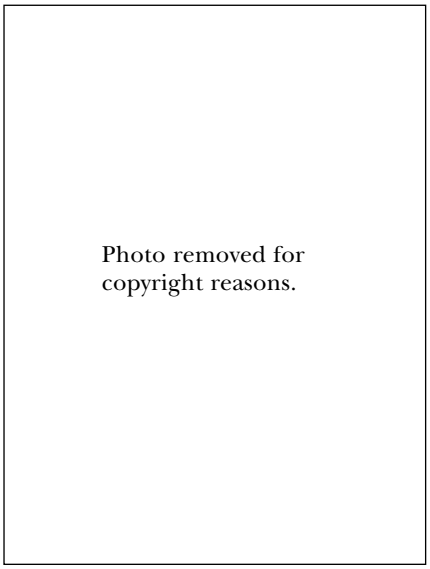
In the United Kingdom, 89 percent of urban core areas lost population between 1981 and 1991, continuing a decline that began as early as the 1960s in cities such as Liverpool, London, and Manchester. Indeed, the UN estimates that central London lost about 850,000 residents during the 1970s. Some analysts argue that land use regulation in the United Kingdom substantially increased urban land costs and produced a form of "concentrated deconcentration" by generating detached high-density "exurbs."[23]

Most inner cities of Western Europe have not experienced the same extent of concentrated poverty as have U.S. cities in recent decades. Most European countries, unlike the United States, concentrate fiscal resources for cities in the hands of national rather than local governments,

which may be better able to maintain infrastructure, social service provision, and other essential features in the core areas, even after wealthier residents move out to the suburbs.

Inner-city poverty in Europe may increase in the coming years, however. The collapse of the Eastern European bloc, the formation of the European Union, labor immigration, and low fertility among Europeans are making Europe's cities more culturally heterogeneous than ever. Some ethnic groups may get left behind in the race for jobs and housing, exacerbating competition among groups and increasing poverty.

Japan exemplifies the most modern form of urban spatial change in the world, similar to Western Germany and to the urban Northeast corridor of the United States. There has been a long-standing proposal, pushed ahead informally by market forces, to rearrange how Japan's capital city functions. This involves linking Tokyo, Osaka, and Nagoya by means of a high-speed train and advanced telecommunications. The emerging structure is a "megalopolis" that encompasses more than 40 million residents and is managed by highly centralized governing bodies. This process is creating a new form of metropolis that is very different from the concentric pattern characterizing the often haphazard development of large cities in other more developed countries.[24]



Rural women from a Ghanian village walk four days to take produce to market. Sub-Saharan Africa is the world's most rural region, but urban growth is accelerating.

Urban Demographics

Policymakers and planners need to know how peoples' demographic behavior—childbearing, moving, dying—makes urban populations grow. Such knowledge allows them to develop and implement policies meant to influence fertility, mortality, and migration, with the goal of achieving a desired population size. Understanding whether urban populations are growing more from births or in-migrants, for instance, helps planners anticipate the needs of children and adults in urban and rural areas with respect to education, housing, employment, and other services.

Closely related to these goals are requirements for information on the demographic characteristics of urban populations, particularly their sex, age, and household structures, to provide necessary social services such as schooling, health care, and shelter. The demographic structure of urban populations also indicates the demand for jobs now and in the future.

Demographic Sources of Growth

Urban populations grow as a result of natural increase (when birth rates exceed death rates), net in-migration (when more people move in than out), and sometimes because of the reclassification of urban boundaries to encompass formerly rural population settlements. The contribution of natural increase, net migration, and reclassification of boundaries to urban

growth in recent decades can be calculated for about one-fourth of the less developed countries.[25]

Based on the experience of these countries, an estimated 60 percent of urban growth in less developed countries (excluding China) between 1960 and 1990 was attributable to natural increase and 40 percent to in-migration from rural areas and the expansion of urban boundaries. As fertility levels decline and economic development increases, however, migration apparently assumes a greater role in determining the pace of urban growth. In Africa, for example, where fertility levels remain high and economies are weak, natural increase fueled 75 percent of urban growth, compared with 51 percent in Asia, where most countries have lower fertility levels and stronger economies.

Temporary migrants can cause large swings in population size.

In China, which has experienced rapid economic growth in recent decades, only 28 percent of urban growth in the 1980s resulted from natural increase. Socioeconomic factors, including a shortage of housing and high levels of female labor force participation in China's cities and towns, have contributed to lower urban than rural fertility. China's one-child-policy has been more strictly enforced in urban than in rural areas, which also kept urban birth rates lower than rural rates. The higher rural fertility contributes to urban growth by adding to the large volume of potential rural migrants in this populous, and still largely rural, country.

The demographic dynamics underlying urban growth are extremely complex, and analyses based on census data often miss such important factors as circular migration, and less direct or long-term effects of migration. Throughout Southeast Asia and sub-Saharan Africa, and in selected countries elsewhere, millions of people move back and forth between urban and rural places to take advantage of income-earning opportunities—a phenomenon known as circular migration. These temporary migrants, who are more commonly men in Africa and women in many countries of Asia and Latin America, often fill niches in particular occupations in the manufacturing and service sectors. They often work in construction in southern China, for example, and domestic service in countries of Latin America.[26] Circular migration is often tied to seasonal patterns or agricultural cycles.

Temporary migrants can cause large swings in population size. In some cities of China, for instance, temporary migrants are estimated to count for between one-fifth and one-third of the total population.[27] In Thailand, thousands of people move to Bangkok from the agricultural north and northeast areas during the dry season when there are fewer jobs in these regions, and return during the wet season when work is more plentiful. In the early 1990s, Bangkok's population of roughly 8 million was about 10 percent larger during the months of the dry season in north and northeastern Thailand than during the wet season.[28] In many countries, such temporary migrants are counted as rural residents if they spend most of the year in rural areas, if they have not lived in an urban area long enough to qualify as urban residents, or for other reasons. Official statistics thus tend to underestimate the actual contribution of migration to urban growth.

Rural migrants also contribute to urban growth when they have children and add to natural increase. Net in-migration to urban areas can ultimately depress urban growth, however, once the national level of urbanization is relatively high and there are fewer potential migrants to move from rural to urban areas than in the opposite direction.[29]

These difficulties in accurately measuring the effects of fertility levels and migration patterns on urban growth suggest that policies to modify urban or city growth by controlling fertility or in-migration must be implemented with caution, and in consideration of their long-term consequences.

Demographic Characteristics of Urban Populations

Information on the demographic characteristics of urban populations throughout the less developed world has become widely available since 1990, thanks to Demographic and Health Surveys (DHS) sponsored by the U.S. Agency for International Development. This new information on population sex compositions, age profiles, household structures, and other characteristics provides valuable insights into the special needs of urban populations relative to rural populations and the potential consequences of the urban and rural differences for less developed countries and their cities.

Rural-to-urban migration is a selective process; people with certain characteristics are more likely to move than people with other characteristics. In many less developed countries the selectivity of migration distorts the sex ratio—the number of males per 100 females—in both destination and origin areas depending on whether rural-to-urban migrants are predominantly male or female. Sex selectivity of rural-urban migration may change over time as urban job opportunities for women increase or decrease relative to opportunities for men. Family norms regarding the migration of women can also change and influence the sex ratio of migration flows.

If migration were not sex-selective —if men were as likely to migrate as women—sex ratios would be about the same in urban and rural areas of a country. With no significant migration or unusual circumstances (such as high levels of female infanticide or underreporting of female household members), the overall sex ratio is usually slightly below 100 because women generally outlive men and outnumber them in older ages.

Sex ratios differ between urban and rural areas in many parts of the world (see Table 1). Compared with rural populations, urban populations in sub-Saharan Africa are heavily skewed toward men because there are more job opportunities available to men in urban areas, while women perform much of the agricultural labor in rural areas. Also, people in some sub-Saharan countries follow a centuries-old cultural dictate that young men should leave the village when they reach a certain age.[30] Some demographers cite the excess of males in African cities as the driving force behind the HIV/AIDS epidemic in the region.[31]

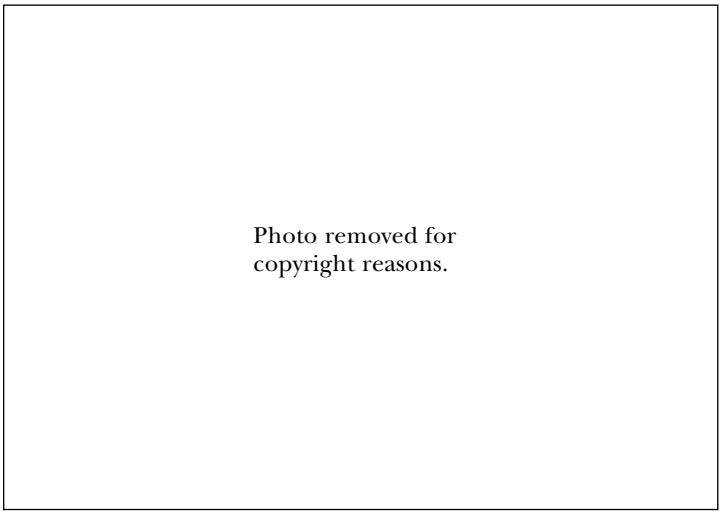
In Latin America and the Caribbean, Southeast Asia, and less developed countries of the former Soviet Union, urban populations include a higher number of women than men, and thus a lower sex ratio. In Latin America, this imbalance results from greater urban job opportunities in domestic and other services for women than men. In Southeast Asia, the lower sex ratios result from the concentration in urban areas of export-oriented manufacturing jobs that use low-skilled and low-wage female assembly workers. Young female laborers in urban areas of Latin America and Southeast Asia often send money back to their families in rural areas. These women also tend to suffer from a high prevalence of sexual abuse. In India and Pakistan, sex ratios indicate more men than women in both rural and urban areas. These

Table 1

Sex Ratio of Urban and Rural Populations, Selected Countries, 1990 to 1998

Region	Country/year	Sex ratio (males per 100 females) Urban	Rural
North Africa	Morocco, 1992	96.7	94.2
Sub-Saharan Africa	Burkina Faso, 1992-93	104.9	92.3
	Kenya, 1998	107.9	93.2
	Malawi, 1996	106.3	89.2
South Asia	India, 1992-93	107.3	103.5
	Pakistan, 1990-91	105.5	109.6
Southeast Asia	Philippines, 1998	94.4	103.3
Near East	Jordan, 1997	102.3	104.1
Central Asia	Uzbekistan, 1996	94.5	104.1
Caribbean	Dominican Rep., 1991	87.2	113.4
Central America	Guatemala, 1995	91.8	96.3
South America	Brazil, 1996	91.6	105.1

Source: Macro International, Inc., Demographic and Health Surveys.



Women in Bangalore, India, attend classes to improve their job choices. The sex ratio of rural-to-urban migrants can vary depending on whether there are more jobs for women or men in an urban area.

unusually high ratios reflect cultural preferences for sons that sometimes lead families to fail to report female household members, to neglect the health of daughters (causing premature deaths), to abort female fetuses, or even to promulgate female infanticide.[32]

The reasons behind the relatively low sex ratio in urban areas of the former Soviet republics in Central Asia are unknown, but the larger number of women may reflect the unusually high mortality rates for middle-aged men found in Russia, Ukraine, and other countries of the former Soviet Union.

In general, urban populations throughout the less developed world have smaller proportions of the very young and the very old than rural populations. In Ghana, for example, about 15 percent of the urban population was under age 5 in the 1990s, compared with nearly 19 percent of the rural population (see Table 2). The smaller share of the young and elderly in urban populations can be largely attributed to lower urban than rural fertility.[33]

These age differences also reflect the high proportion of young adults among rural-urban migrants. Because most people move to take advantage of economic opportunities, and because younger adults find it easier to move than older adults, younger working-age people usually make up a large share of migrants. Fertility declines and migration usually push up the working-age share of the urban population. The number of persons ages 15 to 64 is usually 5 percent to 10 percent greater in urban than in rural areas of less developed countries, which creates greater demand for jobs in towns and cities. The prime working ages are also the prime childbearing ages, and the large percentage of young adults in urban areas means a similarly large need for reproductive health, family planning, and education services. In the many countries where fertility levels remain high and mortality has declined, the disproportionate concentration of urban populations in childbearing ages helps ensure continued growth regardless of the pace of in-migration.

