The trend is inescapable: more and more people in the developing world are living in the cities. By 2020, the number of people living in developing countries will grow from 4.9 billion to 6.8 billion. Ninety percent of this increase will be in rapidly expanding cities and towns. More than half the population of Africa and Asia will live in urban areas by 2020. More than three-quarters of Latin Americans already do.

Growth in urban poverty, food insecurity, and malnutrition and a shift in their concentration from rural to urban areas will accompany urbanization. Although the magnitude and speed of change vary by country, data covering more than half the developing world’s population indicate that:

- The proportion and number of poor people living in urban areas grew during the 1980s and 1990s in seven of eight survey countries, including India and China. (Because data are not available, poverty also serves as a reasonable indicator of food insecurity here.) By the early 1990s, the cities of these eight countries alone were home to more than 140 million poor people, up from about 120 million 5 to 10 years earlier.
- From the early to the mid-1990s, the urban share of malnourished children also increased in 11 of 15 countries for which data are available. The total number of malnourished children in urban areas increased in 9 of the 15. Almost 10 million malnourished children in these countries live in urban areas, up from about 7 million in earlier years.

**URBAN FOOD INSECURITY AND MALNUTRITION: ISSUES AND POLICIES**

A number of factors will affect the future shape of urban food insecurity and malnutrition. Because urban dwellers must buy most of their food, urban food security depends mostly on whether the household can afford to buy food, given prices and incomes. High per-unit costs of food result from inefficient urban food-marketing systems and the fact that the poor usually can buy only small quantities of food at a time rather than in bulk. Macroeconomic policies are also important. Inflation, depreciation in the exchange rate, and the removal of key consumer or producer subsidies can all push prices up. Policies to improve urban food security must therefore seek to improve market efficiency and maintain stable prices.

Logically, income security is also crucial to food security for urban dwellers. Yet with little human or financial capital, the poor are forced to take casual, insecure jobs. These jobs often experience seasonal ups and downs, just as in rural areas. For example, demand for construction workers can decline drastically during the rainy season. Garment workers may be laid off when the holiday rush dies down. With their abundance of labor, but often little else, the poor find competition for jobs is fierce.

To lift the poor from poverty, programs and policies should concentrate on creating jobs and on increasing the capacity of the poor to find and hold more-secure, higher-paying jobs or to expand their own businesses and generate new jobs. Governments, communities, and the private sector should cooperate to provide the elements for private sector success, much of which depends on a capable, if not extensive, government. At the same time, targeted income or food programs and more general social security and unemployment programs will continue to be necessary to provide for those who are left behind or who cannot work, including the elderly and the sick. Programs may also need to address issues of land and housing security, as secure tenure helps ensure that the poor do not lose their investments in tangible assets or in social networks.

However, efforts to improve urban livelihoods must go beyond a focus on urban jobs. Urban and rural lives are intertwined through goods, services, and people. In many cities, a majority of urban dwellers depend indirectly on agriculture for their livelihoods, through employment in food transport, retailing, and processing. Survival strategies may involve maintaining links with a home community in rural areas, through a plot of land or continued connections with family. Policies for improving urban livelihoods, then, must take into account the complexity of urban–rural links and recognize that rural conditions affect urban livelihoods as well.

Urban food security may also have a more direct link with agriculture. Even in large, congested cities, the urban poor may have a home garden or raise small animals as part of a coping strategy. This urban production, often done by women, can complement household incomes and improve the quality of urban diets. Urban planners and local governments should consider how to incorporate environmentally sound urban agriculture in their plans.

Of course, food security is not enough for good nutrition. A healthy household environment and good care and feeding practices are essential as well. The threats to good nutrition for both adults and children in urban areas differ from those in...
rural areas. The most substantial threats to health of the poor in the cities come from flimsy and overcrowded housing amid filthy conditions—uncollected garbage, unsafe water, overflowing sewers—and from the inability of the poor to get good health care. Even when health facilities are available, the poor often have no access to these services because of an inability to pay. According to UNICEF and the World Health Organization, for example, globally less than 20 percent of the urban poor have access to safe water, compared with 80 percent of the rich. Poverty and inequality are clearly major determinants of health and nutrition outcomes in the city.

Potentially harmful changes in diets also accompany urbanization. Because urban dwellers often face time constraints and have greater exposure to advertising and easier access to supermarkets and fast-food vendors, they often consume more processed and prepared foods. The typical urban diet results in higher levels of some micronutrients and animal proteins than the rural one, but it also means higher intakes of saturated and total fat and sugar and lower intakes of fiber. Combined with a sedentary lifestyle, this diet increases the risk of chronic diseases, including obesity. The public health sector faces a significant challenge in trying to overcome the malnutrition and poor health caused by poverty at the same time it responds to diseases associated with wealth and industrialization.

Challenges to child nutrition come from this unhealthy physical environment and from inadequate caring and feeding practices. Urban women end breastfeeding two to three months earlier than rural women, perhaps depriving their children of needed nutrients and reducing immunity. Women in urban areas also often work outside the home, which may mean they have less time and more difficulty in caring for their children. Policies to promote child nutrition in urban areas should focus not only on increasing incomes, especially women’s, but also on encouraging good feeding and caring practices, including provision of easily accessible quality child care for those mothers who work. Good caring practices are possible even for the poor—as they frequently depend more on knowledge rather than income levels—and have been shown to counter the effects of low income on nutritional status.

The greatest difference between solutions to food and nutrition insecurity in rural and urban areas is probably that in rural areas development can often be addressed through broad-brush interventions affecting agriculture, which drives the rural economy. While agricultural growth may also help to reduce urban food insecurity, the income sources in urban areas are more diverse, as are underlying causes and actors in the urban environment. Effective policies and programs will require a holistically conceived response that coordinates actions across actors and levels—from the household (to raise incomes, for example), to the community (to install a water system), to far beyond (to promote labor-intensive growth by the government).

In any case, the most effective, relevant policies will emerge from a system of governance that firmly connects the needs of the poor to a politically responsive local government that has the technical and institutional capacity to act. Programs should work to strengthen the poor’s ability to organize, make demands, and affect local authorities and to strengthen the municipality’s understanding of its responsibility to respond.

**URBAN FOOD INSECURITY AND MALNUTRITION: WHY WORRY NOW?**

Some argue that concern about urban poverty is misplaced—that rural areas continue to hold most of the poor, food insecure, and malnourished and that they will for many years to come. Many analysts and governments seem complacent because their countries are not industrialized or highly urban. As we look to 2020, is such complacency justified? Clearly not.

First, the experiences of the industrialized world clearly show that developing countries are simply not going to “urbanize” themselves out of poverty. Governments and development agencies must take seriously the shift in poverty, food insecurity, and malnutrition from rural to urban areas. Second, in highly urbanized regions such as Latin America, the geographic center of poverty has already shifted: in these countries more poor people already live in the cities than in the countryside. Finally, even in countries that are still highly rural and where rural poverty predominates, millions of poor people live in cities. These people deserve not to be forgotten.

The perception that urban poverty exists only in industrialized countries is not matched by reality. In Mozambique, for example, with a poverty rate of 69 percent, 2 million poor people live in urban areas, more than the number of urban poor in highly urbanized Colombia and more than half the number of urban poor in much more populous Indonesia.

Even in highly rural countries, then, urban poverty, food insecurity, and malnutrition are problems of today, not tomorrow. For the sake of the millions of hungry and undernourished people living in cities today, as well as for the sake of those millions who may be forced to live there tomorrow, governments, development agencies, and communities must act now. They must work forcefully, confidently, and reasonably to promote policies, including those that promote rural development, to confront the rising specter of urban poverty, hunger, and malnutrition and so achieve the 2020 vision of sustainable food and nutrition security for all.

For further reading see the November 1999 issue of World Development plus references found in other briefs in this collection.

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In the next quarter century, the population explosion that characterized much of the 20th century will be replaced by another dramatic demographic transformation: urban population growth of an unprecedented scale. The urban population in the developing world is expected to double to 4 billion by 2025, accounting for about 90 percent of global population growth. In contrast, rural population will grow slowly and stop when it reaches 3 billion. China and India epitomize the huge shifts underway. China, now two-thirds rural, will become predominantly urban in the next 25 years, and the 600 million people projected to live in urban India by 2025 will approximate the combined total population of the United States, Russia, and Japan. By 2015 the number of cities in developing countries with 1 million or more residents is expected to reach 400, more than quadruple the number of such cities in 1975. While forecasts of city sizes are subject to error, some large cities, such as Dhaka, are projected to grow by 1 million or more persons per year for the foreseeable future.

**PERSPECTIVES ON URBAN GROWTH**

Experts in a number of disciplines are concerned about these projections of rapid urban growth. Many demographers warn that cities will be unable to accommodate large population increases—a fear similar to the one voiced a generation ago about global population growth. For these Malthusians, world population growth must be managed by reducing unwanted fertility in urban areas of developing countries and among potential migrants living in rural areas. Unwanted fertility can be reduced most directly by improving access to modern methods of contraception. Reducing fertility is essential because urban populations are particularly skewed toward peak reproductive ages between 15 and 40. Most migrants move to the city between the ages of 12 and 29.

