Food and Nutrition in an Urbanizing World

by James L. Garrett and Marie T. Ruel

In the next twenty-five years, the population of the developing world will grow from 4.9 billion to 6.8 billion. Over 90 percent of this increase will be in urban areas. In developing-country regions, the rural population will increase only in Africa. By 2025 over half the population in Asia and Africa will live in urban areas, as will more than 80 percent of those in Latin America (United Nations 1998).

Citing rapid urban growth rates and describing the horrors of urban slums, policy makers, activists, and researchers point to these statistics with alarm. Rampant violence, flimsy housing, and filthy living conditions, along with hunger and malnutrition, are becoming the daily lot for more and more people as cities grow.

Policy makers and aid officials in developing countries frequently have substantial experience with the tools and programs aimed at promoting social and economic development in rural areas, where agriculture is key. But the urban environment is more complex and more diverse. This article answers some critical questions about the scope and nature of urban-based poverty, hunger, and malnutrition, and suggests a number of actions to take as policy makers and programmers rise to face the urban challenge to food and nutrition security in the next millennium.

Recognizing the challenge: increasing urban poverty and malnutrition

Urbanization is often associated with modernization and development, and with a preponderance of the poor still in rural areas in many developing countries, policy makers, programmers, municipal officials, and community leaders may not yet appreciate the growth and magnitude of urban poverty. Or they may believe that, with development, countries will simply "urbanize" themselves out of poverty, food insecurity, and malnutrition. The permanence of poverty in highly urban Latin America and the continuing expansion of the urban slums in Africa and Asia belie that argument.

In fact, a recent study by the International Food Policy Research Institute (IFPRI) showed that poverty and malnutrition are continuing to increase along with urbanization in the developing world (Haddad, Ruel, and Garrett). Using data from the World Bank on eight countries that together include more than half the developing world's population, the report found that in seven of the eight countries, which included India and China, the proportion of the poor living in urban areas has increased in the past two decades. Of course, such a shift need not mean that poverty is also growing, but, in fact, the study found that the absolute numbers of the poor in urban areas also increased in five of the eight countries.

Figure 1, with statistics for Colombia, India, and Nigeria from that study, shows the global extent of this experience. In Colombia, although the number of poor in both urban and rural areas declined from 1978 to 1992, the relative share of the urban poor increased when rural poverty decreased more rapidly. In India, from 1978 to 1994 the number of urban poor increased by 10 million, even as the number of rural poor declined. A similar, even stronger, pattern appears in Nigeria over an even shorter time span. By 1993, almost one-third of the poor were found in urban areas. As indicated by the tens of millions of poor people in the urban areas of India and Nigeria, urban pov-