Although fertility is lower in urban than in rural areas, and many migrants are separated from their extended families, urban households are not significantly smaller than rural households in most developed regions (see Table 3). Indeed, urban populations have a higher mean number of household members than do rural populations in some countries. Although urban life is thought to be more conducive to nuclear family households and to the breakdown of extended family living arrangements, housing shortages—exacerbated in some cities by a large volume of temporary migrants—and high land costs near the central business districts often result in large households.

In many poor countries, such as those in sub-Saharan Africa, kinship networks enable urban migrants to live with distant relatives, even though dwelling units become extremely crowded, taxing the supply of water and other household infrastructures and eliminating privacy.[34] Households in less developed regions are likely to remain large in cities where there is

rapid population growth but minimal economic growth because population growth will continue to outstrip the housing supply.

Urban Challenges of Less Developed Countries

Urban population change is taking different forms throughout the world and has different potential consequences for less and more developed countries. But poverty is one of the most critical issues facing urban areas in all countries. Successful management of urban areas—including managing the public health, the environment, political stability, and public safety for diverse populations—will depend in part on whether urban poverty is reduced. While some urban poverty originates in rural areas and is transported to towns and cities via rural-urban migration, much of it is grounded in urban life and is passed down from generation to generation of urban residents.

Urban Poverty

In the near future it is plausible that most of the world's poor people will live in urban areas. In the more developed world, poverty is already concentrated in urban areas, despite higher median incomes in urban than rural locales. This situation exists in part because more than 75 percent of the population in more developed countries lives in urban areas.

Assessment of urban poverty in less developed countries is plagued by conceptual and measurement problems. Some scholars consider the distinction between "urban" and "rural" poverty as artificial given the close linkages between rural and urban areas in low-income countries. Seasonal labor migration moves people back and forth between city and countryside, while remittances from rural migrants working in urban areas to their families transfer income from one locale to the other (see Box 3, page 22).[35] Estimates of urban poverty levels also depend on whether poverty is defined by an income threshold (as the World Bank does), by whether basic human needs are met, or by self-identification (through which people identify themselves as poor or not poor). The definition of poverty is likely to be different for more and less developed countries. In more developed countries, for example, virtually all urban

Table 2

Percent of Population Under Age 5 and Age 65 or Older in Urban and Rural Areas, Selected Countries, 1992 to 1998

		Ages			
		Under age 5		65 or older	
Region	Country/year	Urban	Rural	Urban	Rural
North Africa	Egypt, 1995	11.1	14.1	3.6	3.9
Sub-Saharan Africa	Ghana, 1998	11.7	16.1	4.1	5.1
	Benin, 1996	15.7	19.3	3.3	4.8
	Namibia, 1992	13.4	17.6	4.0	7.1
South Asia	Bangladesh, 1996-97	10.2	13.2	2.8	4.0
	Nepal, 1996	12.2	16.3	3.8	3.8
Southeast Asia	Indonesia, 1997	9.9	11.2	4.3	4.8
Near East	Yemen, 1997	14.8	16.9	3.2	4.1
Central Asia	Kazakstan, 1995	7.2	11.9	8.3	5.6
Caribbean	Haiti, 1994-95	12.0	16.0	3.7	6.2
Central America	Nicaragua, 1998	12.3	16.3	4.2	3.7
South America	Bolivia, 1998	12.3	16.1	4.7	7.1

Source: Macro International, Inc., Demographic and Health Surveys.

Table 3

Average Household Size in Urban and Rural Areas, Selected Countries, 1990 to 1998

		Mean number of household members	
Region	Country/year	Urban	Rural
North Africa	Egypt, 1995	4.6	6.0
Sub-Saharan Africa	Central African Rep., 1994-95	5.8	4.4
	Niger, 1998	6.2	5.8
	Zambia, 1995-96	5.7	5.2
South Asia	Bangladesh, 1996-97	5.3	5.3
	Pakistan, 1990-91	7.2	6.5
Near East	Yemen, 1997	7.2	6.9
Central Asia	Kazakstan, 1995	3.1	4.7
Caribbean	Dominican Rep., 1991	4.5	4.8
Central America	Nicaragua, 1998	5.3	5.9
South America	Peru, 1994	5.3	5.2

Source: Macro International, Inc., Demographic and Health Surveys.

Box 3

Urban Poverty Projects: Global and Local Initiatives

Until the 1990s, urban poverty reduction programs of major international development organizations had limited success. The World Bank launched the largest development programs in less developed countries in the past quarter century. The Bank increased its annual funding for alleviating urban poverty from $10 million in 1972 to more than $2 billion in 1988. Sixty percent of the Bank's urban lending during this period went to shelter operations or slum upgrading projects. These initiatives are mainly housing projects in which people are provided with land for building homes and aid for improving neighborhood infrastructure such as water and sewerage systems. Both types of projects rely heavily on self-help schemes.

The World Bank's urban poverty projects in the 1970s and 1980s tended to benefit people in the middle rather than the lower part of the urban income distribution, and they had little influence on the overall urban policies of recipient countries. In the 1990s, the Bank's Urban Management Program attempted to broaden its impact on urban poverty by striving to reach the poorest of the poor in cities and, at the same time, working toward better urban administration, more efficient land markets, a cleaner environment, and other conditions that indirectly affect the urban poor.

In the late 1990s, the Bank launched two notable urban poverty projects in collaboration with the United Nations Center for Human Settlements (UNCHS) and other UN bodies, governments, nongovernmental organizations (NGOs), and local authorities. The two projects are Cities Without Slums and The Cities Alliance. Cities Without Slums aims by 2020 to improve the lives of 100 million slum dwellers throughout the less developed world. The project upgrades living conditions in slum neighborhoods through such means as supporting small-scale enterprises and targeting health care and educational opportunities to the poor.

The Cities Alliance project focuses on policy changes that would improve living conditions of the urban poor. The program, for example, assists local authorities in outlining viable financing and investment plans, supports city-based consensus-building among diverse constituencies, and enables cities to share lessons learned in formulating and implementing development strategies. The cities, goals, and urban sectors (such as departments of planning, health, or education) of these projects are sometimes chosen by local and national authorities, other times by international agencies, but project implementation involves close coordination among many levels of government and other private and public organizations.

Local urban poverty-reduction projects led by community-based organizations and small NGOs are providing valuable lessons for major donor agencies. They emphasize, for example, the importance of empowering low-income households in decision-making. The National Slum Dwellers Federation in Mumbai India, (formerly Bombay), and the South African Homeless People's Federation in Cape Town, for example, have savings and credit groups of low-income people, mainly women, that enable them to fund their own housing. Group members develop their own house designs—first as drawings, then cardboard models, then life-size models.

Communities are encouraged to find creative ways to cut costs. Members of the Orangi Pilot Project in a slum of Karachi, Pakistan, and of the Barrio San Jorge program in Buenos Aires, Argentina, kept down the construction costs of sewers and drains by organizing and managing the construction themselves. The Casa Melhor and Multirão programs in Fortaleza, Brazil, organized low-income households into a formal people's movement that could channel concerns to donor organizations.

Antipoverty programs of international agencies typically operate under cost constraints, a need to show immediate benefits, complex bureaucratic structures, and government inertia or resistance. Given such conditions, an expansion of innovative community-led programs will be necessary to help the growing numbers of urban poor in less developed countries in coming years. Funding from governments and external donors is required to start many poverty alleviation projects, but community self-financing through credit, cost recovery, and other schemes has proved to be a viable approach.

References

World Bank, *The Cities Alliance: A Global Partnership Designed to Achieve the Promise of Well-Managed Cities.* Accessed online at: www.worldbank.org/html/ fpd/urban/citiesallience/ citiesall.htm, on March 13, 2000; J. Anzorena, J. Bolnick, S. Boonyabancha, Y. Cabannes, A. Hardoy, A. Hasan, C. Levy, D. Mitlin, D. Murphy, S. Patel, M. Saborido, D. Satterthwaite, and A. Stein, "Reducing Urban Poverty: Some Lessons from Experience," *Environment and Urbanization* 10, no. 1 (April 1998): 167-86; Aktar A. Badshah, *Our Urban Future: New Paradigms for Equity and Sustainability* (London: Zed Books, 1996); and Gavin A. Jones and Peter M. Ward, "The World Bank's New Urban Management Programme—Paradigm Shift or Policy Continuity?" *Habitat International* 18, no. 3 (1994).

residents have access to the most basic amenities, such as safe drinking water, and poverty is defined in more relative terms.

Even by conservative standards, urban poverty in the less developed world is high and is growing rapidly. The World Bank estimated that in 1985 there were 330 million urban poor people in the less developed countries, using an income cut-off of US$370 per year. The Bank estimates that in 1994 roughly 450 million urban dwellers—or 25 percent of the less developed world's 1994 urban population—lacked access even to the simplest latrines. The United Nations Population Fund concluded in 1996 that 28 percent of urbanites in less developed countries were living in poverty, including 41 percent in sub-Saharan Africa alone.[36]

Yet these estimates may be too low (see Box 4, page 24). The World Health Organization (WHO) and the UN Center for Human Settlements have endorsed a 1990 estimate based on dozens of national and city studies that 600 million urban dwellers—or 42 percent of the 1990 urban population—live in "life and health threatening" homes or neighborhoods.[37]

Urban poverty appears to be increasing in less developed countries. In Latin America, for example, urban areas contained 36 percent of that region's poor in 1970, but 60 percent in 1990, even though the pace of urbanization was considerably slower during this period. The World Bank now concedes as well that by 2025, the majority of the world's urban population will be living in poverty.[38]

Because they lack reliable income data from many poor countries, demographers frequently use proxy indicators of income, such as access to basic amenities including water, shelter, and electricity, to measure poverty.[39] Demographic and Health Surveys conducted in the 1990s reveal enormous variation among countries and regions, for instance, in the availability of piped drinking water in urban dwellings (see Table 4, page 25). In sub-Saharan Africa, urban residents in Namibia are comparatively well off, but less than 20 percent of urban households have piped drinking water in many other countries of the region, underscoring the widespread urban poverty. In some countries of South and Southeast Asia most urban households do not have immediate access to drinking water. By contrast, at least 50 percent of urban households have piped water in many countries of the Near East/North Africa, the former Soviet republics in Central Asia, and most countries of Latin America and the Caribbean.

Public and Reproductive Health

In most less developed countries, levels of mortality and disease are lower in urban than in rural areas. Generally, life expectancies began to increase in urban centers after World War II with the introduction of modern health services and sanitation systems in cities. In rural areas, better health and longer life are more recent developments and stem from mass immunization programs, improved access to preventive and curative health treatment, and other interventions of governments and international organizations since the 1970s.

The urban health advantage, however, masks enormous disparities between the urban poor and their more affluent neighbors. A study in Bangladesh in 1990, for example, found that in three low-income urban areas between 95 and 152 infants per 1,000 live births died before the age of 1; in a middle-class area, 32 of 1,000 births died. Infant mortality in the urban slums, in fact, was higher than in rural Bangladesh. In Porto Alegre, Brazil, the infant mortality rate in the early 1990s varied from more than 60 deaths per 1,000 live births in the city's poorest districts to less than 5 in the wealthiest. Research in Quito, Ecuador, uncovered infant mortality rates of 129 within families of manual workers in squatter settlements and 5 in upper-class districts.[40]

Innovative community-led programs will be necessary to help the urban poor.

Box 4

The UN Conferences on Human Settlements: 1976 and 1996

The United Nations (UN) has convened two global conferences on human settlements: Habitat I in Vancouver, Canada, in 1976, and Habitat II in Istanbul, Turkey, in 1996. The conferences represent the evolution of thought among governments and international development agencies regarding the less developed world's settlement problems. The focus shifted from rural areas in the 1970s to urban places in the 1990s. Indeed, Habitat II was officially dubbed "The City Summit" by its organizer, the UN Center for Human Settlements. The conferences also illustrate the reorientation of strategy in solving local settlement problems, from a government-led approach to the current perspective of partnerships among the public and private sectors and local communities.

The 1976 Vancouver Declaration on Human Settlements noted that "it is of paramount importance that national and international efforts give priority to improving the rural habitat." This emphasis stemmed from "rural backwardness which compels a large majority of mankind to live at the lowest standards of living," and "rural dispersion exemplified by small scattered settlements and isolated homesteads which inhibit the provision of infrastructure and services."