Some public health specialists raise different concerns. They see the poor health conditions suffered by now-developed countries in Europe and North America during 1875–1900, the period of most rapid urban growth, as a possible fate of developing countries. Despite comparatively modest population growth and great economic progress, industrializing cities in the late 19th century experienced higher mortality levels than did rural areas. Urban health services and sanitary infrastructure could not keep up with the demand generated by in-migration. Given such a precedent, these specialists believe, it behooves developing-country governments to increase budgetary allocations to the health sector, direct public health resources toward urban centers in accordance with exceedingly rapid growth rates, and maintain adequate urban water and sewage systems.

Environmentalists too worry about large, modernizing cities in poor countries because these cities contribute to the destruction of the world’s ozone layer. Modern urban systems require a great deal of energy, and the consequent emissions of carbon monoxide, carbon dioxide, and nitrogen oxide from fossil fuel combinations blanket the earth, trapping excess heat and leading to global warming, climate change, rising sea levels, change in vegetation, and severe weather events such as El Niño. To limit such damage, environmentalists call for innovations in urban planning that would reduce the dependency on motor vehicles—the primary polluting agent in cities—and on air-conditioning. Also of growing concern to environmental scientists is the heavy toll on human life taken by floods and other natural disasters in ecologically fragile zones. Colonialists established large cities of the developing world along routes most suitable for trading, usually coastal areas. They did not choose these locales for their environmental safety standards, nor for their ability to accommodate millions of new residents. Nor has a sensitivity to the possibility of disaster guided the development of these cities.

Political scientists commonly view rapid city growth with some alarm because they believe that unmanageable city sizes can lead to civil violence, a weakening of the state, growing radical religious fundamentalism, revolution, and a general deterioration in the quality of urban life. The World Bank predicted in 1990 that urban poverty would become the most significant and politically explosive problem in the next century. Current estimates of urban poverty in developing countries lend credence to such claims. The United Nations (UN) concluded in 1996 that more than 500 million urban residents in less-developed countries, or almost 30 percent of the world’s urban population, were living without adequate shelter.

**REGIONAL PATTERNS**

Future urban population change in the developing world is likely to pose different challenges in different regions. Latin America, for instance, has already reached the urbanization level of the developed world, with three-quarters of the population living in cities and towns. As manufacturing plants move to increasingly distant places—in cases such as Mexico City and São Paulo as far as 200 kilometers from the metropolitan center—urban populations will become more geographically dispersed and encroach on agricultural land. Despite this urban
sprawl, virtually all cities in the region that currently contain 2 million residents or more likely will have to absorb at least an additional million residents by 2025.

In most large cities of Africa, the population is increasingly moving to unplanned settlements on the periphery where land is cheapest. In contrast to Latin America, however, this horizontal expansion does not involve job relocation, and it reduces the efficacy of major urban infrastructure such as piped water, electricity, sewerage, and roads. The projected average annual growth rate of the urban population in Africa during 2000–20, 3.9 percent, portends that settlements will only deteriorate, particularly in the absence of sustained economic growth. Of equal concern to some commentators is the proliferation of “urban villages” of 200,000 to 400,000 residents, large towns and small cities that typically lack the most basic amenities for a decent standard of living. The UN anticipates that in 2020 60 percent of urbanites in Africa will reside in cities with fewer than 500,000 residents, making urban development planning for small locales a continued priority.

The challenge facing China and India is one of magnitude: the rapid urbanization that will occur in these two countries during the next quarter century is unprecedented in terms of numbers. Moreover, in South Asia—as in Sub-Saharan Africa—urban growth has been fueled less by economic dynamism than by rural poverty and continuing high fertility, a pattern likely to continue in the immediate future. In contrast, urban population change in more prosperous Southeast Asia has been distinguished by dynamism, resulting in the blurring of rural-urban boundaries as major expressways and railroad lines radiate out from urban cores, giving rise to new towns, industrial estates, and other urban forms in areas hitherto agricultural.

POLICY OPTIONS TO MANAGE URBAN GROWTH

For governments that wish to manage urban population growth in the future, three policy options have received priority attention.

Population Control

Contrary to conventional wisdom, urban growth in developing regions has stemmed more from natural increase (an excess of births over deaths) than from rural out-migration. This pattern is likely to continue in the near future. To control population, therefore, particular emphasis should be given to measures that provide women in urban areas and potential migrants in rural areas with the means to regulate fertility. This strategy has been implemented effectively, for instance, by PROFAMILIA, the national family planning agency of Colombia. In 1980 Bogotá’s population was expected to number 11.7 million in 2000, but current estimates indicate 8.6 million residents, the difference being due mainly to rapid fertility decline. By contrast, efforts to reduce city sizes by restricting migration have largely failed, even under the most coercive regimes (with the exception of South Africa under apartheid).

Improved Urban Management and Governance

Many scholars accept that rapid urban growth in the developing world is inevitable but do not accept dire predictions of its consequences. These optimists maintain that city governments with good management capabilities can absorb large population increases without diminishing human welfare or the quality of the environment. The key is a commitment to undertake and sustain policies that, among other things, maintain infrastructure, increase productivity of the labor force, and alleviate poverty. A frequently cited example of success is Curitiba, a city in Brazil that has avoided the degradations experienced in most other developing-country cities of comparable size by implementing low-cost public transport as an alternative to cars, preserving green spaces, promoting multisectoral planning, and introducing other sound urban management measures.

Effective urban governance is an additional mechanism by which cities can overcome population pressures. Though good governance practices for cities have been articulated only recently and not yet been implemented fully anywhere, they include engaging nongovernmental actors—communities, civic groups, private contractors—in meeting basic needs; decentralizing decisionmaking authority and control of municipal resources to local indigenous groups; and making city governments more responsive to local needs, more accountable for actions, and more transparent with respect to financing.

Balanced Growth of Manufacturing and Agriculture

Studies show that urban growth rates rise when developing countries favor urban manufacturing over rural agriculture. Rural-to-urban migration is heavier when well-paying jobs are plentiful in urban industry but scarce in village farming and when rural laborers cannot obtain desirable prices for their goods. An unexpected outcome of the structural adjustment programs of the 1980s, which raised the price of food for urban consumers, has been slower urban growth in many countries than was anticipated 20 years ago. In the future, governments themselves conceivably can manage the pace of urban growth by promoting equitable economic policies between urban and rural areas.

Managing the ongoing rapid urban growth in developing countries, and avoiding the bleak vision of the pessimists, is possible only if governments act energetically on a number of different fronts: reducing urban poverty and inequality, helping women achieve their fertility preferences, improving urban infrastructure, removing bias against rural-based agriculture, and building good governance.


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Urban food and nutrition security depends on strong links between urban and rural areas. But policymakers and urban planners often ignore this interdependence. There are two broad, often overlapping, categories of rural-urban linkages. “Spatial” links refer to the movement of people, goods, money, and information between urban and rural areas. “Sectoral” links describe the interdependence between agriculture on the one hand and industry and services on the other. In the next two decades, three main issues related to rural-urban interdependence are likely to emerge: (1) changes in land use around urban centers, from farmland to residential or industrial use; (2) greater diversification of income sources in rural and urban areas, often involving people migrating or commuting between the countryside and urban centers; and (3) changes in the direction and composition of internal migration.

FOOD PRODUCTION AND LAND USE IN PERI-URBAN AREAS
The areas surrounding urban centers play an important part in the provision of food to urban consumers, and the proximity of these areas to urban markets lowers food transport and storage costs. At the same time, urbanization is at its most intense in these periurban areas. The process of urbanization transforms land-use and farming systems, patterns of labor-force participation, infrastructure requirements, and natural resource systems.

Peri-urban areas show wide regional variations. Southeast Asia’s extended metropolitan regions involve a mix of agriculture, cottage industry, industrial estates, suburban development, and other residential settlement over a wide radius. But in Sub-Saharan Africa, where the industrial base is usually weaker, agriculture prevails around cities, although with important transformations in land ownership and use.

Uncontrolled urban growth can pose a major threat to agricultural land and in many cases benefits mainly middle- and upper-income groups. Speculative purchases can also withdraw agricultural land from food production. In Manila’s extended metropolitan region, for example, large areas of rice land have been converted to industrial, residential, and recreational uses or have lain idle while owners awaited either development permits or more propitious market conditions. Such changes eliminate highly fertile agricultural land from production that urban households would otherwise rely on for affordable food.

Although small-scale peri-urban farmers contribute significantly to food production, in the process devising ways of using degraded land and large volumes of waste, proximity to urban markets does not guarantee them access to urban consumers. Around Paraguay’s capital, Asunción, for example, limited access to credit severely constrains the capacity of small farmers to grow produce, which is in high demand among urban consumers. On the outskirts of Bamako, Mali, the lack of transport makes it difficult for many small-scale fruit and vegetable producers to reach the city’s markets. Social networks among traders and middlemen can also exclude small producers from access to local markets. These constraints affect not only the income of small producers but also the food and nutrition security of urban consumers.

The transformation of peri-urban agricultural land, likely to intensify in the next few decades, raises two important issues for policymaking. First, to avoid increases in poverty, better working conditions and alternative employment opportunities are required for workers in these areas. Increased mechanization of production will reduce the number of agricultural workers. Those that remain will be mainly wage workers, often hired on a seasonal basis. These workers will need to supplement their incomes with other urban-based activities. Second, sound management of natural resources will become increasingly necessary as commercial agricultural production competes even more intensively with urban industry and households for essential resources such as water.