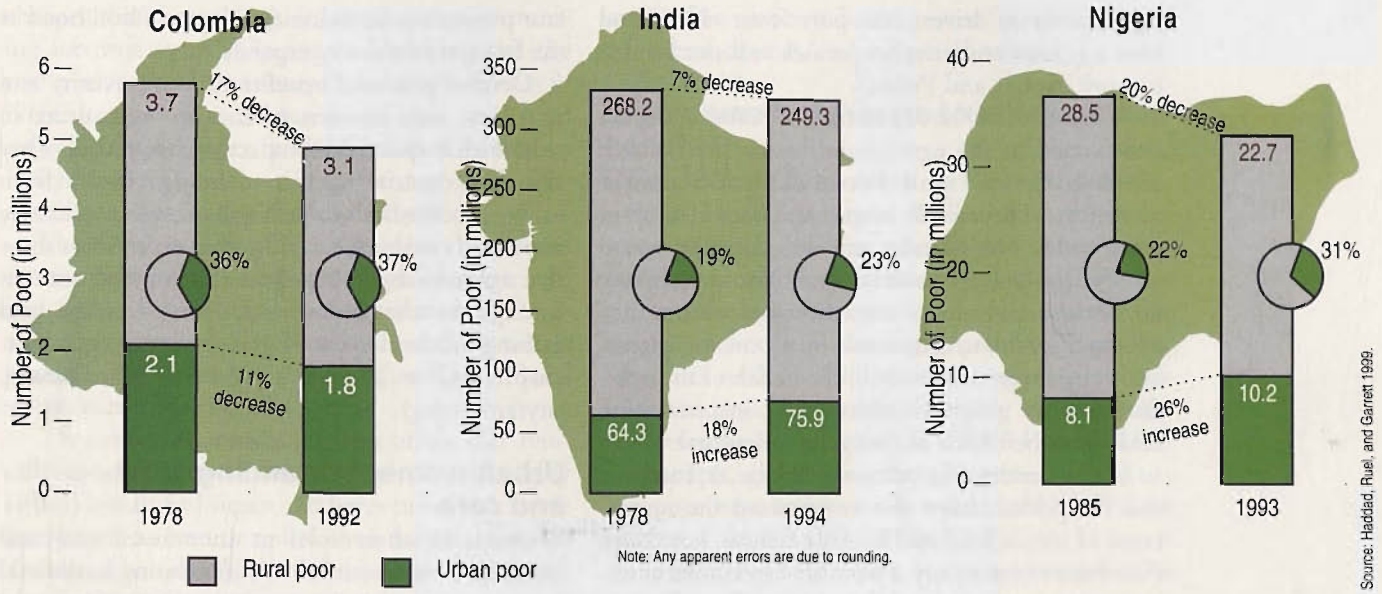

Figure 1. Location and number of urban poor

erty is a serious concern, even for countries that are not highly urbanized.

The IFPRI study also looked at changes in urban malnutrition, using data from the World Health Organization (WHO). It found that the urban share of underweight children has increased in eleven of fifteen countries studied, and the absolute number increased in nine of the fifteen countries.

Although the magnitude of change is not always large and varies by country, the diversity and consistency of experience suggests an inescapable trend in the shift in the locus of poverty and malnutrition from rural to urban areas. While recognizing the seriousness of rural poverty, the growing millions of urban poor, food insecure, and malnourished, cannot be ignored.

The urban food economy: the importance of cash income

Chief among the differences in the nature of urban and rural food security is the importance of cash income. In contrast to their rural counterparts who grow a substantial portion of their own food, urban dwellers must buy most of their food. In Accra, Ghana, for example, urban households purchase more than 90 percent of their food (Maxwell et al., forthcoming).

The importance of prices. Because urban dwellers buy most of their food, food prices are especially important to their food security. Prices paid for food depend to a large extent on the efficiency of the food marketing system and macroeconomic policies, including the availability of subsidies for consumers, producers, and processors.

For the most part, urban marketing systems in developing countries remain inefficient, especially the distribution channels that serve the poor. Wholesale markets in the cities are often run-down and poorly managed; they can be crowded, unclean, and unsanitary. Some modernization is occurring among retailers, as supermarkets replace traditional systems of small and unorganized retail outlets. In Chile, supermarkets already supply 45 percent of food for low-income households (Schejtman). But in most developing-country cities, urban retail markets remain small and scattered. Although perhaps not efficient, these markets do meet the needs of the poor, who earn and spend their wages daily and must buy food in small quantities; the poor are often not able to lower costs by buying in bulk because they simply do not have the money at hand.

Macroeconomic policies can also significantly affect food prices. For many years, "cheap food" policies, including widespread subsidies, overvalued exchange rates, and trade restrictions, deliberately kept the price of food in the cities low. Structural adjustment programs in the 1980s and 1990s reversed these policies in many countries. Despite potentially enhancing the long-term prospects for economic growth, these programs frequently resulted in food prices that rose more quickly than incomes and the general price level, often leading to political unrest and hardship among the urban poor.

The need for cash income. In addition to prices, urban food security depends a great deal on whether the individual can earn enough cash income to buy food. But the urban poor often work for low wages at casual or temporary jobs. Seasonality heightens the vulnerability of the urban poor, just as it does the rural poor. In the rainy season in Dhaka, for instance, the incomes of rickshaw drivers decline

significantly as drivers transport fewer clients and have a greater tendency to get sick and not be able to work (Sutter and Perine).

While the livelihoods of rural dwellers are often closely tied to the agricultural sector, the jobs of urban dwellers are more diverse and span a number of sectors. They work in garment factories or in petty trades, sweep streets and clean latrines, or toil as day laborers in construction. Of course, many do work in enterprises related to agriculture: they sell food in the streets, work in processing plants, or drive delivery trucks. Still, the health of the overall economy generally affects their income more than does the health of domestic agriculture.