Twenty years later, when a large majority of people no longer lived in rural areas, an overriding theme of Habitat II was "sustainable human settlements development in an urbanizing world." Reaching people in isolated homesteads was no longer the top priority. The Istanbul Declaration on Human Settlements noted a "tendency towards excessive population concentration" in cities and urged governments to "minimize rural-to-urban migration." The introduction to the Habitat II Agenda by Boutros Boutros-Ghali, then UN Secretary-General, put governments' consensus of spatial concerns clearly: "The mass exodus to cities has led to sharpened urban poverty, scarcity of housing and basic services, unemployment and underemployment, ethnic tensions and violence, substance abuse, crime and social disintegration."

The 1976 declaration stated that "adequate shelter and services are a basic human right which places an obligation on Governments to ensure their attainment by all people, beginning with direct assistance to the least advantaged." The 1996 declaration, while reaffirming "a right to adequate housing," also recognized the "more than one billion people living in absolute poverty." The reliance on government is now considered a flawed approach to meet basic needs, particularly in cities where the costs of amenities are much higher than in rural areas. Rather, the 1996 conference committed to expanding "the supply of affordable housing by enabling markets to perform efficiently." This involves increased government cooperation with and mobilization of resources from the private sector, labor unions, nongovernmental organizations, and other civil society organizations, including community associations.

The hope is that the inclusive approach to urban management advocated at Habitat II, rather than the traditional top-down approach dominated by government, will allow cities in the future to be "places where human beings lead fulfilling lives in dignity, good health, safety, happiness and hope."

References

United Nations, *Habitat Agenda and Istanbul Declaration: Second United Nations Conference on Human Settlements, Istanbul, Turkey, 3-14 June 1996* (New York: United Nations, 1996); and United Nations, *Report of Habitat: United Nations Conference on Human Settlements. Vancouver, 31 May–11 June, 1976* (New York: United Nations, 1976).

Diseases of poverty, such as malnutrition, may be increasing in urban areas. A 1999 study of the 16 countries on the WHO Global Database on Child Growth and Malnutrition found that the number of underweight children was increasing at a faster rate in urban areas than in rural areas.[41]

Yet it is not just the poor who experience health deprivations in urban areas. The WHO emphasizes that all urban dwellers in less developed countries, unlike rural residents, are exposed to the "double burden of disease." The first burden is traditional scourges associated with living in a poor country, such as malnutrition, measles, and malaria. The second burden is afflictions resulting from newly modernizing societies, such as obesity, cancer, and road accidents.[42] More recently, a third dimension has been added: the deterioration of mental health and increased rates of psychiatric disorders and deviant behavior that are associated with degraded living conditions, overcrowding, and rapid social and cultural change in ur-

ban areas. Depression is projected to become the leading disease burden in less developed countries by 2020, when more than one-half of the region will be urban.[43]

Cities of less developed countries are also prime locations of newly emerging killers, notably HIV/AIDS. In sub-Saharan Africa, where about 80 percent of all AIDS deaths have occurred, HIV infection is much higher in cities than smaller areas, in some places by a factor of four.[44] Sexual norms are often more permissive in urban centers than in the countryside, which can facilitate transmission of the disease. The preponderance of single men in temporary urban migration in some areas, such as sub-Saharan Africa, also leads to widespread prostitution and multiple sex partners, which are the greatest risk factors in the spread of HIV/AIDS.[45] In Asia, HIV/AIDS began to spread in the early 1990s, when the largest countries—China, India, Indonesia, and Pakistan—were just beginning to urbanize rapidly. Urbanization could accelerate the HIV/AIDS epidemic in these countries unless the practice of safe sex becomes more widespread.

Given these conditions and trends, the traditional survival advantage of urban compared with rural residents in less developed countries may begin to diminish. Urban areas also had higher death rates than rural areas during the boom period of urban growth of many countries in Europe and North America: 1875 to 1900. In the United States in 1900, for instance, for every 1,000 children born, 177 died before age 5 in rural areas, compared with 215 in urban areas in general, and 237 in New York City in particular.[46] In Prussia in 1875, the infant mortality rate was 190 in rural areas and 240 in urban areas. High levels of population density also led to high levels of tuberculosis in urban areas of Europe and the United States in the late 19th century.[47] The urban health services and sanitary infrastructure were not able to keep up with the demand generated by in-migration.

Table 4

Urban Households With Piped Water, Less Developed Countries by Region, 1990s

Country, year of survey	Percent with piped water
Sub-Saharan Africa	
Namibia, 1992	82
Senegal, 1997	64
Kenya, 1998	58
Côte d'Ivoire, 1998-99	51
Zambia, 1995-96	47
Eritrea, 1995	41
Ghana, 1998	41
Tanzania, 1996	32
Niger, 1998	27
Burkina Faso, 1993	26
Rwanda, 1992	26
Mozambique, 1997	23
Cameroon, 1998	20
Benin, 1996	19
Madagascar, 1997	18
Nigeria, 1990	17
Uganda, 1995	13
Malawi, 1996	12
Togo, 1998	12
Guinea, 1999	10
Central African Republic, 1994-95	5
Near East/North Africa	
Jordan, 1997	97
Egypt, 1995	92
Morocco, 1995	86
Yemen, 1997	66
Asia	
Kazakstan, 1995	91
Kyrgz Republic, 1997	87
Uzbekistan, 1996	87
Pakistan, 1990-91	48
Philippines, 1998	47
Nepal, 1996	46
Bangladesh, 1996-97	32
Indonesia, 1997	29
Latin America/Caribbean	
Brazil, 1996	81
Paraguay, 1998	75
Peru, 1996	72
Nicaragua, 1998	70
Dominican Republic, 1996	50
Bolivia, 1998	47
Haiti, 1998	29

Note: The percentages refer to households with drinking water piped into the residence.

Source: Macro International, Inc., Demographic and Health Surveys.

Box 5

The Healthy Cities Movement

In 1985, the World Health Organization (WHO) launched the "Healthy Cities" project in 11 European cities as part of its movement to achieve "Health for All" by the year 2000. By 1998, the project had extended to more than 550 cities throughout Europe, and more than 1,000 cities worldwide were applying principles of the movement. By networking via the Internet, conferences, publications, and visits, successful approaches of one city are shared with hundreds of others. Healthy City projects have led to healthy cities, and lessons learned from the initiative promise to sustain and improve urban health in cities throughout the world.

Healthy City projects seek to put health at the forefront of the agenda of decisionmakers, to build a strong lobby for public health at the local level, and to develop a local, participatory approach for dealing with health and environmental problems. A "healthy city" is defined in terms of process and outcome rather than a specific level of health. A healthy city is one that is conscious of health and is striving to improve it, which means that any city could be part of the healthy cities movement.

Health problems of cities vary, consequently different approaches have been applied. Guided by research, authorities in Copenhagen, Denmark, transformed their city's health policy from one targeting specific medical objectives, such as altering behaviors of smoking, drinking, and unhealthy diets, to a policy that addressed individuals' social problems, such as feelings of loneliness, neglect, and uselessness. Practices in other more developed countries include insulating residential high-rise buildings in Sheffield, England; alleviating pollution in Krakow and Bialystok in Poland; and regulating downtown traffic to make cities in Italy more "child-friendly."

In 1995, a Healthy City project began in Fayoum, a group of packed villages containing 2 million inhabitants approximately 90 kilometers from Cairo, Egypt. The policy approach was initiated at a workshop where local elected leaders articulated their perceptions of health problems in the area. Research was then conducted, collecting existing data related to the city, interviewing hospital and health center staff and leaders of women's groups through questionnaires and focus groups, and analyzing hospital records. Based on the results, project personnel identified several priority issues. A 1995-1996 plan of action was drawn up that focused on two issues: healthy schools and on-site sanitation. A 1996-1997 plan of action emphasized four issues: health education, water and waste water, environmental sanitation, and income generation. Working groups were created in the community to address each of these issues.

Fayoum is one of hundreds of healthy city initiatives recently pursued in less developed countries. Public health and policy specialists have learned that the success of these efforts in the future will require good governance at the local level. Among the keys to success are involving community stakeholders in identifying and addressing their city's health problems, collaboration among different sectors of local government, and getting local leaders to take responsibility for raising funds to implement programs.

References

World Health Organization, *About the WHO Healthy Cities Project.* Accessed online at: www.rulimburg.nl/~who-city/hcp-info.htm, on April 12, 2000; Trudy Harpham, Ilona Blue, Edmundo Werna, and Greg Goldstein, "From Healthy City Projects to Healthy Cities" *Environment and Urbanization* 11, no. 1 (April 1999): 27-52; and Marina Kenzer, "Healthy Cities: A Guide to the Literature," *Environment and Urbanization* 11, no. 1 (April 1999): 201–20.

Urban reproductive health will become a more important policy issue in the future. Based on UN projections of urbanization and population age structure, there will be more women in their peak childbearing years of 15 to 39 in urban than rural places between 2015 and 2020, in part because of migration of young women from rural areas. In urban areas, the proportion of women who are ages 15 to 39 typically exceeds 40 percent, higher than in rural areas (see Table 5). Urban women generally want fewer children than rural women, but they will need access to family planning services to be able to limit the number of children they have.

To avoid mortality increases in urban areas, alleviate current urban health problems, and meet the projected need for greater reproductive health care, the governments of less developed countries may choose to invest more heavily in urban health programs in general.

Such investment would involve increasing the national budget for the health sector, allocating public health resources for urban centers according to their population growth, and maintaining adequate urban water and sewerage systems.

Such a broad response to urban health conditions, however, may be constrained by insufficient economic resources and by a widespread perception that urban areas are getting more than their fair share of government resources. Strategies to promote "health equity" by reducing health inequalities within cities or between cities and other areas have gained favor among international health organizations.[48] Reform of the urban health sector's organization, management, and funding, involving such measures as health insurance, privatization, decentralization, and user fees, has improved health equity in many countries (see Box 5).

Natural Disasters and Environmental Hazards

The concentration of people in cities can exact a heavy death toll from natural disasters, as illustrated by Hurricane Mitch, which destroyed much of Tegucigalpa, Honduras, and other Central American cities in 1998, and by major earthquakes near Taipei, Taiwan, and Istanbul, Turkey, in 1999. Many cities of less developed countries are especially vulnerable to flooding and storm damage because they were established in coastal areas, along routes most suitable for trading.

Invariably, natural disasters in cities kill or injure members of low-income groups disproportionately because the poor often live in unsafe housing on land susceptible to flooding or landslides. The loss of homes, possessions, and often livelihood because of a natural disaster often leads to further impoverishment.

Motor vehicles are a less sensational yet more significant environmental threat to urban residents. Vehicle fleet size in less developed countries has been growing exponentially.[49] By 2020, traffic accidents in urban areas are projected to be the third largest cause of death and disability in the world, ahead of war and infectious diseases, including HIV/AIDS.[50] The main victims of crashes are pedestrians, not motorists.

Motor vehicles also contribute to air pollution in cities, which is a major cause of respiratory diseases. Levels of air pollution, particularly in the big cities of East and Southeast Asia, are so high as to have a marked impact on human health and productivity. A UN study concluded that 13 of the 15 cities with the worst air pollution in the world are in Asia. Levels of smoke and dust emitted from leaded gasoline and coal burning in Beijing and Shanghai in China are often five times the levels in most European and North American urban areas.

Children often suffer the greatest health risk from environmental pollution. Lead levels in Shanghai and Bangkok are already high enough to impair the mental development of children.[51] The World Bank estimates that lead exposure causes up to half a million cases of hypertension a year in Bangkok, and that more than 800 infants die annually in Cairo because their mothers had been exposed to lead.[52] A ban on the sale of leaded gasoline in Beijing and some other Chinese cities at the beginning of 1998 may gradually improve environ-

Table 5

Percent of Women Ages 15 to 39 in Urban and Rural Areas, Selected Countries, 1990s

Country, year	Percent of women ages 15 to 39		Ratio
	Urban	Rural	Urban : rural
Bangladesh, 1996-97	48	41	1:18
Haiti, 1994-95	46	34	1:36
Indonesia, 1997	47	41	1:16
Kenya, 1998	53	35	1:53
Nicaragua, 1996	42	36	1:17
Yemen, 1997	41	35	1:17

Source: Macro International, Inc., Demographic and Health Surveys.

mental health in urban China over the next generation.