MAKING A LIVING ACROSS THE RURAL-URBAN DIVIDE
A large number of households in both rural and urban areas rely on different income sources for their livelihoods, which span the rural-urban divide. In Colombia much of the temporary workforce employed during the coffee harvest comes from urban areas. These workers usually stay on the farm over the week and return home for the weekend. In Zimbabwe low-income urban residents make ends meet by working seasonally on farms. Rural residents, on the other hand, increasingly make their living from sources outside agriculture. Low-income rural people, for example, supplement their income with petty trading, which can involve commuting or circular migration to urban centers.

In many cases those who migrate semipermanently remain closely in touch with their relatives back home. Parents working long hours in the urban informal sector tend to send their children to live with relatives in their home villages. This is because living conditions, including access to health services, are sometimes better in rural areas than in the cities, especially
Internal migration is another key facet of rural-urban interdependence. It cannot be measured easily, however, partly because censuses do not register short-term movements. Not all migration is rural-to-urban: in Latin America most movement occurs between urban centers, while in Sub-Saharan Africa rural-to-rural movement is important. Anecdotal evidence on return migration links it to worker retrenchments in the formal sector, especially during the implementation of structural adjustment programs in the 1980s. These different kinds of migratory patterns point to the varied influence of regional and national economies. For instance, the relocation of Mexican industries to secondary cities because of government incentives has precipitated the movement of skilled, middle-class workers out of Mexico City.

Economic imbalance between locations is not the only cause of migration. Changing social relations, especially between gender and generational groups, and improved access to information are also important. As young men and women migrate to seek greater financial and social independence, they often tend to remit less than their predecessors, generally because of the increased cost of living in the cities.

Another major cause of migration is the higher demand for women workers in the service industry and in light manufacturing linked to export processing. This trend is likely to continue in the next few decades and will have a major impact on labor markets. Policymakers need to identify and support the positive aspects of this urban influx and minimize the negative ones, such as the lack of child care for mothers who work.

Migration will play an increasingly central role in economic and social change over the next decades. But it will be a complex affair, involving different directions for different groups. Children may be looked after by older generations in home villages while their young parents move to urban centers for specific periods of time. After accumulating capital during that first period of urban employment, the parents are likely to move on to invest the capital. Policymakers need to carefully consider the relationships between migrant parent, child, and home village, all of which are bound up by the economic web of remittances.

WHAT ROLE FOR POLICY?
Policymakers have usually ignored the importance of rural-urban interdependence, or attempted to curb it, as in the case of migration. Inevitably the living conditions of lower- and middle-income groups have worsened. As a first step, policymakers need to identify and soften or eliminate policies that have a negative impact on rural-urban linkages. The next step is trickier because rural-urban linkages are highly context-dependent. Policies based on generalizations about the scale and nature of linkages have usually failed. Local government can play an important role in addressing local needs and priorities, but action at the local level generally must be supported at the regional and national levels. This support includes managing natural resources while responding to both urban and rural demands; assisting local economies by providing physical and social (health and education) infrastructure; and facilitating the efforts of low-income households to make a living by drawing on a variety of resources, including migration.

Given the difficulty of making specific policy recommendations, what is more important initially is for various government, NGO, and other groups and actors to recognize the centrality of urban-rural interdependence to both urban and rural livelihoods, to understand the local and national problems associated with it, and to conduct a democratic dialogue to arrive at a negotiated set of strategies for nurturing and benefiting from this interdependence. Understanding the importance of rural linkages to urban livelihood, food, and nutrition security is critical if policies are to improve the lives of the urban poor, rather than making them even more difficult than they already are.

For further reading see the journal Environment and Urbanization, vol. 10, April 1998, special issue entitled “Beyond the Rural-Urban Divide.”

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The quality of work opportunities—low wages, precarious working conditions, and insecure job tenure—is a crucial constraint to improving the livelihoods of the urban poor, especially since labor is poor people’s greatest asset. As urbanization proceeds in the coming decades and continues to provide opportunities for residents of as well as migrants to urban areas, the labor market increasingly becomes a key determinant of wealth and poverty. If policymakers do not address labor market issues, urbanization may intensify poverty in cities and shift the primary location of destitution from rural to urban areas.

**URBAN EMPLOYMENT TRANSITION**

Urbanization implies a transition from agricultural to industrial employment and, particularly, to service-sector jobs. According to International Labour Organization (ILO) estimates, the share of industrial employment in developing countries rose only from 11 to 14 percent between 1965 and 1990 (and only from 8 to 9 percent in Sub-Saharan Africa), while service-sector employment increased from 17 to 25 percent (13 to 24 percent in Sub-Saharan Africa). With urbanization, cities also account for an increasing share of national income. Urban areas now generate 55 percent of gross national product in low-income countries—although the urban population share is much lower—and 85 percent in high-income countries.

Dynamic cities represent engines of economic growth. They bring benefits through economies of scale and the higher productivity of many urban economic activities. Urban incidences of poverty tend to be lower than rural ones precisely because expanding urban economies offer significant employment opportunities. However, the contribution of urbanization to improving the livelihoods of poor people in urban and rural areas is more modest than these positive outcomes may suggest, for the following reasons:

- Urban growth is often supported by government bias against rural and in favor of urban areas when allocating investment funds.
- A nation’s overall poverty level may be reduced much more by rural development than by urban growth, especially in highly rural regions such as Asia and Africa.
- Often the poorest people from rural areas are not able to migrate to cities because of the financial investment and networks that migration usually requires.
- Many urban workers are badly paid, have insecure employment, or are overworked.

**DIVERSITY, FLEXIBILITY, AND INSECURITY IN URBAN EMPLOYMENT**

During the 1950s and 1960s, many experts expected that urbanization in developing countries would be accompanied by growth of a modern industrial sector that would provide permanent, protected employment. Instead, large numbers of urban inhabitants ended up working in the informal sector. In developing-country cities most people, particularly women, worked outside large, modern enterprises. Many of these jobs were insecure and did not pay well. With economic crises and adjustments during the 1980s and 1990s, the percentage of people working in this urban informal sector increased.

Jobs in urban areas show great diversity—from regular, secure government jobs; to well-paid independent jobs; to skilled, manual jobs in large-scale industries (with or without security of tenure); to visible kinds of “informal” jobs. The last category is extremely heterogeneous, including relatively better-off taxi drivers and market vendors as well as rickshaw pullers, beggars, prostitutes, and others. Many urban occupations are also marked by seasonal variations in availability of work.

Moreover, job characteristics are linked to social differentiation. People of particular groups, ethnicity, castes, gender, or age often find employment only in particular segments of the labor market. Although women’s role in the labor market is changing with urbanization, women’s workforce is concentrated in a limited number of sectors. During the last three to four decades the global female labor force expanded nearly twice as much as men’s, but women still tend to be overrepresented in less-secure and irregular jobs. Even when they work in the same types of jobs or sectors as men, they get paid less than men. When countries experience economic crises, the burden tends to fall heaviest on urban women, who must continue to work and devise innovative coping strategies to care for other members of the household.

The complexity of urban labor markets is augmented by the fact that people usually derive incomes from various sectors. Members of a household often work in different occupations and sectors. People in secure jobs whose pay has eroded with inflation may take up extra jobs, such as vending or driving a taxi. In many cases, urban households cross rural–urban boundaries, with their rural base continuing to function as a social and economic safety net. Urban workers often return to their villages when they lose their jobs during crises.

Some urban dwellers maintain ties to the land in another way, through urban agricultural production that provides...
income and improves nutrition for as much as 40 to 50 percent of the African and Latin American urban population. This extra food and income is important for lower-income groups, particularly women, and often serves as a means of coping with increases in urban poverty, higher food prices, or food shortages.

**TRENDS IN URBAN LABOR MARKETS**

The general tendency globally is toward more flexible labor markets, with less employment security and more differentiation among types of jobs. In Africa, Asia, and Latin America, flexibility in employment has been reinforced by economic stagnation since the 1980s and continuing policies of liberalization. The fall of communism also has led to more diverse forms of employment, away from state-guaranteed work.

- In China state enterprises have been dismantled, employment security has declined, and a huge urban “floating population” of migrants—with the least security—has rapidly emerged.
- The East Asian miracle itself was based on flexible labor markets, with large companies employing a core group of workers and using subcontractors to employ large numbers of additional workers, with little employment protection.
- In India growth of modern employment stagnated even in the 1980s, and—as in East Asia—large numbers of laborers worked for subcontractors, often in appalling conditions.
- In Africa, with the lowest levels of urbanization and continued economic crisis, flexible forms of labor have remained the norm.
- Latin America urbanized and industrialized early, and here flexible employment perhaps has been most prominent.

Trends in wages have also been diverse. For example, positive trends in employment in Chile and Indonesia were accompanied by declines in real manufacturing wages. Within Asia some countries have experienced increases in wages, while in most non-Asian countries and some industrialized countries, real industrial wages have declined in recent years.