Urbanization's effect on the global environment is also noteworthy. Large, modernizing cities are often referred to as "heat centers" and blamed for contributing to the destruction of the world's ozone layer. While motor vehicles are the primary cause of pollution in cities, increased demand for energy to run air conditioning and electrical appliances is contributing to pollution in many cities. Producing the energy required to run modern urban systems often involves burning fossil fuels, which releases such greenhouse gases as carbon monoxide, carbon dioxide, and nitrogen oxides. These emissions lead to global warming, which can cause climate change, rising sea-levels, changes in vegetation, and severe weather events. Oxides of sulfur and nitrogen emitted to the atmosphere from cities have led to acid rain that have killed lakes and forests in North America and Northern Europe.

A 'healthy city' is defined in terms of process and outcome rather than a specific level of health.

Solutions to these environmental dangers—as well as to problems that confront many cities, such as industrial pollution and sewerage waste—are well known but require political will to enact. Disaster from human activities can be avoided, and damage from natural disaster reduced, by enforcing regulations on industrial plant safety and waste disposal, and ensuring that public agencies take appropriate disaster preparedness measures. Flooding, which especially devastates low-income communities because they often are situated in vulnerable areas, could be avoided through better watershed management upstream and improved storm drains. Motor vehicle crashes could be limited through changes in road design and enforcement of vehicle safety standards and traffic regulations. Fatalities could be reduced through road safety awareness, first aid training, and emergency medical services. And changes in urban infrastructure that encourage more compact cities and efficient public transportation systems could reduce dependence on motor transport and hence pollution levels.

Political Change

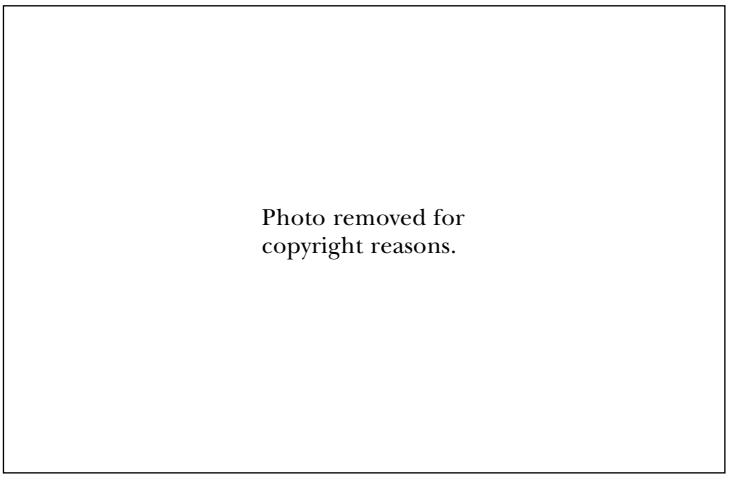
The relationship between urban population change, poverty, and political upheaval is an issue of growing debate. In the 1990s, many political scientists grew concerned that rapid urbanization and city growth in less developed countries, coupled with increased urban poverty, often led to civil violence in cities that threatened national political stability.[53] This pessimistic view of urbanization derives from a long-standing body of social conflict theory dating to Karl Marx's alienated and revolutionary urban proletariat. Some analysts predict that urban poverty will become the most significant and politically explosive problem in the 21st century. Without policies that redress social inequalities, claim some demographers, urban areas will experience escalating crime and violence punctuated by sporadic riots and increased terrorism.[54]

The 1979 Islamic Revolution in Iran is frequently cited as an example of how urbanization can generate political turbulence. In the decades preceding this revolution, population growth rates in Iran were several times higher in urban than rural areas, mainly because of rural-urban migration. Young migrants became more educated yet remained poor, creating a large population of frustrated urban youth, who mobilized to overthrow the Shah in a dramatic revolution. A similar scenario has been envisioned for African countries.[55]

The historical record, derived from a less urbanized past, shows few direct causal links between urban population growth, urban poverty, and political change. Some social scientists argue that, from the dawn of civilization, peasant revolts in the countryside have been the most important insurrectionary components of almost all successful political revolutions.[56] Viewed across the rural-

urban divide, political insurgency frequently results from a collection of factors, including class conflict; cleavages of ethnicity, race, or religion; and environmental scarcity. Observers of the economic downturns in Latin America in the 1980s point out that increased urban poverty did not spur revolt. Rather, people were motivated to take on multiple jobs, work longer hours, spend more time seeking informal employment, and increase participation in the labor force.[57]

Yet, policymakers cannot rule out the potential security threat posed by unprecedented levels of urbanization and rates of urban growth in areas with few resources and slow economic growth. Even the potential for violence in the world's burgeoning cities merits attention by governments in the future because any civil disturbance could quickly threaten large numbers of people.



This favela in Rio de Janeiro, Brazil, is vulnerable to flooding and landslides. Many of the poorest residents in less developed countries live in makeshift housing subject to environmental hazards, such as flooding and industrial pollution.

Urban Challenges of More Developed Countries

As in the less developed world, the potential consequences of urban population change in more developed countries will almost certainly relate to trends in urban poverty. The close relationship between urban population change and urban poverty is indicated by evidence from the United States.

Urban Poverty in the United States

In the United States in 1998, 12.3 percent of the population in metropolitan areas was living in poverty, compared with 14.4 percent of the rural population. Yet because America's population was more than 75 percent urban, these percentages translated into 27.0 million poor urban dwellers and 7.5 million poor rural residents.[58]

Urbanization levels alone, however, cannot account for the large numbers of impoverished people in urban areas. The share of the U.S. population living in urban areas increased from 74 percent to 77 percent between 1970 and 1990, but the percentage of poor people living in metropolitan areas increased much more rapidly, from 56 percent to 72 percent.[59] One reason for the increased poverty may be changes in the composition of urban populations, especially those in central cities.

Urban poverty in the United States is mainly a characteristic of central cities. In the 1990s, a person living in the central city of a U.S. metropolitan area was twice as likely to be poor as a person residing in a suburb. In 1998, one-third of the country's 539 central cities had 20 percent or more of their residents living in poverty. The economic boom of the 1980s and 1990s helped reduce unemployment in central cities from 8.5 percent to 5.1 percent between 1992 and 1998, but job growth occurred faster in suburbs than in central cities. In 1998, 17 percent of central cities had unemployment rates at least 50 percent higher than the national average.[60] Poverty has become more concentrated in central cites over the past few decades. In the 100 largest U.S. cities, the percentage of poor people living in neighborhoods with a poverty rate

of 20 percent or more rose from 55 percent in 1970 to 69 percent in 1990.[61]

Paradoxically, inner-city poverty has resulted, in part, from economic growth. America's strong economy in the 1990s pushed rents up faster than wages for millions of central-city residents, who often lacked the skills and means of transport to get to jobs being created in the suburbs.

A critical shortage of affordable housing has emerged in metropolitan areas, and in central cities in particular. In 1998, for example, in all metropolitan areas, the housing wage—that is, what people need to earn in order to limit their housing costs to 30 percent of their incomes, or a fair market rent (FMR)—was higher than the federal minimum wage of $5.15 an hour. In the District of Columbia, the housing wage was more than three times the minimum wage, while residents of Boston needed to earn 3.4 times the minimum wage to afford a two-bedroom unit at FMR.[62]

Unaffordable housing in metropolitan areas has contributed to increasing homelessness in American cities. A 1996 survey of the homeless by the Census Bureau found that 71 percent of these persons lived in central cities, and an additional 21 percent resided in fringe suburbs. A 1998 survey of 30 major cities found that requests for public shelter had increased in 21 cities by an average of 11 percent during the year. Most cities had stopped accepting requests for assisted housing because waiting lists had grown too long. Requests for emergency food assistance in those 30 cities rose by an average of 14 percent.[63]

Inner-city poverty is closely linked with inadequate educational opportunities for children. The poor performance of central-city school systems remains a major barrier to attracting middle-income households—and therefore higher tax revenues—back to cities. In 80 percent of large, central-city schools, at least 70 percent of students were poor. In 1996, 60 percent of children in city schools failed to achieve basic levels of competency in reading and mathematics. Almost one-half of high school students in these schools failed to graduate within four years.[64]

Another consequence of poverty in cities is a lack of public safety. Admittedly, crime reduction is one area where most big cities have shown their greatest improvement in the 1990s. In cities with 1 million or more residents, the murder rate fell by more than 40 percent between 1991 and 1997, from 35 to 20 murders per 100,000 population. Between 1997 and 1998, these "million-plus" cities recorded a further 11 percent decline in the murder rate.[65]

Nonetheless, crime in the United States remains an overwhelmingly urban phenomenon. In 1997, 96 percent of reported violent crimes, such as murder, rape, robbery, and aggravated assault, and 95 percent of reported property crimes were committed in urban areas. Metropolitan-area residents were 2.6 times as likely to be victims of crime as rural residents. Some metropolitan areas are still particularly dangerous. The rate of violent crime in Atlanta exceeded 30 incidents per 1,000 people, as compared with the national rate of 6 cases per 1,000. Murder rates in New Orleans and Washington, D.C., were 50 per 100,000 people, whereas the national murder rate was 7 per 100,000. Urban crime is often linked to drug use and drug trafficking. In Philadelphia, 78 percent of arrestees in 1997 tested positive for marijuana, cocaine, heroine, or another illicit drug.[66]

Changing Ethnic Composition

American cities have long been celebrated as "melting pots" of diversity among ethnic and racial groups. They are the entry port of most immigrants, who have a significant impact on population size, wages, social services, school enrollment, housing, and other features of cities. Indeed, the arrival of legal and illegal immigrants helped stabilize the population size of many of America's central cities in the 1990s.

Of the nearly 6 million immigrants entering the United States between 1990 and 1998, more than 47 percent settled in central cities and an additional 46 percent moved to nearby suburbs, according to Census Bureau data.

Just 10 of America's metropolitan areas attracted two-thirds of all immigrants between 1990 and 1998.[67] These 10 "gateway" cities are home to 58 percent of the country's Hispanic population. The immigrant profile of U.S. cities varies considerably, however, and it can shift over time. One-third of the legal immigrants to New York City between 1990 and 1994, came from the Caribbean, compared with one-eighth of all U.S. immigrants (see Figure 10, page 32).

The clustering of immigrants in "ethnic enclaves," such as Miami's Little Havana and Little Haiti, Chinatowns in New York and San Francisco, and Little Saigon in Los Angeles, is well known. Monterey Park, just northeast of Los Angeles, has become the first city on the U.S. mainland with an Asian majority. At the end of the 1990s, nearly 60 percent of Los Angeles' more than 60,000 residents were Asian; many Asian residents were recent immigrants.[68]

Today's U.S. immigrants, like their predecessors, tend to move to the suburbs and to smaller cities over time. A 1999 study concluded that at least half of Cubans, Filipinos, Asian Indians, and Koreans in homes with foreign-born household heads were living in the suburbs, rather than in the inner-city neighborhoods they helped to stabilize in the 1980s.[69]

The ethnic diversity of America's cities presents many challenges for municipal authorities. Most prominent, perhaps, is the need to equip new entrants with the basic English-language skills usually needed for economic success. Among the more than 700,000 students in the Los Angeles School District, more than 100 languages are spoken. Establishing fluency in English comes at a high cost to the school system because it requires additional teachers, classrooms, and courses.

Newcomers face especially high health threats when they move to low-income urban neighborhoods, in part because the public health system does not reach them. The infant mortality rate in New York City in 1998 was 6.8 infant deaths per 1,000 live births, better than the national average rate of 7.2. In the neighborhood of Bedford-Stuyvesant, Brooklyn, however, where many new immigrants are settling, the rate was 14 per 1,000.[70]

New ethnic groups in American cities have historically suffered the racial hostility of majority or longer-term residents. Today, as immigrant populations in cities become larger and more diverse, they sometimes face violent conflict and bigotry from other immigrant groups as well as from long-term residents. The Los Angeles riots of 1990 and 1991, for example, were prompted by African Americans' frustration with L.A.'s largely white police department and justice system, but two-thirds of the victims were Korean Americans, primarily immigrants. About the same time, riots in Crown Heights, Brooklyn, pitted Hasidic Jews against African American immigrants, mainly from the Caribbean.[71]

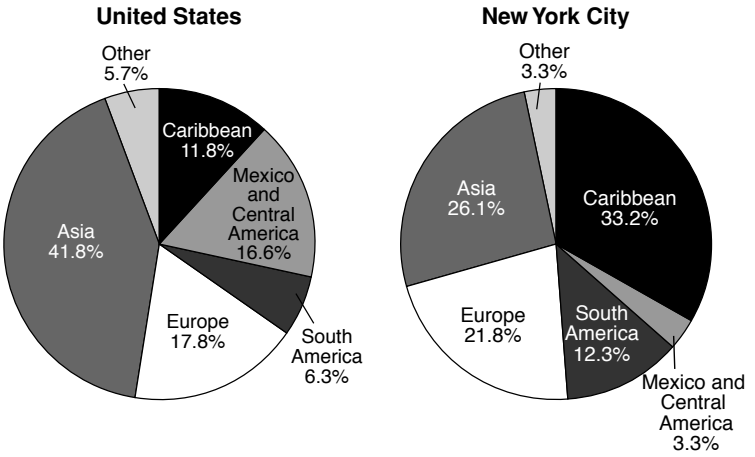
Both incidents indicate that minorities often harbor deeper anger or distrust for other minorities than toward whites. A national survey in 1998, for example, found that almost half of Latinos agreed that Asian Americans are "unscrupulous, crafty and devious in business." More than two out of three Asian Americans believed that Latinos "have bigger families than they are able to support," while Latinos were three times as likely as whites to believes that blacks "aren't capable of getting ahead even if given the opportunity."[72]

Interracial or interethnic animosity is particularly relevant for big cities. The close proximity of large differentiated groups in highly competitive economic markets places a high demand on governments to provide law enforcement and other services that deter aggression. Urban sociologists warn that as successive waves of

The arrival of immigrants helped stabilize many U.S. central-city populations.

Figure 10

Immigrants Admitted to the United States and New York City by Area of Origin, 1990 to 1994



Note: About 40 percent of New York's Caribbean immigrants were from non-Hispanic countries.

Source: New York City Department of Planning, *The Newest New Yorkers, 1990-1994* (December 1996).

immigrants move to smaller urban areas and as middle-class African Americans leave central cities for the suburbs, many impoverished African Americans are being left behind in segregated, central-city neighborhoods.[73]

Aging of Urban Areas

The proportion of the population age 65 years or older is projected to increase rapidly in more developed countries, from 14 percent in 2000 to 21 percent by 2025. Population aging carries special significance for cities of these countries. Most cities have a higher percentage of elderly people than the national average, and inner cities generally have higher proportions than surrounding metropolitan areas. In addition, more elderly people in cities live alone compared with the elderly in rural areas.[74]

While many older people prefer independent living, living alone can lead to isolation and, subsequently, to loneliness and inadequate attention to physical health. Thus, many elderly people who live alone need exactly what the city can offer: health and social services, opportunities to interact with other people, public transportation systems, and other urban amenities. The decentralization of authority to local tiers of government in most countries means that cities, rather than national institutions, will have an increasing role in meeting the needs of their elderly populations.

Population aging in cities means that services and housing have to be adjusted to elderly persons' requirements. Cities have adopted different approaches to this challenge of aging, but five common principles for policy development have emerged. These are: (1) enabling the elderly to live independently for as long as possible; (2) providing residential rather than institutional environments for those who require special care; (3) creating local conditions to help the elderly live as active a life as possible; (4) involving the private sector in delivering housing and services for the elderly; and (5) stimulating self-help on the part of the elderly and informal care by their neighbors.

Innovative policies used in some countries to pursue these principles may help guide cities in other countries. Some cities in Denmark, for instance, relaxed their zoning regulations to allow the building of additional community centers, enabling elderly people to stay in the areas they know and to maintain their existing social networks. Canada has designed "New Horizon Grants" to encourage self-help initiatives by providing funds to community organizations that are run by the elderly. "Project 67+" has enabled elderly residents of Oslo, Norway, to provide policy recommendations on such issues as improving the accessibility of local transport. New technologies—such as personal alarms and interactive video systems connected to a source of assistance—promise more security for the urban elderly.[75]

Improving transport for the elderly will be a central challenge of urban planning. Since every journey usually begins and ends on foot, improving walking routes is a first task. Simple

changes to urban transport—better design of hand rails, reserved seating, and accessible information before and during trips—could also make it easier for the elderly to be independent and mobile.

The growing population of elderly will also need assistance meeting the relatively high costs of urban housing, especially for people who must move to assisted-living situations. Experts anticipate that traditional sources of assistance—by elderly persons themselves, family, government, or voluntary organizations—may not be able to meet the increased demand for financing. Innovative household financing for the urban elderly will be required, such as greater coverage under insurance schemes, tax exemptions, and mandated pension contributions for housing.

The Urban Future in Less Developed Countries

There are generally two schools of thought regarding the future management of urban population change in less developed countries. These perspectives revolve around a central question: Are urban areas growing too rapidly? Those concerned most with rapid urban growth per se, rather than with urban population problems such as poverty or poor health, tend to advocate one of two types of policy approaches. The first strategy uses explicit population policies to slow the pace of urban growth. The second approach relies on macroeconomic adjustments to eliminate the "urban bias" of government policies that indirectly spurs migration to the largest cities.

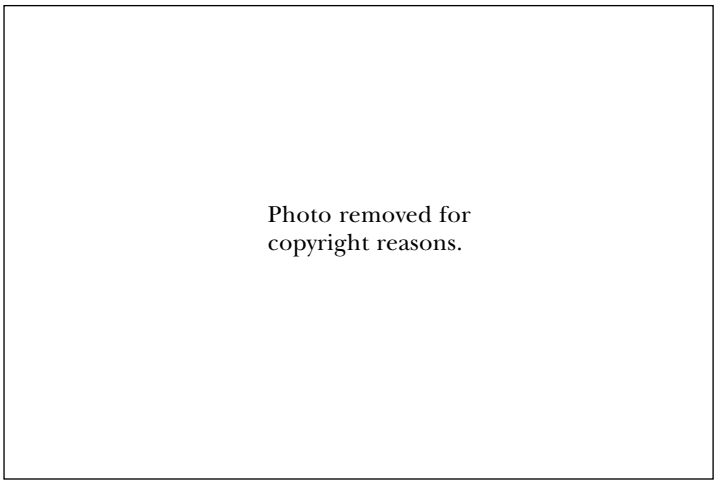
Those who believe that the pace of urban growth is less important than other urban population problems generally recommend three policy prescriptions that are guided by countries' levels of development. First, all countries are being urged by international organizations to improve urban management and governance so they can accommodate future increases to their urban populations. Second, wealthier less developed countries are pursuing tactics to create "competitive cities" that foster economic linkages with big cities of more developed countries as well as with other cities in less developed countries. And third, cities in the least developed countries, where economic prospects are especially dim, are being advised that they can nonetheless adopt "best practices" of cities in countries with comparable conditions to attack specific urban maladies.

Slowing Urban Growth

Many countries have tried to slow the pace of urban growth through explicit policies. Most urban growth in less developed countries in recent decades has been attributed to natural increase. Nonetheless, the population policies to reduce urban growth in most less developed countries have focused almost solely on restricting in-migration and, indirectly, altering the geographic distribution of populations. Such migration-oriented policies have included eligibility requirements that limit people's ability to move (in China and Ethiopia, for example), rural development schemes to encourage people to stay in rural areas (Malaysia and Vietnam), and land colonization schemes meant to attract settlers to newly developed areas (as in Brazil and Indonesia). With rare exceptions, such as South Africa under apartheid, these migration-oriented policies have failed to curb the pace of urban growth. In contrast, policies that accommodate migrants from the countryside and assimilate them to the more modern social norms and behaviors of urban areas have more effectively curbed urban growth by reducing migrant fertility.[76]

Some countries have attempted to reduce migration to large cities by strengthening the economies of towns and medium-sized cities and building an urban system with strong networks

Improving transport for the elderly will be a central challenge of urban planning.



Telecommunications advances have facilitated the creation of urban networks of cities around the world. Brokers on the Nairobi stock exchange, for example, will have increasing access to businesses outside Kenya.

between such "secondary cities" and between towns and rural areas. This policy approach assumes that urban and rural development must go hand in hand, and that secondary cities can occupy an intermediate niche that links villages with big cities and thereby redistributes economic growth and benefits throughout a country.[77] The 1982 Urban Distribution Policy in China, for instance, prescribed strict control of large coastal cities, the development of medium-sized inland cities, and encouragement of the growth of small cities and towns. State-allocated resources were redirected to smaller places. These policies helped limit the growth of big cities for awhile, but were undermined by increased emphasis on market-oriented economic coordination in the 1980s and 1990s, which has accentuated the importance of China's coastal regions.[78] Nonetheless, secondary city development can be credited with modest success in slowing the growth of very large cities in Mexico, South Korea, Thailand, and elsewhere.

Economic reforms have also helped manage the pace of urban growth by promoting equitable economic policies between urban and rural areas. Under pressure from international financial institutions, for example, some countries have raised the price of food for urban consumers since the 1980s by eliminating subsidies, for example. An unexpected outcome of this, in many less developed countries, has been slower urban growth than was anticipated 20 years ago.[79]

If urban population control is an explicit objective, a more promising strategy from a demographic standpoint is to provide women in urban areas and potential migrants in rural areas with the means to regulate their fertility and have the number of children they desire. This practice has been implemented effectively, for instance, by PROFAMILIA, the national family planning agency of Colombia. Between 1970 and 1995, the average number of births per woman fell from six children to less than three children in Colombia. Bogotá's population of 8.6 million residents in 2000 is several million below projections made as recently as 1980.

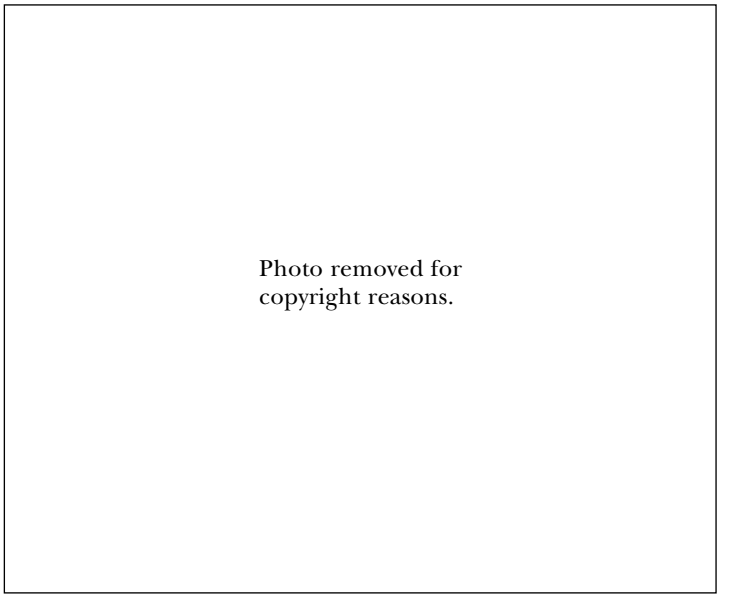
Addressing Urban Problems

Many scholars accept that rapid urban growth in the less developed world is inevitable in the future, but do not accept the predictions of its dire consequences. This more optimistic perspective maintains that any urban area with good management capabilities can absorb large population increments without diminishing human welfare or the quality of the environment.[80] The key to success is a commitment to adopt policies that, among other things, maintain infrastructure, increase productivity of the labor force, and alleviate poverty. A frequently cited example of urban managerial success is Curitiba, in Brazil, which through innovations to encourage use of buses rather than cars, land use regulations that conserve green space, and other measures, has avoided the degradation experienced in most other cities of comparable size in less developed countries.[81]

In addition to appropriate management, good governance is particularly important to the well-being of urban residents. Rural areas are less vulnerable to "bad" governance, because they are generally further removed and rely on fewer public services. Good governance practices for cities have only recently been articulated and fully implemented in the less developed world. Such practices include engaging nongovernmental actors—communities, civic groups, private contractors—in meeting basic needs; decentralizing decisionmaking authority and control of municipal resources from governments to local groups; and making city governments more responsive to local needs, more accountable for their actions, and more transparent with respect to financing.

Achieving effective governance will be particularly daunting in extended metropolitan regions. These large urban systems are difficult to manage in a cooperative fashion and will require the establishment of new regional governance institutions and technologies, including improved management information systems to track the increasingly rapid and complex flow of people, information, finance, and commodities.[82]

All of the world's cities will face growing international competition in the 21st century. Some analysts maintain that cities of less developed countries, particularly those in countries with prospering economies as well as large labor pools and domestic consumer markets, will be "winners" in the urbanizing world if they can enhance their competitiveness.[83] Their success will improve the well-being of city dwellers, and then spur regional or national economic growth. The Pearl River Delta region of southern China is an example. This region's string of cities and urbanized zones has experienced the fastest economic growth in the world since around 1980, relying on heavy inflows of foreign direct investment and temporary migrant labor from the countryside. Rapid urban growth has allowed massive global export of low-cost consumer items.