**THE CHALLENGE OF GLOBALIZATION**

Urbanization is increasingly accompanied by globalization through trade and financial liberalization, both of which reinforce the importance of cities and economies of scale. Urban labor markets in 2020 are likely to become even more competitive and flexible. To take advantage of open, expanded, but highly competitive markets, governments need to react rapidly to demands imposed by a global labor market and now rely less on inward-oriented development policies.

Highly diverse urban labor markets are here to stay. Rewards from these markets will differ dramatically, depending on each economy’s ability to respond to and take advantage of global markets. Inequality is already quite pronounced in urban areas—and between urban and rural areas—and may become even more pronounced. Therefore, public policies that support urban labor will be needed to reduce the tensions that may arise from globalization and to ensure equitable access to rewarding labor markets, especially for the poor.

**POLICY RESPONSES**

Many policymakers have indicated a desire to reduce rates of urbanization, but this is not a reasonable strategy. Continued economic growth under open markets will remain the most likely development scenario, one that probably will not lead to de-urbanization.

Policies should focus on improving the effects of inevitable urbanization and migration, for example, by providing support to migrants rather than discriminating against them. Certainly in many countries rural development will remain crucial to reducing poverty and improving food security and nutrition, but this should not bar urban policies from supporting the livelihood strategies of both urban migrants and urban residents.

Macroeconomic policies have tended to assume that liberalization and deregulation would lead to economic growth and creation of employment. However, such policies by themselves may have only limited impact on poverty and may even have specific negative consequences for the urban poor. Macroeconomic policies need to be context-specific and sensitive to their effects on urban labor markets, especially on the conditions that need to be fulfilled to enable the urban poor to participate in the benefits of economic growth on an equitable basis.

Policymakers must also create targeted programs for the urban poor and food insecure. Up to now, urban policies, particularly those of donors, have tended to focus on issues of service delivery, shelter, and infrastructure. More thought needs to be given to employment-guarantee schemes in urban areas.

Macroeconomic policies and safety-net programs, however, are only part of the urban employment agenda. Policies need to pay more attention to enhancing productive employment for the urban poor—that is, ensuring employability of and equal opportunities for the urban poor in an increasingly competitive urban labor market. Policies should promote access of the poor to financial capital through microfinance schemes; build the capabilities of the urban poor through formal education and training so that they can secure high-quality employment; and take into account the heterogeneity of labor markets and fluctuating nature of labor supply and demand. Governments may also need to pursue special policies to reduce gender disparities and to break through the labor market segmentation that inhibits certain groups from taking up jobs in more rewarding activities.

For further reading see the International Labour Organization’s annual *World Labour Report*.
Urban expansion and issues of food supply and distribution to and in the cities have four major consequences for urban food security. The first is the competition between demands for land needed for housing, industry, and infrastructure and land needed for agricultural production within and around cities. Agriculturally productive lands are likely to be lost in this competition.

The second consequence is the increasing quantities of food that must be brought into cities and distributed within the expanding urban areas (see table). This means more trucks coming into cities, contributing to traffic congestion and air pollution. It also means additional stress on existing food distribution infrastructure and facilities, most of which are already inefficient, unhygienic, and environmentally unfriendly.

The third consequence is the modification of consumption habits and food purchasing behaviors. Consumers in urban areas—who generally pay up to 30 percent more for their food compared with their rural counterparts—have less time to spend preparing food. Therefore, the demand for more convenience and processed meals increases, raising issues of food quality and safety in terms of the use of appropriate inputs, particularly safe water, in food processing.

The final consequence for urban food security is the likelihood that low-income urban households will reside farther and farther away from food markets, often in slums that do not have water, roads, or electricity. Since these households are also less likely to have refrigerators, they face additional time and transport costs in accessing food daily.

As urban expansion continues apace, the overall cost of supplying, distributing, and accessing food is likely to increase further and, with it, the number of urban households that are food insecure. The challenge of feeding cities therefore lies in facilitating consumer access to food and ensuring that required investments are forthcoming for increasing food production, processing, and distribution capacities and services under hygienic, healthy, and environmentally sound conditions. Adequately meeting this challenge will promote the development of peri-urban and rural areas.

**FOOD SUPPLY PROBLEMS**

To feed ever-growing cities, more food will have to be imported or produced in areas presently under cultivation or on new lands (which are likely to be more distant and less productive). Urban and peri-urban agriculture can be an important source of food for some cities, especially when the national rural food production, marketing, and transportation systems are not well developed. However, urban and peri-urban agriculture pose a number of problems that stem from their close proximity to densely populated areas, with animals and humans sharing the same air, water, and soil resources. Inappropriate use of chemicals and solid and liquid wastes in farming can contaminate food, soil, and water resources used for drinking and food processing. Raising livestock in and close to urban areas may also increase health risks for residents. While many of the problems could be solved by information and extension assistance, local city authorities have often responded instead by destroying food crops and evicting food producers from public lands.

Much of the expected higher cost of feeding cities is likely to be accounted for by transportation costs as well as by postharvest food losses from inappropriate food handling and packaging, the need to collect food from a large number of small farmers, and frequent delays from road check points and (often illegal) taxation. These food losses can be as high as 35 percent for perishable food products, while transportation costs can reach as high as 90 percent of the overall food marketing margin.

### Expected Level of Food Consumption in Selected Cities, 2000 and 2010

<table>
<thead>
<tr>
<th>City</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yaoundé</td>
<td>3,030</td>
<td>5,752</td>
</tr>
<tr>
<td>Nairobi</td>
<td>4,805</td>
<td>7,984</td>
</tr>
<tr>
<td>Isfahan</td>
<td>13,000</td>
<td>20,500</td>
</tr>
<tr>
<td>Karachi</td>
<td>41,800</td>
<td>63,900</td>
</tr>
<tr>
<td>Lima</td>
<td>19,276</td>
<td>24,567</td>
</tr>
<tr>
<td>Port-au-Prince</td>
<td>2,934</td>
<td>4,450</td>
</tr>
<tr>
<td>Managua</td>
<td>2,782</td>
<td>4,075</td>
</tr>
</tbody>
</table>

Source: Food and Agriculture Organization of the United Nations, FAOSTAT and Food into Cities (2000).

Note: Data are based on national food consumption averages.

Urban and peri-urban agriculture can be an important source of food for some cities, especially when the national rural food production, marketing, and transportation systems are not well developed. However, urban and peri-urban agriculture pose a number of problems that stem from their close proximity to densely populated areas, with animals and humans sharing the same air, water, and soil resources. Inappropriate use of chemicals and solid and liquid wastes in farming can contaminate food, soil, and water resources used for drinking and food processing. Raising livestock in and close to urban areas may also increase health risks for residents. While many of the problems could be solved by information and extension assistance, local city authorities have often responded instead by destroying food crops and evicting food producers from public lands.
FOOD DISTRIBUTION PROBLEMS

In developing countries, a large share of food passes through wholesale markets and is then redistributed within the urban area through retail markets, shops, street sellers, and supermarkets, all of which have problems. Many wholesale markets are old, have not adapted to the increase in food quantities, are not properly managed and maintained, and are in areas that urban expansion has transformed into central, high-density spots. The latter factor increases traffic congestion and eliminates space for market expansion. Storage facilities, particularly cold storage, are insufficient or badly managed or both. These difficulties create additional costs and losses for traders and lead to increased food contamination.

At the retail level, supermarkets and hypermarkets (combined supermarkets and department stores) play only a minor role in urban food distribution in developing economies. Even in Latin American cities this sector accounts for only 30 percent of food retail sales, even though it has developed rapidly since the 1970s. Such markets usually cater to the needs of high-income families, are located in middle- to high-income urban areas, and distribute mainly manufactured food products and imports. Staples produced locally are only a small part of these markets’ food sales. They usually rely instead on direct contracts with distant food producers for their supplies.

The traditional retail food sector dominates developing-country markets, making it central to improving food distribution in cities. But public retail markets, which tend to be concentrated in city centers, are usually congested, unhealthy, and insecure. Spontaneous markets are often seen by local city authorities as a cause of traffic, health, and safety problems, and the sellers are consequently harassed by municipal police. In recent times many cities have experienced a steep rise in informal-sector retailing, which fills an important gap in the distribution chain because it is a convenient source of cheap food for low-income urban consumers. It also serves as an important source of revenue for low-income households engaged in these activities.

THE ROLE OF CITY AND LOCAL AUTHORITIES

Most city and local authorities believe that food supply and distribution issues are not their responsibility and instead concentrate on public health, education, housing, sanitation, and transport. However, these authorities affect food supply and distribution systems directly or indirectly through, for example, health and housing regulations and construction and management of processing and market infrastructure. Fortunately, awareness is growing of the need for city and local authorities to play a proactive and coordinating role in actions to improve urban food security. City authorities need to adopt policies that support those involved in food supply and distribution activities by promoting private investment, getting involved in food supply and distribution themselves (by facilitating urban and peri-urban agriculture and by providing the necessary planning, infrastructure, facilities, services, information, and regulations), coordinating public and private development initiatives, and mediating between the central government and the private food sector.

When formulating food supply and distribution policies and strategies, city and local authorities should rely on four strategic principles: (1) adopt an approach that is consultative, participatory, open-minded, alliance-seeking, and technically sound and involves the private sector; (2) promote competition and reduce the influence of large intermediaries; (3) leave to the private sector facilities and services that can best be run as businesses; and (4) encourage effective development that lowers the cost of living and stimulates employment growth in the city. City and local authorities can also play a crucial role in national food-security policies by complementing efforts by farmers’ associations and local rural authorities to lobby governments on projects and programs that will reduce food production and marketing constraints.