One strategy to reduce urban poverty is to provide loans for small businesses, such as this manufacturer of leather bags in Santa Cruz, Bolivia.

Other cities in less developed regions may become more competitive, alternatively, by establishing networks with cities in other countries, as is occurring in Southeast Asia. A city can form an economic node linked to other cities by large chains of airports, highways, and communications. A networked city would no longer be dependent on its own central core, but on the global network of cities.[84]

Finally, the growth of Internet technology and the personal computer industry in the 1990s is enabling the poorest cities, at low cost, to share "best practices" in dealing with their specific population problems. Dakar, Senegal, provides one example of "best practices" for urban transport in sub-Saharan Africa that can now easily be shared with other countries. Dakar, which contains over 20 percent of Senegal's residents, purchased obsolete railroad cars from France and quickly converted them for use on a suburban railroad that transports about 22,000 commuters daily into the city.

Another best practices model is from the favelas, or slums, of Rio de Janeiro, where girls 14 years of age or older are trained in hair dressing through a government-funded program. This program has enabled numerous young Brazilians to get jobs in beauty salons or to establish their own businesses, generate income for their families, enhance their self-esteem, and become productive urban citizens. This model urban-livelihood strategy also reduces the incentives for impoverished young women to become commercial sex workers. The practices of hundreds of cities in coping with problems of their populations can now be instantaneously accessed elsewhere, to guide other cities.[85]

Managing Population Change in U.S. Cities

America's urban population trends and spatial forms in the future will be shaped by international flows of capital, information, labor, and technology, as well as by private decisions of individuals and families. The task of managing urban changes, however, will fall on four agents: national government, municipal authorities, the private sector, and community groups (including nonprofit organizations).

Unlike most governments in Western Europe, the U.S. government has historically had a minimal role in managing cities and urbanized regions. Rather, policy planning has been decentralized to the municipal level, leaving cities to bear the fiscal burden of providing most infrastructure and services.

In 1999, however, the U.S. government proposed a 21st-century agenda for cities and suburbs to achieve three broad goals. First, no central cities should be left behind while the U.S. economy prospers from global integration. Second, urban sprawl to and beyond the suburbs must be contained to ensure a better quality of life in these areas. Third, for the first time in its history, the United States must develop a mutually beneficial relationship between its central cities and suburbs, based on regionally coordinated strategies of development.[86]

The national government's policy agenda to save central cities rests on four integrated components: (1) encouraging business to use the untapped labor market of underemployed and unemployed city dwellers; (2) investing in skills training; (3) expanding affordable rental housing and homeownership; and (4) making inner-city communities more livable. To increase employment and occupational skills among inner-city residents, the government must rely on leverage from public and private partnerships—that is, use public funds and guarantees to encourage greater private-sector investment in promoting urban business. One current policy, for example, calls for an initial government investment to upgrade skills in African American communities and increase literacy in immigrant neighborhoods, thereby encouraging private investment in such areas before businesses look overseas for opportunities. "Brownfields"—former industrial sites requiring clean-up before they can be redeveloped as community assets—are seen as a key job-generating opportunity for inner cities.

Affordable housing is crucial because rent is the top cost burden in the transition from welfare to work in inner cities. Increased federal mortgage insurance, for example, can encourage homeownership while making inner-city communities more livable, stable, and safe.

Urban sprawl is making urban areas less livable and adversely affecting central cities. A sprawled urban area is one in which land is developed—by roads, buildings, and other infrastructure—at a faster pace than population growth. One example is Kansas City, where the population increased by 5 percent between 1990 and 1996, while developed land increased by 70 percent. The spatial

form of sprawl is horizontal expansion, as typified by Atlanta, which grew from 65 miles north to south in 1990 to 110 miles in 1998.[87]

For suburbanites, sprawl increases commuting time, raises the cost of living, and reduces the standard of living. A 1999 report concluded that members of an average suburban household drive 3,300 more miles per year than their central-city counterparts. Suburban residents of Denver used 12 times as much gasoline as those in Manhattan. Sprawled suburbs have road costs up to 33 percent higher and utility costs 18 percent to 25 percent higher than sprawl-free communities. Sprawled development consumes 25 percent to 67 percent more open land than nonsprawl development, and produces about one-third more water pollution.

Urban sprawl also worsens conditions for poor central-city residents because the movement of businesses to suburbs creates a mismatch between where this untapped supply of potential workers lives and where jobs are located. Public transport is not bridging this gap. In Boston, welfare recipients using public transit would, after a one-hour commute, still have access to only 14 percent of the jobs in the metropolitan area's fast-growth communities.[88]

To restore the population of central cities and contain suburban sprawl requires cooperation, rather than competition, between city and suburban leaders, and recognition that their problems are interrelated. Reversing the downward spiral of U.S. central cities in the coming years also requires invigorating the Department of Housing and Urban Development (HUD), the federal agency most responsible for dealing with the needs of urban areas in the country.

While the national government develops its agenda for urban areas, in many cities elected officials, private industry, and local citizens have taken the initiative to manage urban population changes (see Box 6, page 38). Two notable examples are providing affordable housing for low-income residents—in part to reduce urban homelessness—and using the arts to revitalize downtown areas and increase revenues to make cities more attractive places for more affluent families to live.

Seattle is often lauded as an ideal model for ways to keep housing affordable. On three occasions since 1981, Seattle residents voted to tax themselves to fund low-income housing in middle-class neighborhoods and downtown areas, and to allow older adults to live independently in their communities. Nonprofit developers, church groups, and public consortiums have coordinated to increase the number of publicly subsidized units from fewer than 2,000 in 1988 to more than 11,000 in 2000. To maintain its reputation as a haven for the arts, the city established a co-op where homeless artists can sell their wares. A large, vacant office building downtown is being converted into apartment units for individuals diagnosed with AIDS, chemical dependency, or mental illness. Funds from the federal HOME program—which was established in 1991 to expand the stock of affordable housing around the country—are used selectively to help families in months when they cannot pay their rent and to target assistance to households with children. The rationale underlying Seattle's approach to housing and homelessness is one that American cities are learning to apply as they enter the 21st century: The cost of preventing homelessness is ultimately less than the cost of providing temporary shelter and food.[89]

Municipal leaders, including civic and business groups, are emphasizing "cultural renewal" to save central cities that have been stagnant since the 1960s. Since 1997, a plethora of downtown performing arts centers have been created as part of the most ambitious, expensive, and focused strategy of the post-World War II era to slow migration to the suburbs and lure suburbanites back to the city. These cultural projects include the $180 million construction in Newark of the New Jersey Center for the Performing Arts, the reopening of San Francisco's his-

Affordable housing is crucial in the transition from welfare to work in U.S. cities.

Box 6

Restoring America's Cities: Lessons of Urban Planning

Jane Jacobs' pioneering book on U.S. urban problems, *The Death and Life of Great American Cities*, published in 1961, observed that the country had spent billions of dollars on "housing projects that are truly marvels of dullness and regimentation, civic centers that are avoided by everyone but bums … promenades that go from no place to nowhere … expressways that eviscerate great cities. This is not the rebuilding of cities. This is the sacking of cities."

Over the years, however, a number of urban planning projects have demonstrated strategies to revitalize central cities and contain the exodus of people to the suburbs. The primary lesson learned from these projects is that the role of city government in urban planning should be confined to three broad areas: strategic public investment, regulation, and incentives for private action. Governments must create ways for the private sector to profit from investment in declining urban areas.

The revitalization of downtown Portland, Ore., during the 1970s and 1980s vividly demonstrates the effectiveness of strategic capital investment. During this time, the city government established a light-rail system that starts in the downtown retail center and extends 15 miles into the suburbs. Financing was provided for public fountains, bus shelters, artwork, and new street furniture along the way. The government purchased and refurbished sections of the riverfront. The response of the private sector was predictable. The Rouse Company constructed "The Galleria" (since replicated in other cities), large stores such as Nordstrom and Saks Fifth Avenue were quickly built, and dozens of cafes and restaurants lined the streets. Today, downtown Portland is a major tourist attraction, and has lured so many people back to the central city that zoning restrictions have been imposed to keep housing affordable.

Land-use regulations transformed inner Santa Barbara, Calif., from a dusty, wooden town at the turn of the century into a modern tourist attraction. Civic leaders there decided that all architecture must conform to a Spanish colonial style to maintain the city's historic feeling and charm. To head off economic collapse in the 1970s, New York City used tax exemptions to encourage private investors to pour tens of millions of dollars into improving existing housing stock.

Six factors must be manipulated for any urban planning project to succeed in restoring the inner-city: market, location, design, financing, entrepreneurship, and time. A market indicates a population's desire for something and its willingness and ability to pay for it in the face of available alternatives. The Pulaski Ward on the edge of downtown Savannah, Ga., was successfully revived in the late 1960s after concerned citizens established a revolving fund through nonprofit institutions that provided money for many households to purchase and resell vacant or deteriorating buildings.

The preservation of beautiful antebellum sections of Charleston, S.C., is a product of zoning adopted in 1931, but also of skillful design. The architectural style, color, materials, and scale used in preservation have attracted a growing population. The design of Minneapolis' interconnected 153 parks and 23 lakes—allowing easy family recreation—has slowed suburban migration from the central city.

Governments can finance the revitalization of central cities by providing mortgage and equity money, but they need to attract developers to obtain the additional money needed to pay all the costs. The renewal of Philadelphia's blighted "Society Hill" beginning in the 1950s has served as a prototype of successful public and private cofinancing. Federal urban renewal subsidies made available in 1954 were used to trigger private reinvestment in the neighborhood. By 1970, owners had rehabilitated more than 600 of the neighborhood's historic structures, property value had more than doubled, and the community's population had increased by a third. The project succeeded largely from the entrepreneurship of Edmund Bacon, executive director of the Philadelphia Planning Commission. Bacon successfully combined the activities of bankers, bureaucrats, property owners, engineers, contractors, and countless other actors needed to revitalize the neighborhood.

New York's Lincoln Center has succeeded in luring population to Manhattan because it satisfies the time requirement of urban planning. The Center is alive with people all day, every day, and attracts people for different purposes at different times of the day or night, 52 weeks a year. Surrounding bars, restaurants, retail stores, and service establishments ensure that Lincoln Center will survive changing political and financial climates over time.

Successful urban planning in one city does not necessarily provide a blueprint for another. Yet, effective strategies to maintain economically viable central-city neighborhoods are now well-known. Their application in the future will be critical to keep central cities alive and healthy.

References

Billie Bramhall, "Building People Power in Three Cities," *Planning* 58, no. 11 (November 1992); Timothy Egan, "Seattle and Portland Push to Avert A Paradise Lost," *The New York Times*, Nov. 1, 1997; Alexander Garvin, *The American City: What Works, What Doesn't* (New York, McGraw-Hill, 1995); and Jane Jacobs, *The Death and Life of Great American Cities* (New York: Random House, 1961): 4.

toric War Memorial Opera House after a $90 million refurbishment, Kansas City's creation of the first American museum devoted entirely to jazz, and Cleveland's four-theater Playhouse Square, which has spurred investment of more than $225 million in the surrounding neighborhood. There are comparable developments in Miami, San Jose, Chicago, Philadelphia, and other cities.[90]

The urban planning concept underlying cultural renewal is "infill," inserting new buildings and businesses into older, declining areas. The hope is to create "urban villages" that cluster services within walking distance of residents and foster a sense of community. The objective is to capture the money of well-to-do suburbanites on nights and weekends, and use it to improve central-city schools, infrastructure, and safety.

The Sustainability of an Urbanizing World

The basic features of the urban demographic revolution of the next few decades are already known. Urban areas of less developed countries will incur almost all of the world's population growth and will envelop much of the world's population. Urban areas of more developed countries will experience population aging and an influx of immigrants.

Many of the consequences of urban population change also can be predicted with confidence. Urban areas of less developed countries will contain increasing numbers of poor people, while those of more developed countries will become more diverse. The implications for delivery of services are likewise clear. The urban populations in less developed countries will need vastly expanded health services, safe income-earning opportunities, and shelter. The urban populations of more developed countries will especially require jobs that will pay for adequate housing; incentives to stay in central cities and urban neighborhoods rather than move to sprawling suburban areas; and urban infrastructure and programs that are sensitive to physical limitations and cultural distinctions.

What is much less certain is whether the horrific scenarios envisioned by some scholars will come to pass. Will earthquakes and hurricanes kill millions of people in big cities that are unable to prepare for or cope with such disasters? Will large and dense populations become breeding grounds for devastating new infectious diseases? Are ghettos a permanent and worsening aspect of the urban landscape in even the richest of countries? If cities swell with youth, but not with jobs, will violence erupt? Do increasingly volatile global financial movements impose an insurmountable barrier to informed urban planning?

Ironically, one can take comfort that these questions are being raised because they charge policymakers with planning for inevitable urban demographic changes. Such questions challenge demographers and urban scholars to improve our understanding of how urban populations are growing and the spatial forms they adopt. These pessimistic scenarios encourage governments to follow urban population trends closely—expanding data collected by traditional methods with data from new technologies such as satellite imagery.

There is an abundance of evidence on programs that do or do not work to alleviate problems generated by urban population change. There is a remarkable confluence of interest in urban population issues among health and social scientists, and among the public and private sectors throughout the world. Most important, there is a growing mass of people who are residing in urban areas, and who desire a good standard of living. These factors and others suggest that sustainable urban development, even under conditions of extreme population growth, is an attainable goal.

References

1. Unless otherwise noted, all urban demographic statistics in the text are derived from United Nations, *World Urbanization Prospects: The 1999 Revision* (New York: United Nations, 2000). "More developed" countries include all of Europe and North America, plus Japan, Australia, and New Zealand. "Less developed" includes all of Africa, Asia (except Japan), Oceania (except Australia and New Zealand), and Latin America and the Caribbean.
2. Paul Bairoch, *Cities and Economic Development* (Chicago: The University of Chicago Press, 1988); and United Nations, *Patterns of Urban and Rural Population Growth*, Population Studies 68 (New York: United Nations, 1980).
3. Etienne van de Walle and John Knodel, "Europe's Fertility Transition: New Evidence and Lessons for Today's Developing World," *Population Bulletin* 34, no. 6 (Washington, DC: Population Reference Bureau, 1980); and Gora Mboup and Tulshi Saha, "Fertility Levels, Trends, and Differentials," *DHS Comparative Studies* 28 (Calverton, MD: Macro International, 1998).
4. World Bank, *World Development Report 1999/2000: Entering the 21st Century* (New York: Oxford University Press for the World Bank, 1999); Harry W. Richardson, "Efficiency and Welfare in LDC Mega Cities," in *Third World Cities: Problems, Politics, and Prospects*, eds. J.D. Kasarda and A.M. Parnell (Newbury Park, CA: Sage Publications, 1993): 32-57; and United Nations Centre for Regional Development, *Habitat II. Dialogue 1: Proceedings of How Cities Will Look in the 21st Century* (New York: United Nations, June 4, 1996).
5. Sarah Atkinson, Jacob Songsore, and Edmundo Werna, eds., *Urban Health Research in Developing Countries: Implications for Policy* (Oxford, England: Oxford University Press, 1996); and Samuel H. Preston and Michael R. Haines, *Fatal Years: Child Mortality in Late Nineteenth-Century America* (Princeton, NJ: Princeton University Press, 1991).
6. Thomas F. Homer-Dixon and Jessica Blitt, eds., *Ecoviolence: Links Among Environment, Population and Security* (Lanham, MD: Rowman Littlefield Publishers Inc., 1998); Thomas F. Homer-Dixon, "On the Threshold: Environmental Changes as Causes of Acute Conflict," *International Security* 16, no. 2 (1991): 76-116; Samuel P. Huntington, *The Clash of Civilizations and the Remaking of World Order* (New York: Simon & Schuster, 1996); and Robert D. Kaplan, "Cities of Despair," *The New York Times*, June 7, 1996.
7. Alexander Garvin, *The American City: What Works, What Doesn't* (New York: McGraw-Hill, 1995); Neil Smith, *The New Urban Frontier: Gentrification and the Revanchist City* (New York: Routledge, 1996); Trish Hall, "Flight to the Cities: Urban Areas—With Their Culture, Excitement and Convenience—Prove Irresistible for More Retirees," *The Wall Street Journal*, Sept. 14, 1998; and Coco McCabe, "Many Elders Are On the Road Again," *The Boston Globe*, Dec. 5, 1999.
8. Michael Harrington, *The Other America: Poverty in the United States* (New York: Macmillan Publishing Company, 1962).
9. Martin Brockerhoff and Ellen Brennan, "The Poverty of Cities in Developing Regions," *Population and Development Review* 24, no. 1 (March 1998): 75-114.
10. Brian J. Berry, *The Human Consequences of Urbanization* (New York: St. Martin's Press, 1973); and Michael Timberlake, ed., *Urbanization in the World Economy* (New York: Academic Press, 1985).
11. Terrence G. McGee and Ira M. Robinson, *The Mega Urban Regions of Southeast Asia* (Vancouver, Canada: University of British Columbia Press, 1995); and Terry McGee, "Urbanisation in an Era of Volatile Globalisation: Policy Problematiques for the 21st Century," in *East West Perspectives on 21st Century Urban Development: Sustainable Eastern and Western Cities in the New Millenium*, eds. J. Brotchie, P. Newton, P. Hall, and J. Dickey (Burlington, VT: Ashgate Publishing Company, 1999): 37-52.
12. Alan Gilbert, ed., *The Mega-City in Latin America* (Tokyo: United Nations University Press, 1996); and James B. Pick and Edgar Butler, *Mexico Megacity* (Boulder, CO: Westview Press, 1997).
13. Dudley Althaus, "A Fractured Land," *Houston Chronicle*, Oct. 11, 1998; and Alejandro Portes, Carlos Dore-Cabral, and Patricia Landolt, eds., *The Urban Caribbean: Transition to the New Global Economy* (Baltimore: John Hopkins University Press, 1997).
14. Carole Rakodi, ed., *The Urban Challenge in Africa: Growth and Management of its Large Cities* (New York: The United Nations University Press, 1997).
15. United Nations Center for Human Settlements (UNCHS), *An Urbanizing World: Global Report on Human Settlements* (Oxford, England: Oxford University Press for Habitat, 1996).
16. International Federation of Red Cross and Red Crescent Societies, *World Disaster Report 1998* (New York: Oxford University Press, 1998): 105-14.
17. United Nations, *Population Growth and Policies in Mega-Cities: Calcutta*, Population Policy Paper No. 1 (New York: United Nations, 1986); and United Nations, *Population Growth and*

Policies in Mega-Cities: Bombay, Population Policy Paper No. 6 (New York: United Nations, 1986).
18. Anthony G. Champion, ed., *Counterurbanization: The Changing Pace and the Nature of Population Deconcentration* (London: Edward Arnold, 1989).
19. William H. Frey and Alden Speare Jr., *Regional and Metropolitan Growth and Decline in the United States* (New York: Russell Sage Foundation, 1988); and William Frey, "Population Movement and City-Suburb Redistribution: An Analytic Framework," *Demography* 15, no. 4 (November 1978): 571-88.
20. U.S. Department of Housing and Urban Development (HUD), *The State of the Cities Report 1999* (Washington, DC: HUD, 1999).
21. Ibid.
22. Anita A. Summers, Paul C. Cheshire, and Lanfranco Senn, eds., *Urban Change in the United States and Western Europe: Comparative Analysis and Policy* (Washington, DC: Urban Institute Press, 1999).
23. Ibid.
24. Saskia Sassen, *The Global City: New York, London, Tokyo* (Princeton, NJ: Princeton University Press, 1991).
25. Nancy Chen, Paolo Valente, and Hania Zlotnik, "What Do We Know About Recent Trends in Urbanization?" in *Migration, Urbanization, and Development: New Directions and Issues*, ed. Richard E. Bilsborrow (New York: United Nations Population Fund and Kluwer Academic Publishers, 1996): 59-88.
26. R. Mansell Prothero and Murray Chapman, *Circulation in Third World Countries* (London: Routledge & Kegan Paul, 1985); Thomas Scharping, ed., *Floating Population and Migration in China: The Impact of Economic Reforms* (Hamburg, Germany: Institut für Asienkunde, 1997); and Delia Deeds, *Internal Migration in Contemporary China* (London: Macmillan Press, 1999).
27. Dorothy Solinger, "The Floating Population in the Cities: Chances for Assimilation," in *Urban Spaces in Contemporary China*, eds. D. Davis, R. Kraus, B. Naughton, and E. J. Perry (Cambridge, England: Cambridge University Press, 1995).
28. A. Chamratrithlrong, K. Archavanltkul, K. Richter, P. Guest, T. Varachal, W. Boonchalaksi, N. Pirtyathamwong, and P. Vong-Ek, *National Migration Survey of Thailand* (Salaya, Thailand: The Institute for Population and Social Research, Mahidol University, 1995).
29. Andrei Rogers, "Sources of Urban Population Growth and Urbanization, 1950-2000: A Demographic Accounting," *Economic Development and Cultural Change* 30, no. 3 (April 1982): 483-506; and Nathan Keyfitz, "Do Cities Grow by Natural Increase or by Migration?" *Geographical Analysis* 12 (April 1980): 142-56.
30. John O. Oucho and William T.S. Gould, "Internal Migration, Urbanization, and Population Distribution," in *Demographic Change in Sub-Saharan Africa*, National Research Council Committee on Population (Washington, DC: National Academy Press, 1993): 256-96; and Elliot P. Skinner, *African Urban Life: The Transformation of Ouagadougou* (Princeton, NJ: Princeton University Press, 1974).
31. John C. Caldwell, John K. Anarfi, and Pat Caldwell, "Mobility, Migration, Sex, STDs, and AIDS: An Essay on Sub-Saharan Africa with Other Parallels," in *Anthropological and Demographic Perspectives*, ed. Gilbert Herdt (Oxford, England: Clarendon Press, 1997): 41-54.
32. Richard E. Bilsborrow and United Nations Secretariat, "Internal Female Migration and Development: An Overview," in *Internal Migration of Women in Developing Countries*, ST/ESA/SER.R/127 (New York: United Nations, 1993): 1-17; Cristina Szanton Blanc with contributors, *Urban Children in Distress: Global Predicaments and Innovative Strategies* (Grey, Switzerland: Gordon and Breach for UNICEF, 1994); and Nancy Riley, "Gender, Power, and Population Change," *Population Bulletin* 52, no. 1 (Washington, DC: Population Reference Bureau, 1997): 14-17.
33. Henry S. Shryock, Jacob S. Siegel, and Associates, *The Methods and Materials of Demography*, Condensed edition, ed. Edward G. Stockwell (New York: Academic Press, 1976): 133-34.
34. Anthony O'Connor, *The African City* (New York: Africana Publishing Company, 1983).
35. Cecilia Tacoli, "Rural-Urban Interactions: A Guide to the Literature," *Environment and Urbanization* 10, no. 1 (April 1998).
36. World Bank, *World Development Report 1990: Poverty* (New York: Oxford University Press for the World Bank, 1990); World Bank, *World Development Report 1999/2000*; and United Nations Population Fund, *The State of World Population 1996, Changing Places: Population Development and the Urban Future* (New York: United Nations, 1996).
37. Sandy Cairncross, Jorge E. Hardoy, and David Satterthwaite, eds., *The Poor Die Young: Housing and Health in Third World Cities* (London: Earthscan Publications, 1990).
38. Douglas S. Massey, "The Age of Extremes: Concentrated Affluence and Poverty in the Twenty-First Century," *Demography* 33, no. 4 (November 1996): 395-412; and World Bank and UNCHS (Habitat), *Cities Alliance for Cities Without Slums: Action Plan for Moving Slum Upgrading to Scale, World Bank Group Annual Meetings 1999 Special Summary Edition.* Accessed online at: www.worldbank.org/html/fpd/urban/cws/cwoslums.htm, on March 13, 2000.