City and local authorities also need to support urban and peri-urban agriculture with information campaigns to minimize adverse health and environmental consequences and with appropriately enforced regulations that allow and facilitate urban and peri-urban agricultural activities.

City and local authorities can play a fundamental role in ensuring that food distribution issues are appropriately considered when new infrastructure, facilities, and services are being planned. These considerations include location, type, and standards of the services and structures, as well as the financial capacity of the users, in order to enable them to pay usage fees and keep up market facilities. Other key issues are the management of markets and the criteria for allocating space for building markets.

While much of the food production and distribution is out of the control of city and local authorities, these authorities must coordinate with other organizations that are major stakeholders in the food production and distribution system, and they should promote and support policies that ensure urban food security and stimulate private investment as well as private participation in planning decisions. Only if low-income urban households have access to affordable, good-quality food through the programs and policies noted here can they achieve food security.


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“A 2020 VISION FOR FOOD, AGRICULTURE, AND THE ENVIRONMENT” IS AN INITIATIVE OF THE INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI) TO FEED THE WORLD, REDUCE POVERTY, AND PROTECT THE ENVIRONMENT.
In the next 20 years, urbanization will intensify in Latin America and the Caribbean, but Africa and Asia will witness the most explosive urban growth. Countries that are urbanizing the most rapidly are also among the least well-prepared to satisfy their food needs, and many already depend precariously on food aid and imports.

Urban agriculture—agriculture located within or on the fringe of a town or city—may be one way to bolster city food supplies while also increasing the incomes of the poor. Urban agriculture uses resources, products, and services found in and around the urban area and, in turn, often supplies resources, products, and services to that area. Urban agricultural systems include horticulture, floriculture, forestry, aquaculture, and livestock production.

MAGNITUDE OF URBAN AGRICULTURE
The United Nations Development Programme estimates that 800 million people are engaged in urban agriculture worldwide, with the majority in Asian cities. Of these, 200 million are considered to be market producers, employing 150 million people full time. Urban agriculture is thus an important supply source in developing-country urban food systems, a critical food-security valve for poor urban households. It affords a cheap, simple, and flexible tool for productively using open urban spaces, treating and recovering urban solid and liquid wastes, generating employment and income, adding value to products, managing freshwater resources more sparingly, and resolving otherwise incompatible urban land use issues. Urban agriculture’s nature and magnitude vary, of course, depending on agroecological conditions; national, regional, and local policies; market conditions; and household characteristics, but it has become an important part of the urban scene.

Urban agriculture complements, rather than supplants, rural supplies and imports of food and will continue to do so. Cities will continue to depend largely on rural agriculture for bulkier, less perishable foodstuffs. But urban agriculture can provide significant amounts of food at small scales and for specific items. It can generate goods valued at tens of millions of dollars in any given major city. By growing their own food, cities lower their food deficits and obtain an important source of fruits and vegetables and livestock products, including dairy. Urban agriculture provides an estimated 15 percent of all food consumed in urban areas and is likely to double that share in the next couple of decades. Cities with more advanced urban agriculture sectors, particularly in Asia, have become largely self-sufficient in higher-valued, nutritious perishables. Some cities even export surpluses abroad.

Urban agriculture is also integral to city life, a vibrant part of urban economic and ecological systems. Urban farmers use urban land, public services, inputs, and even urban wastes in production. They then sell to local markets and often reinvest profits into goods produced or sold at city outlets.

Urban agriculture can be an important supplement to household income. In Cairo, the rearing of small livestock, practiced by over a quarter of households, provides more than 60 percent of household income. In Dar es Salaam urban agriculture is the second largest employer. High-valued specialty foods (for example, mushrooms) and nonfood crops (such as ornamental flowers) that require little space for production are especially good for providing needed cash.

Still, the great majority of urban farmers are poor and grow food mainly for their own subsistence, with little support or protection, on small plots that they do not own. These households can secure food from urban agriculture that they could not afford otherwise. Studies in Harare, Kampala, and Nairobi found that urban agriculture can improve nutritional status of household members, as measured by caloric and protein intake, meal quality, or children’s growth rates.

Many surveys indicate that women predominate in urban agriculture, which conveniently enables women to earn income, improve household diets, perform household chores, and exert greater control over household resources, budgets, and decisionmaking.

RISKS AND CONSTRAINTS
The poor can be constrained from doing well with urban farming for many reasons, including lack of access to land, credit, water, and other inputs or legal obstacles arising from concerns about public health. Urban farmers often use public spaces, and if they lack title to the land they use, they cannot be assured they will actually reap the benefits of their investment. Without title, the majority of low-income urban producers cannot get formal loans that require assets as a guarantee nor can they get support from national farmers’ unions, whose members’ activities must be legally sanctioned. Women may be constrained by extension or credit services that disregard the knowledge women farmers have of crops, input combinations, and cultivation methods.

Aridity, unreliable supplies of piped water, and violent rainfalls can all critically constrain many production systems.
If improperly managed, urban agriculture can even exacerbate environmental degradation, including soil erosion, loss of vegetation, siltation, and depletion of water resources.

Public health concerns stem from misuse or mishandling of agrochemicals; the application of untreated or improperly treated wastes to food crops; the exposure of crops to air, water, or land pollution, including possible contamination from heavy metals; and unsafe disposal of vegetable and animal wastes. Some threats, such as those from agrochemicals, are less prevalent than commonly believed because the poor usually cannot afford inorganic inputs. Consequently they grow crops or raise livestock organically. However, the poor often have no option other than to grow their crops in hazardous conditions, and threats from authorities may only deter them from investing in safer production methods.

**POLICY AND PRACTICE**

To improve urban agriculture and make it more sustainable, farmers must use better practices and governments must promote or better manage it through more informed policies. Nongovernmental organizations (NGOs) can support these efforts.

Legitimizing urban agriculture can help its low-income practitioners gain access to land, needed services, and credit. Policymakers can legitimize and promote urban agriculture through public appeals, as in Uganda. Governments can provide land for urban agriculture in city master plans, support greenbelt projects, and set up a network of input and service centers. They can engage directly in urban agricultural production by leasing out public land; assigning undeveloped, public land to farmer organizations; partnering with producers; or becoming producers themselves. Urban laws and regulations can be revised to be compatible with people’s survival options, as in Kampala, where bylaws now allow for certain kinds of farm production in certain zones. Governments can also tolerate urban agriculture as interim land use in public housing schemes or incorporate it as a way to productively manage open urban spaces. Some development banks in South Africa and Tanzania have also provided credit by supporting revolving funds for cooperatives of urban farmers. Farmers’ organizations can also help to legitimize the sector and organize access to credit, inputs, and markets.

There is enormous potential for reducing risks to public health by educating and empowering urban producers, as opposed to ignoring or harassing them. Farmers can reduce environmental risks and gain financially by making appropriate choices about what crops to grow. For example, increasing the use of short-cycle crops boosts productivity and decreases the use of potentially contaminated water.

Because many safe practices are knowledge-based, they are also affordable and easily adopted by farmers. Producers can be taught to avoid the use of polluted organic or chemical fertilizers on specific crops or to draw water from wells instead of rivers. Urban farmers can have mutually beneficial contracts with municipal waste-disposal services, and nonfood urban agriculture can be used to rehabilitate contaminated water bodies and soils, generating income in the process. NGOs can help determine the scale of composting that would be both cost-effective and environmentally suitable. Cities can treat and recirculate wastewater. When cities introduce treatment of water for irrigation, they should also devise creative cost-recovery mechanisms (for example, bartering agreements) instead of penalizing wastewater-using farmers.

Challenges to urban agriculture remain to be addressed from the community up to the national level. Governments must apply the wealth of local experiences to creating institutional structures for implementing urban agriculture policies. Overall, experience shows that prohibition of urban agriculture has been ineffective. Governments now should move beyond accommodation and into issue resolution: multiple-stakeholder governance so far seems to be the best approach to creating a sustainable urban agriculture that is friendly to small farmers. NGOs can help create and mediate among the various organizations.

Experience also has shown that urban agriculture is most viable where it is mainstreamed into robust strategies for land use, poverty alleviation, economic development, and sound environmental management. Outside Asia, few national food policies seek synergies between rural and urban production or guide integrated urban agricultural programs. Land-use and regulatory systems must be designed and enforced for fairer access to land, water, and markets. Agricultural extension must be adapted to the needs of urban producers. Agricultural research stations and urban planning departments must collaborate. Model health and land-use codes need to be developed. Regional and global networks are developing, but national and local networks must also be created and supported. Public policy should also acknowledge women’s knowledge, constraints, and opportunities and act upon them to enhance women’s citizenship.

Governments throughout the developing world must recognize the place of urban agriculture in the city’s development and in securing food and nutrition security of its residents, a place it has long held without recognition and, moreover, a place that is now expanding.