39. Mark R. Montgomery, Michele Gragnolati, Kathleen A. Burke, and Edmundo Paredes, "Measuring Living Standards With Proxy Variables," *Demography* 37, no. 2 (May 2000): 155-74.
40. Trudy Harpham and M. Tanner, eds., *Urban Health in Developing Countries: Progress and Prospects* (London: Earthscan Publications, 1995); Atkinson, Songsore, and Werna, eds., *Urban Health Research in Developing Countries: Implications for Policy, 1996*; and Trudy Harpham and Carolyn Stephens, "Urbanization and Health in Developing Countries," *World Health Statistics Quarterly* 44, no. 2 (1991): 62-69.
41. L. Haddad, M.T. Ruel, and J.L. Garrett, "Are Urban Poverty and Undernutrition Growing? Some Newly Assembled Evidence," *World Development* 27, no. 11 (1999): 1891-904.
42. David Bradley, Carolyn Stephens, Trudy Harpham, and Sandy Cairncross, "A Review of Environmental Health Impacts in Developing Countries," *Urban Management Programme Discussion Paper* 6 (Washington, DC: The World Bank, 1992).
43. I. Tabibzadeh and E. Liisberg, "Response of Health Systems to Urbanization in Developing Countries," *World Health Forum* 18, no. 3-4 (1997): 287-93; and Ilona Blue, "Intra-Urban Differentials in Mental Health in São Paulo, Brazil." Ph.D. Thesis (London: South Bank University, 1999).
44. United Nations, *AIDS and the Demography of Africa* (New York: United Nations, 1994).
45. Wiseman Chijere Chirwa, "Migrant Labour, Sexual Networking and Multi-Partnered Sex in Malawi," *Health Transition Review* 7, Supplement 3 (1997): 5-16.
46. Preston and Haines, *Fatal Years*: 91.
47. J. Vögele, "Urbanization and the Urban Mortality Change in Imperial Germany," *Health and Place* 6, no.1 (2000): 41-55; and World Bank, *World Development Report 1999/2000*: 142-43.
48. M. Whitehead, *The Concepts and Principles of Equity and Health* (Copenhagen, Denmark: WHO Regional Office for Europe, document EUR/ICP/RPD/414, 1990); and World Health Organization, *Equity in Health Care: A WHO/SIDA Initiative* (Geneva: World Health Organization, unpublished document ARB 96.1, 1996).
49. Peter Newton and Peter Manins, "Cities and Air Pollution," in *East West Perspectives on 21st Century Urban Development*, eds. Brotchie, Newton, Hall, and Dickey: 277-304.
50. International Federation of Red Cross and Red Crescent Societies, *World Disaster Report 1998*.
51. Cited in Nicholas D. Kristof, "Across Asia, a Pollution Disaster Hovers," *The New York Times*, Nov. 28, 1997. See also World Resources Institute (WRI), *The Urban Environment 1996-97* (New York: Oxford University Press, 1996.
52. Cited in "World Bank Wants to Get the Lead Out," *Albany Times Union*, May 19, 1996.
53. Homer-Dixon and Blitt, eds., *Ecoviolence*; Huntington, *The Clash of Civilizations*; Kaplan, "Cities of Despair"; and Eugene Linden, "The Exploding Cities of the Developing World," *Foreign Affairs* 75, no. 1: 52-65.
54. Nigel Harris, ed., *Cities in the 1990s: The Challenge for Developing Countries* (New York: St. Martin's Press, 1992): 201; and Massey, "The Age of Extremes": 410.
55. Robert D. Kaplan, *The Ends of the Earth: A Journey at the Dawn of the 21st Century* (New York: Random House, 1996).
56. Barrington Moore, Jr., *Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World* (Boston: Beacon Press, 1966); and Theda Skocpol, *States & Social Revolutions: A Comparative Analysis of France, Russia & China* (London: Cambridge University Press, 1979).
57. John Walton, *Reluctant Rebels: Comparative Studies of Revolution and Underdevelopment* (New York: Columbia University Press, 1984); Orlandina de Oliveira and Bryan Roberts, "Urban Development and Social Inequality in Latin America," in *The Urban Transformation of the Developing World*, ed. Josef Gugler (Oxford, England: Oxford University Press, 1996): 253-313.
58. U.S. Census Bureau, "Poverty in the United States, 1998," by Joseph Dalaker, *Current Population Reports* P60-207 (September 1999): Table 2.
59. Massey, "The Age of Extremes."
60. U.S. Census Bureau, *Current Population Reports* P60-200. Accessed online at: www.census.gov/hhes/income/histinc/inchdet.html, on March 23, 1999; and HUD, *The State of the Cities Report 1999*.
61. John D. Kasarda, "Inner City Concentrated Poverty and Neighborhood Distress 1970-1990," *Housing Policy Debate* 4 (1993): 253-302.
62. National Low Income Housing Coalition (LIHC), *Out of Reach* (September 1999). Accessed online at: www.nlihc.org/oor99/introduction.htm, on April 14, 2000.
63. Department of Housing and Urban Development (HUD), *Homelessness: Programs and the People They Serve*. Accessed online at: www.huduser.org.org/publications/homeless/homelessness/highlights.html, on April 14, 2000.
64. HUD, *The State of the Cities Report 1999*.
65. Ibid.

66. U.S. Federal Bureau of Investigation, *Crime in the United States* (Washington, DC: FBI, 1997).
67. William H. Frey and Ross DeVol, *America's Demography in the New Century: Aging Baby Boomers and New Immigrants as Major Players* (Santa Monica, CA: The Milken Institute, 2000).
68. Jan Lin, *Reconstructing Chinatown: Ethnic Enclave, Global Change* (Minneapolis: University of Minnesota Press, 1998); Alejandro Portes and Alex Stepick, *City on the Edge: The Transformation of Miami* (Berkeley, CA: University of California Press, 1997); and David Ferrell and Robert Lee Hotz, "Ethnic Pockets Amid a Vast Fabric of English," *The Los Angeles Times*, Jan. 23, 2000.
69. Richard D. Alba, J.R. Logan, B.J. Stults, G. Marzan, and W. Zhang, "Immigrant Groups in the Suburbs: A Reexamination of Suburbanization and Spatial Assimilation," *American Sociological Review* 64 (June 1999): 446-60.
70. Jennifer Steinhauer, "High Infant Mortality Rates in Brooklyn Mystify Experts," *The New York Times*, Feb. 29, 2000.
71. Lin, *Reconstructing Chinatown: Ethnic Enclave, Global Change*; and Murray Friedman and Nancy Isserman, eds., *The Tribal Basis of American Life: Racial, Religious and Ethnic Groups in Conflict* (Westport, CT: Praeger Publishers, 1998).
72. Michael A. Fletcher, "In Rapidly Changing L.A., A Sense of Future Conflicts," *The Washington Post*, April 7, 1998.
73. William Julius Wilson, *The Truly Disadvantaged: The Inner City, The Underclass, and Public Policy* (Chicago: University of Chicago Press, 1987).
74. Statistics based on medium-variant projections in United Nations, *World Population Prospects: The 1998 Revision* (New York: United Nations, 1999).
75. Ariel Alexandre and Yuko Aoyama, "The Organization for Economic Cooperation and Development, 'The City and the Elderly,'" *The OECD Observer* (Paris: August/September, 1992).
76. Martin Brockerhoff, "Migration and the Fertility Transition in African Cities," in *Migration, Urbanization, and Development: New Directions and Issues*, ed. Bilsborrow: 357-87.
77. Dennis A. Rondinelli, *Secondary Cities in Developing Countries: Policies for Diffusing Urbanization* (Beverly Hills, CA: Sage Publications, 1983).
78. Alice Goldstein and Wang Feng, eds., *China: The Many Facets of Demographic Change* (Boulder, CO: Westview Press, 1996).
79. Martin Brockerhoff, "Urban Growth in Developing Countries: A Review of Projections and Predictions," *Population and Development Review* 25, no. 4 (December 1999): 757-78.
80. Shabbir Cheema, "Issues in Urban Management," in *Cities in the 1990s: The Challenge for Developing Countries*, ed. Harris: 110-12.
81. Jonas Rabinovitch, "Curitiba: Towards Sustainable Urban Development," *Environment and Urbanization* 4, no. 2 (October 1992): 62-73.
82. Richard Stren and Judith Kjellberg Bell, eds., *Perspectives on the City* 4 (Toronto: University of Toronto, Centre for Urban and Community Studies, 1995).
83. "Competitive Cities Summary Report." (A report on the World Bank's World Competitive Cities Congress (WCCC), May 18-21, 1999, in Washington, DC.) Accessed online at: www.worldcongress.com/1999Cities/1999cities_report.htm, on April 19, 2000.
84. Michael Lindfield and Robert Stimson, "Urban Economic Development and Globalisation Linkages in the Pacific Rim," in *East West Perspectives on 21st Century Urban Development*, eds. Brotchie, Newton, Hall, and Dickey: 89-123.
85. See UNCHS (Habitat), "Best Practices and Local Leadership Programme," and "Sharing the Lessons Learned from Best Practices." Accessed online at: www.bestpractices.org, on April 19, 2000.
86. HUD, *The State of the Cities Report 1999.*
87. See Robert W. Burchell, et al., "The Costs of Sprawl Revisited," *Transit Cooperative Research Program Report* 39 (Washington, DC: Transportation Research Board, National Research Council, 1998); and Robert W. Burchell, "The State of the Cities and Sprawl," a report prepared for HUD (1999).
88. Ibid.
89. Dean Paton, "Seattle's Innovative Answer to the Housing Crunch," *Christian Science Monitor*, April 11, 2000; Aurelio Rojas, "Seattle's Innovative Solution to Homelessness," *San Francisco Chronicle*, Dec. 23, 1997; Norman B. Rice, "Funding Affordable Housing: Seattle's $159 Million Commitment," *Journal of Housing and Community Development* 53, no. 3 (May/June 1996); and Karen Thoreson and Tom Larson, "At Home With HOME: How Innovative Cities Use Home Funds," *Journal of Housing and Community Development* 52, no. 3 (May 1995).
90. James S. Russell, "Performing Art Centers: Using Art to Revive Cities," *Architectural Record* (New York: May 1999); and Bruce Weber, "Cities Are Fostering the Arts as a Way to Save Downtown," *The New York Times*, Nov. 18, 1997.

Suggested Resources

Bartlett, Sheridan, Roger Hart, David Satterthwaite, Ximena de la Barra, and Alfredo Missair. *Cities for Children: Children's Rights, Poverty and Urban Management*. London: Earthscan Publications, 1999.

Becker, Charles, Andrew Hamer, and Andrew R. Morrison. *Beyond Urban Bias in Africa: Urbanization in an Era of Structural Adjustment*. Portsmouth, NH: Heinemann, 1994.

Bilsborrow, Richard E., ed. *Migration, Urbanization, and Development: New Directions and Issues*. New York: United Nations Population Fund and Kluwer Academic Publishers, 1998.

Gilbert, Alan, and Josef Gugler. *Cities, Poverty, and Development: Urbanization in the Third World*. New York: Oxford University Press, 1991.

Gugler, Josef, ed. *The Urban Transformation of the Developing World*. Oxford: Oxford University Press, 1996.

Hardoy, Jorge E., and David Satterthwaite. *Squatter Citizen: Life in the Urban World*. London: Earthscan Publications, 1989.

Jones, Gavin W., and Pravin M. Visaria. *Urbanization in Large Developing Countries: China, Indonesia, Brazil and India*. Oxford, England: Clarendon Press, 1997.

Lo, Fu-chen, and Yue-Man Yeuny, eds. *Globalization and the World of Large Cities*. New York: United Nations University Press, 1998.

Mitchell, James K., ed. *Crucibles of Hazard: Mega-Cities and Disasters in Transition*. New York: United Nations University Press, 1999.

Sassen, Saskia. *The Global City: New York, London, Tokyo*. Princeton, NJ: Princeton University Press, 1991.

Stren, Richard. *Perspectives on the City. Vol. 4*. Toronto: University of Toronto, Centre for Urban and Community Studies, 1995.

United Nations Center for Human Settlements (UNCHS). *An Urbanizing World: Global Report on Human Settlements*, 1996. Oxford, England: Oxford University Press for HABITAT, 1996.

United Nations Department of International Economic and Social Affairs. *World Urbanization Prospects: The 1999 Revision*. New York: United Nations, 2000.

Wilson, David, ed. "Globalization and the Changing U.S. City," *The Annals of the American Academy of Political and Social Science* 551. London: Sage Periodicals Press, May 1997.

World Health Organization. *The Urban Health Crisis: Strategies for Health for All in the Face of Rapid Urbanization*. A Report of the Technical Discussions at the Forty-Fourth World Health Assembly. Geneva: World Health Organization, 1993.

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