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Increasing urbanization in the developing world has brought a remarkably rapid shift toward a high incidence of obesity and noncommunicable diseases such as diabetes and coronary problems, at a time when large segments of the population still face undernutrition and poverty-related diseases. Obesity and its related diseases, for example, affect 25–50 percent of the population in countries as disparate as Kuwait, Mexico, Thailand, and Tunisia. This “nutrition transition”—a term used to describe shifts in diet, physical activity, health, and nutrition—can be traced to higher incomes, the influence of mass media and food marketing, and a range of changes in the nature of work and leisure.

Where a person stands in the nutrition transition depends on how far that person has moved away from a traditional diet and toward a diet common in the West, with all the accompanying changes in physical activity and body composition. According to this qualitative measure of transition, urban areas throughout the developing world are much further along in the process than rural areas. On a regional basis, most Latin American and Caribbean countries and selected countries in North Africa, the Middle East, and East Asia have shifted the most in nutritional status and dietary and activity patterns. The most promising policy option for remediating the ill effects of this transition appears to be a combination of price policies, education, and specific program actions at the school level.

THE NUTRITION TRANSITION
Urban residents have vastly different lifestyles than rural residents. These lifestyles create their own patterns of food demand and time allocation. The consequences for diets, physical activity, and health have been enormous.

The urban diet. Urban residents obtain a much higher proportion of energy from fats and sweeteners than do rural residents, even in the poorest areas of very low-income countries. Most urban dwellers also eat greater amounts of animal products than their rural counterparts. Urbanites consume a more diversified diet and more micronutrients and animal proteins than rural residents but with considerably higher intakes of refined carbohydrates, processed foods, and saturated and total fat and lower intakes of fiber.

The figure shows how urbanization changes the fat and sweet content of national diets. Countries that have an urban population share of 75 percent consume about 4 percentage points more energy from vegetable and animal fat and 12 percentage points more energy from sweeteners than countries
with an urban population share of 25 percent. This holds true even at low levels of gross national product (GNP). Related research has shown that lower-income countries are able now to afford far more energy from fat than they could in the past at the same level of GNP. Thus, not only are urban diets changing, but they are changing at an earlier stage of economic development.

Increasing incomes partially explain this turn toward fatter foods and sweeteners, but there also seems to be an upward shift in consumer demand for sweeteners and higher-fat products at any given income level. Greater penetration of mass media and modern marketing approaches into the lives of urban residents may account for this shift in food choices. Little is understood, though, about the impact of media and marketing on the nutrition transition. Economic work that relies on income and price changes cannot account for these shifts in behavior.

The ability to produce lower-cost foods that contain oils and sweeteners has facilitated the transition as well. In the last half century, new technologies and new oilseed varieties, for example, have made it much easier to create high-quality, low-cost edible oils as alternatives to much more expensive animal fats.

**Urban physical activity patterns.** New technologies in work and leisure, along with shifting diets, have increased obesity levels in the urban areas of developing countries. Body composition has changed in tandem with the transformation of the preindustrial agrarian economy into an industrial, urban one. As this transformation has accelerated, the service sector has grown rapidly, capital-intensive processes have come to dominate industrial production, and time-allocation patterns have changed dramatically. Urban work now requires less physical exertion and allows more leisure. Leisure activity has been transformed, particularly by changes in food preparation, production, and processing and by the revolutionary penetration of the mass media into the developing world. Almost all Chinese households, for example, owned at least one working television set by 1997.

**Health and nutrition consequences.** Changes in diet and physical activity have accelerated the rate of increase in obesity in the developing world. Trends in obesity are not limited to one region, country, or racial or ethnic group. In many cases, such as with women in Egypt and South Africa and across ages and sexes in Mexico, the lower- and middle-income countries have overweight levels that match those of the United States and exceed those of most European countries. Obesity levels are much higher in urban areas: in China and Indonesia adult obesity is twice as prevalent in urban areas as it is in rural areas; in the Congo it is almost six times as prevalent. The Middle East, the Western Pacific, and Latin America have far higher levels of obesity than other developing regions.

Higher-income populations in the developing world also have much higher levels of obesity. This relationship also held a century ago among European and North American populations, but the reverse is now true: the poor in Europe and North America experience far higher levels of obesity and diet-related chronic diseases than their rich counterparts. This reversal has occurred recently among urban Brazilian women and in Chile.

A range of changes in health have accompanied this nutrition transition. Most immediate among these seems to be the emerging epidemic of diabetes, stroke, and hypertension, all diet-related chronic diseases. The evidence from some Asian and Latin American countries is particularly worrying. The economic costs of diet-related noncommunicable diseases in fact have surpassed the cost of malnutrition in China.

A unique issue emerging from this transition is the increasingly frequent double burden of undernutrition and obesity in the same household. The prevalence of households with both overweight and underweight members in Brazil, for example, is 11 percent.

**WHERE DO WE GO FROM HERE?**

How can the food policy and public health communities, already burdened by the challenges of poverty, undernutrition, and underdevelopment, deal with the seemingly contradictory goal of promoting both greater and lesser food intake? How can they address the prevention of obesity when they focus on undernutrition and poverty?

Part of the answer lies in finding solutions common to both undernutrition and overnutrition and promoting them through education and more direct interventions. Promulgating nutrient-dense fruits and vegetables, for example, would reduce caloric intake and improve micronutrient status. Another such solution is breast-feeding, which offers food rich in nutrients and reduces obesity and coronary heart disease.

Policymakers must also take direct action to reduce obesity at all age levels. Few large-scale efforts have done this successfully, though Scandinavian countries did change their diets and reduce coronary heart disease between 1976 and the 1980s. To do so, the Scandinavians focused on price and other policies, such as fish subsidies, to encourage healthier diets. During the 1990s Singapore reduced child obesity through a combination of changes in school diet and increased fitness and physical activity programming.

A major first step toward a healthier population is awareness of the problems related to the nutrition transition. Many developing countries are realizing the importance of this issue. They must continue their efforts and develop programs and policies for agricultural production, nutrition, food marketing, and education that will help them to successfully confront the nutrition transition and achieve sustainable food and nutrition security.


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As the urban population in all developing regions grows over the next 20 years, governments and families will face unique challenges in their efforts to ensure the well-being of millions of children. They will have to take into account changes in women’s roles, in strategies for childcare, and in the means of obtaining food security. All these changes will have major implications for the livelihoods of people residing in the new urban megacities.

EXTENT OF LABOR-FORCE PARTICIPATION
Many studies in developing countries show that women contribute as much or more than men do to family food security and children’s nutritional status when unpaid work is included in the estimation. Nowadays more women also work for income than ever before. Globally women’s rates of participation in the labor force were 54 percent in 1950 and 66 percent in 1990 and are projected to reach almost 70 percent in 2010. Urban women now are more likely to work for income when their children are very young and to stay in the labor force longer than they were previously. Worldwide they enter the labor market at high rates in their 20s, increase labor force participation through their 30s and 40s, and leave work only after age 50.

The percent of households that rely on women’s financial contribution for food security is also increasing. Women provide the main source of income in more than 20 percent of households in Latin America, Sub-Saharan Africa, and most of Asia. Even in dual-parent families, women are contributing a higher percentage of income than before.

The forces that have increased women’s labor force participation—urbanization and globalization—have pulled women into jobs that are of lower quality (low-skilled jobs with no security or protection), part-time, home-based, or all of these. More than 80 percent of women work in largely gender-segregated occupations, and women on average still earn less than 70 percent of what men earn. Since women are in lower-skilled and temporary jobs, they are more likely to lose jobs than are men during financial crises. Women also still lag far behind men in having the skills to handle new technologies, making them less likely to get higher-paying jobs that require these skills.

CONSEQUENCES OF LABOR-FORCE PARTICIPATION
Urban residence can have mixed consequences for women and children. On the one hand, women workers in an urban economy can potentially earn a higher percentage of the family income. Since percentage of income earned has been shown to relate to decisionmaking in the family, these women might be less tied to traditional restrictions, such as food taboos during pregnancy. According to a recent United Nations study, urban women also have fewer children, and they and their children are much more likely to be literate than rural women and theirs. Services such as family planning may be more available in urban areas, and women’s increased independence may lead to higher self-esteem and recognition of rights.

On the other hand, urban women who work may be more vulnerable to violence and harassment at the workplace than rural women and may be forced into informal work such as street vending that offers few protections. Many women with little income must raise their children surrounded by the inadequate infrastructure of urban slums. For new migrants to urban squatter settlements, support systems may be weak, leading to stress and family dysfunction. Poor or sporadic job opportunities for men, as well as the need to obtain food with cash, may result in a decline in male support for families and less food security.

Women are now much more likely to work when their children are under 12 months old, a period of time when children have the greatest need of intensive care for good growth and development. Workers in the formal sector, for example, are limited to 12 weeks of maternity leave in most countries, even though about 6 months of exclusive breastfeeding is recommended. For women working in the informal sector, any leave at all is taken at the risk of losing income and job opportunities.

Although in some countries working mothers breastfeed less, work itself does not necessarily limit breastfeeding, nor does mothers’ work seem to affect children’s nutritional status in some developing countries. In two studies in urban Latin America, income earned by the mother when the child was at least 12 months of age was positively associated with the child’s nutritional status when income levels were controlled for. Women’s income had a stronger positive association with children’s nutritional status than men’s income. However, when women did not have the power to decide how to spend their income on children, wage work led to negative effects on children’s nutritional status.
Adequate childcare is essential for working mothers. In urban Ghana, women’s strategies for providing childcare were more important for children’s nutritional status than family income. In urban Guatemala, maternal employment did not increase children’s chances of malnutrition unless they were cared for by a preteen. Work at home, however, often considered to be a positive option, has been associated with poorer nutritional status for children if demands of the work are intense and time-bound (for example, piecework).

In sum, when mothers are poor—with time-intensive, low-paid, and inflexible work; no control over earnings; and no good alternative caregivers—infants are at risk of poor growth. Some women who work during their child’s first year of life have no other sources of support. For these women, work is a survival strategy; the alternative is starvation for mother and child.

CURRENT LIMITS OF CHILDCARE

Day care in the urban slums of developing countries, particularly for children under three, is usually woefully inadequate in coverage and quality. The most common day-care centers are run by governments or private voluntary organizations. These centers are likely to be attended only by children over three and have extremely limited coverage because of the large investment needed in buildings and equipment. Yet childcare is clearly necessary. United Nations data from 23 countries in Africa, Asia, and Latin America show that a majority of working women with children under five work away from home.

Some innovative approaches to childcare include family day-care homes, in which one mother watches five or six neighbor children in her home; or mobile crèches, which involve childcare facilities set up near the employment site of working mothers. In lieu of day-care options, families use older female siblings (much more than male siblings), thus keeping girls out of school; other family members; and neighbors. There are cases of families resorting to drastic strategies, such as giving children a dose of opium so that they will sleep during the day.

IMPROVING WORKING MOTHERS’ ABILITY TO PROVIDE CARE

More women will work for earnings in the next 20 years, particularly when their children are young. Although the smaller family sizes associated with urbanization should decrease the time needed for childcare, this may turn out not to be the case. Many urban parents will want their children to be schooled in order to attain the best opportunities for a successful life. The consequent focus on developing children’s language and social skills may increase rather than decrease time commitments for care.

Three factors have been shown to reduce the negative effects of maternal work on young children: helping mothers not to work when their children are very young, providing an adequate wage rate and flexible working hours, and providing reasonable alternative childcare. Ensuring these will be necessary for the health and well-being of an urbanizing society.

Policies are also needed that provide women protection against returning to work too soon after giving birth. Maternity protection legislation is woefully inadequate. Whereas 192 countries have ratified the Convention on the Rights of the Child, only 38 have ratified the International Labour Organization’s 1952 Maternity Protection Convention. Even if signed, the latter’s provisions apply to only a small proportion of the population.

Cultural and social attitudes also need to reflect women’s equality in the workforce. For example, although girls are attending school at much higher rates and are performing as well as or better than boys in many countries, these gains have not been translated into correspondingly equal employment and training opportunities, according to the International Labour Organization’s 1999 World Employment Report.

Policies can go a long way toward improving women’s income by, for example, implementing gender-blind minimum wage rates, organizing informal or self-employed labor, and supporting urban development projects. To improve outcomes for children, governments can legalize squatter settlements after a period of time to allow people living in them access to services, and they can invest in health, day care, and infrastructure. Training women for skilled jobs is also a key component for raising incomes and thereby improving child health. Outside pressures, such as the Beijing Conference on Women, and efforts of United Nations and bilateral agencies, can help, but sustained efforts are needed within countries to implement and monitor good policies.

Caring adequately for urban children will be essential for their nutritional status and the health of urban society. Providing alternative childcare means that women’s work in childcare, which was traditionally unpaid, must now be paid for. Model urban programs, such as Child Friendly Cities Programs, do invest in childcare for working women, but these efforts are not enough. Innovative approaches are needed to provide good childcare, especially for the youngest age group. These approaches must rely on partnerships between employers, workers, and government to provide adequate care. Innovative strategies could include support for parental childcare cooperatives, social insurance to enable mothers or fathers to stay home after the birth of a child, childcare linked to schools, and even the involvement of elders in childcare. Good childcare is not cheap, but the investments made at this age are perhaps the most important for the next generation and for working women themselves.


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The future looks more urban than ever. As urban demographer Ellen Brennan has observed, “In a few years, roughly around 2006, a crossroads will be reached in human history, when half of the world’s population will be residing in urban areas.” By 2030, three-fifths of the world’s population will live in urban areas.

Evidence indicates, though, that this future may be more unequal than ever. The majority of urban people will live in Asia, Africa, and Latin America—in countries that are getting relatively poorer, not richer. The latest World Bank data show the ratio of income per capita in the richest countries over that in the poorest countries has increased from 11 to 1 in 1870, to 38 to 1 in 1960, and to 52 to 1 in 1985. And poverty in the poorest countries appears to have become more urbanized. An urban world with growing inequality bodes ill for the health of urban dwellers.

In addition, globalization—the rapid global movement of capital, ideas, skills, and employment connected to the concentration of power in the private sector—is changing the urban physical and social environment. Consequent changes in diet and physical activity are affecting the health of all urban people. Accompanying these changes is the fact that the poor rely increasingly on the wealthy. The United Nations Environment Programme (UNEP) reports that private foreign investment controlled by corporations was worth US$250 billion in 1996, in contrast with less than US$50 billion in official development assistance. In the same year, foreign exchange trading by big investors amounted to US$350 trillion—more than 10 times the world’s gross domestic product. The wealth of the world is now in the hands of a tiny minority of people. The ratio of the average income of the world’s wealthiest 5 percent to the world’s poorest 5 percent increased from 78 to 1 in 1988 to 123 to 1 in 1993.

This shift of financial and political power influences development opportunities for urban areas. Cities compete against each other for foreign and private investment on the basis of their population and resources. Urban development relies on low-cost urban labor in one city or country competing with low-cost urban labor in another. As a result the well-being and health of the world’s urban people can become precarious.

**URBAN HEALTH AND PRIORITIES FOR ACTION**

Urban areas could be healthy places for people to grow, live, and work. Health depends on equitable availability of a simple set of good physical conditions, such as clean and plentiful water, clean air, uncontaminated and adequate food, access to sanitary home and work environments, protective shelter, safe and remunerative employment, and safe environments in which to move around. At first, the urban health picture looks quite simple. Urban development, based on industrial or manufacturing processes, provides employment, which leads to a wealthier society. A richer society, in turn, can pay for better delivery of water, sanitation, health services, and education. Ultimately this translates into better health. Witness the mortality rate of children under five of per 1,000 in highly urbanized industrialized countries, as opposed to about 170 per 1,000 in 30 percent urbanized Sub-Saharan Africa and about 120 per 1,000 in 27 percent urbanized South Asia.

But this simple view conceals the impact on health of inequalities between and within urban centers. Urbanization in developing countries has not taken place in a context that enables good physical conditions for health to be easily realized. Historically, the industrialized countries of the northern hemisphere built their economies by transforming and trading the natural-resource bases of Asia, Latin America, and Africa. These northern countries went on to control the trade system, limiting the ability of the so-called “developing” countries to follow the same route toward urbanization and development.

Developing countries have three significant urban health agendas, each linked to the issue of inequity between and within cities: the resolution of health problems stemming from (1) urban poverty, such as infectious diseases and poor nutrition, (2) the current “dirty” industrialization process, and (3) the social and political environment within cities.

**URBAN POVERTY**

An estimated 600 million or more people live in low-income settlements in African, Asian, and Latin American cities and towns. This urban poverty is generally accompanied by limited and poor-quality water, food, and housing, as well as limited education and low-paid hazardous work. Urban poverty is the most direct result of constricted urban development opportunities, which are driven by inequalities between countries and cities. Undernutrition, malnutrition, and infectious diseases are widespread in African and Asian urban centers because of poverty. Malnutrition increases the risk of infectious disease. Death rates for infectious diseases—such as diarrhea, measles, and tuberculosis—and for infant mortality among urban poor children in developing countries can be up to 100 times higher than those for urban children in industrialized countries. The World Bank cal-
culated that in 1998 acute respiratory diseases (about 111 million years of life lost) and diarrheal diseases (about 94 million years of life lost) were the world’s major health problems, and they were concentrated in urban areas of developing countries. In one poor part of Calcutta that contains 4 million people, about one out of every fifth child under 5 and adult over 65 dies due to diarrheal and respiratory diseases. Malaria and dengue fever represent significant health problems in urban areas of Africa and Asia. Thus the first challenge is to provide a solution to the disease-causing environments propagated by poverty.

**“DIRTY” INDUSTRIALIZATION**

Pollution from dirty industrial development adds to health risks. Metropolitan areas in developing countries often rely on attracting investment for rapid, environmentally dirty industrial development. Transportation also contributes significantly to local air pollution and global warming. UNEP reports that 1 billion urban residents are exposed to health-threatening levels of air pollution, creating the double health burden city dwellers face of poverty and environmental degradation.

This type of double health burden is linked to the dilemma of developing-country cities being forced to compete against each other in dirty development: attracting investment on the basis of extremely low environmental standards and extremely poor labor conditions. This kind of development is hazardous for the current generation but also toxic for the future. It raises the challenge of providing a form of urban development that eliminates urban poverty without introducing the effects of dirty, unsustainable industrialization.

**INTRA-URBAN SOCIAL AND POLITICAL INEQUALITY**

Good urban health also depends on the urban social and political environment. The shift toward inequality within countries is evident in almost every city and town internationally, regardless of its wealth, and has been linked to social and health impacts such as increases in violence and poor mental health. Evidence shows that urban violence stems from political disenempowerment, unequal access of some people to opportunity and justice, frustrated aspirations, and perpetual confrontation with lack of change. Death rates from urban violence in the low-income areas of cities are high. More than twice as many poor in São Paulo, for example, die a violent death compared with the rich. Poor urban children, particularly boys, are greatly affected by the trauma of urban violence. All these issues raise the third challenge for urban health: developing urban areas in a way that provides equal opportunity and benefits to all.

**SUSTAINABLE AND EQUITABLE DEVELOPMENT**

Many now believe that the three urban health challenges outlined above could be met if urban policymakers focused more on environmental and social sustainability. Sustainability could help reverse trends in inequality because it emphasizes equity in consumption and resource distribution.

If equitable, sustainable development is to be achieved, a first step may be to emphasize the use of health as a means of identifying priorities in urban policy. This would enable the urban development agenda to be guided by the long-term goal of human well-being rather than the short-term goal of economic well-being. Governmental, nongovernmental, and international organizations are developing urban initiatives—such as the high- ly participatory Local Agenda 21 plans, Healthy Cities, and Sustainable City Networks—that emphasize healthy and sustainable development. These initiatives incorporate intersectoral collaboration; the participation, particularly of the poor, in setting priorities; equity in distribution of services; and sustainability in decisions about investment.

The forces of globalization must also be turned toward environmental and social justice, and thus to the advantage of the urban majority and the urban future. Against the attempts to shift toward equity and intersectoral collaboration, urban services have become part of the globalized economy, with large-scale privatization of urban services, including education, water, waste disposal, energy, housing, sanitation, and health. Privatization policies were intended to improve efficiency and extend delivery, but urban services appear to be moving into the hands of major multinational corporations, who then control many aspects of urban policy that were formerly in the hands of local government. The result often has been a narrowing of delivery.

Macropolitical and macroeconomic processes influence the ability of decisionmakers to improve the conditions that affect the health and well-being of urban citizens. Many specialists argue that only when local governments gain control of the destiny of their cities will sustainable urban development become a reality and will we be able to achieve health security for all.


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“A 2020 VISION FOR FOOD, AGRICULTURE, AND THE ENVIRONMENT” IS AN INITIATIVE OF THE INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI) TO FEED THE WORLD, REDUCE POVERTY, AND PROTECT THE ENVIRONMENT.
Governments, development agencies, and communities are attempting to improve urban livelihoods and reduce urban poverty and food and nutrition insecurity. However, much of their understanding builds on a rural and agrarian knowledge base or focuses on providing urban public services and infrastructure. Developing more effective urban programs requires considering some key characteristics that affect the livelihoods of the urban poor:

- Greater dependency on cash income and less reliance on agriculture and natural resources
- Low wages from work at insecure jobs
- A large number of women working outside the home
- Legal obstacles, including insecure land and housing tenure
- Inadequate access to safe water, sanitation, and health services
- Frequently weak social networks, which often transcend the geographic boundaries of communities.

**URBAN PROGRAM CONSIDERATIONS**

In urban settings diagnostic tools must be able to grapple with livelihood systems that are complex and constantly changing, often span economic sectors, and often involve linkages with rural areas. Standard approaches may be stymied because the poor may not readily disclose coping strategies, which are frequently illegal, and because safety considerations may constrain data collection, with interviews having to be carried out before dark.

Targeting programs may also be difficult. Community-based targeting may not work well in urban areas because poverty and malnutrition are widely dispersed in pockets across the city and because people move frequently and often work outside of the areas where they live.

Project design must also take into account the complex political environment in urban areas. Local, municipal, and national governments, along with community organizations and nongovernmental organizations, combine with political interests from inside and outside a community to exert influence over local activities.

**ECONOMIC INSECURITY AND ECONOMIC JUSTICE**

Lack of skills, poor health, and inadequate access to capital often limit the poor to jobs that are insecure, temporary, and casual. Incomes, too, are often subject to significant seasonal swings, just as in rural areas. For example, in the rainy season, the government may shut down foodsellers because it fears an outbreak of cholera.

Insecure access to affordable, decent housing also consigns the poor to livelihoods that are unlikely to improve. This is because a house in an urban area serves not only as a base for household enterprise but also as the center of social relations useful for finding jobs, getting credit, or acquiring food. Eviction can be a tragic disruption of these strategic networks.

Lack of secure tenure can also inhibit community development. Donors or governments may hesitate to invest in infrastructure without being assured that people have a stake in maintaining the investment or that they will still be there when construction is completed. Slum improvements may even negatively affect the poor if the poor do not have secure tenure because with improvements, landlords may raise rents, forcing out the very group the improvements were intended to benefit.

Creating successful employment is also difficult. Income-generation and credit schemes tend to be small in scale. While perhaps helping some individuals to cope with deprivation, they often fail to provide permanent escape from poverty. Business-training programs often have difficulty identifying those individuals who are true entrepreneurs and who can generate a significant number of higher-quality jobs. Still, experience suggests that effective programs must ensure that the poor receive training in job and life skills and have access to sufficient credit. Income-support programs need to keep the seasonal dimension in mind as well. Communities must work with the private sector and government to ensure that available labor is matched up with available opportunities and to provide an economic and regulatory environment that promotes business expansion.

**PRIVATIZATION OF SERVICES AND DISTRIBUTIVE JUSTICE**

Existing services in urban areas are often overwhelmed by crowded conditions and poor infrastructure maintenance. Dangerous environments are made more so by inadequate health facilities, erratic water supplies, poor drainage, and infrequent refuse collection. Government agencies may not have the capacity or resources to adequately support these services. Privatization may hold out hope for more efficient service, but private companies are likely not to be concerned with distributive justice. They may raise prices beyond the ability of the poor to pay, increasing inequity in access to basic services. In pursuit of profit, private companies may also worsen environmental conditions and raise risks to the health of the poor.
Proposed solutions for improving service delivery must include input from, and meet the needs of, those the system will serve. Community water systems, for example, must be financially viable for the supplier but also must not exclude the poor who may not be able to pay full recovery-cost prices. Poor people’s rights to access basic services must be ensured, even in a competitive, free-market world, and government agencies, civic groups, and the private sector should work together to design and implement effective, sustainable systems. Experiences even in such countries as Haiti have shown that communities can work with the private sector to devise creative, low-cost, often low-tech solutions that accomplish that goal.

Nongovernmental organizations can play an especially important role as facilitators among these groups, providing technical capacity, or knowledge of other experiences, when needed.

SOCIAL COHESION AND SOCIAL JUSTICE
People rely on social networks to create opportunities or manage risk. In an urban setting, increased mobility leads to weak social cohesion and fewer opportunities for establishing a sense of community. In addition, networks that are differentiated and decentralized replace the family- and geographic-community-based networks of rural areas. Individual-level social capital based primarily on an ability to reciprocate becomes the backbone of these new urban networks. With so little to give, the destitute may soon be left out of these networks.

Negative forms of social capital can arise, with organized crime providing a system of protection and assistance for many. The resulting crime and violence can seriously restrict mobility for social interaction, eroding the space for developing trust and cooperation in the community even further.

Programs should be careful not to displace beneficial social networks where they exist. They should be sure to take into account the resources, current social networks, and coping strategies of the poor. Where community cohesion is weak, initial efforts might concentrate on focused, tangible projects—such as water and sanitation infrastructure—that will help the community establish trust and mechanisms for further cooperation. Building community infrastructure using community labor is one way to provide employment and contribute to community cohesion. Special efforts should be made to involve those whose social ties may be weak and have few resources, other than their labor, to offer.

Unemployed youth may be a particularly vulnerable group. Providing this group with job and life skills, improving their connections to employers, and augmenting their sense of self-worth may help to address problems of crime, violence, and sexually transmitted diseases, especially HIV/AIDS.

CONFLICTS AND HUMAN RIGHTS
Conflicts in rural areas causing flight to urban areas or in cities themselves put immense strains on often-impoverished governments—disrupting services, distorting markets, and eliminating employment opportunities. Conflict may erase any sense of governmental authority and scatter populations in and around the city, complicating service provision.

Even in the midst of conflict, organizations must strive to promote a functional, nondiscriminatory authority to protect the population’s access to services, food, and other goods. Relief programs may provide goods directly to needy areas, although sometimes providing cash directly to the poor may be best. At the same time, efforts must be carried out on a continuing basis, with all parties drawn into negotiations, to guarantee a minimal set of interventions for providing basic services.

THE FUTURE OF URBAN PROGRAMMING
In addition to the factors mentioned here that complicate urban programming, a number of trends will also affect the design of future programs. Past urban interventions focused on supplying infrastructure and related services or were sectorally focused. Donors now place greater emphasis on designing strategies that emerge from an integrated understanding of the lives of the urban poor.

Donors and development organizations are also placing greater emphasis on the community’s participation in and control of the development process. Instead of providing services or managing interventions directly, they facilitate development processes led by communities, linking communities with local governments and other key players. Donors must acknowledge that this process will take more time than is traditionally allotted, and must incorporate a flexible workplan, because they must consult with, and often improve the capacity of, all stakeholders, including municipal governments.


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