Urban residents in places as diverse as Tanzania and Bangladesh have also emphasized the importance of secure land and housing tenure. For them, their home is not only a base for household enterprises, it also provides a foundation for a fragilely constructed existence. It is the center of a network of social and professional relations that helps them to resolve disputes, get food, or find a job. A threat of eviction threatens the very mechanisms by which the urban poor survive.

The hidden significance of urban agriculture

Agriculture is usually thought of as only a rural activity, yet urban and peri-urban agriculture is fairly widespread in the developing world. It can be an important source of food for entire cities and for vulnerable households.

Statistics are hard to come by, but The Urban Agriculture Network has estimated that globally as many as 800 million people work in some form of urban or peri-urban agriculture. Many of the producers are women. Other studies indicate that as much as 40 percent of the population in African cities and up to 50 percent in urban areas of Latin America are involved in urban or peri-urban agriculture. In the 1980s, peri-urban and urban producers met over 90 percent of vegetable demand and over half of meat and poultry demand in China's largest cities (UNDP).

For most urban dwellers, of course, own-production from urban agriculture is not the primary source of food. But growing vegetables or raising small animals in urban areas can be a crucial form of food access for lower-income groups and can improve child nutrition, as suggested by a recent study in Kampala, Uganda (Maxwell, Levin, and Csete).

The extent of urban agriculture varies widely depending on land availability and legal restrictions, and in many cities it is a precarious enterprise. Urban farmers often walk a fine legal line, using public spaces or vacant lots of private owners, with or without permission. Peri-urban producers often face pressure to abandon farming as a livelihood as the frontier of the city expands.

Despite potential benefits to food security and nutrition, city planners often view agriculture in cities with skepticism, if not active disapproval. They cite the potential hazards to human health from using agrochemicals or raising livestock in a densely populated environment. But other experiences show that agriculture can benefit the urban environment through recycling wastes, stabilizing drainage, and making productive use of green spaces (see, for example, City Farmer's web site at www.cityfarmer.org).

Urban women: balancing work and care

Women, in their roles as income-earners and caregivers, play a critical role in assuring household food security and the good nutritional status of their children. Yet, because they may work long hours in the streets or in factories, women who work outside the home, as many urban women do, may not be able to spend as much time managing the household, purchasing and preparing food, or taking care of children. On the other hand, these women may bring in additional household income and may exert additional control over household resources, perhaps increasing expenditures on food and children's needs.

What happens to child nutritional status depends on how the family balances these forces. Working conditions, the availability of alternative child care arrangements, and the child's age influence the effect working outside the home has on child nutrition (Engle, Menon, and Haddad). Recent research indicates that urban mothers tend to adapt their work patterns to meet the changing needs of the child, reducing work hours or working at home when the child is youngest, for instance, and so perhaps mitigate the negative nutritional impacts on their children (Ruel et al.).

The changing patterns of food demand: causes and consequences

Diets tend to change with urbanization, posing new risks to health. The diets of urban dwellers are often more diverse than those of rural dwellers, but they also usually include more processed foods and foods prepared away from home. Higher incomes, greater exposure to advertising, and easier access to supermarkets and fast-food vendors, including street food sellers, along with the high opportunity cost of time, especially for women, encourage this pattern.

Street foods. Street foods often become an important source of food and a substantial part of the food budget in cities. Street foods may not only be more convenient for the poor, they may also be

cheaper than home-prepared meals, after accounting for time spent shopping and cooking and the cost of transport. One study found city residents in Nigeria spent up to 50 percent of their total food expenditures on street foods (Tinker). Children in Haiti receive as much as 25 percent of their calories from street foods (Webb and Hyatt).

The health effects of street foods are more uncertain. Street foods tend to be high in sugar, salt, and fat, and they may be contaminated. But, according to some studies, food sold on the streets is generally no more contaminated than food in local restaurants (Tinker).

The "nutrition transition." The urban diet typically consists of more animal products and highly refined cereals and sugars and fewer unrefined, staple foods, such as corn or millet, than the rural diet. As a resulr, urban dwellers usually consume higher levels of some micronutrients and animal proteins but also have higher intakes of saturated and total fat and refined carbohydrates and lower intakes of fiber. Combined with a more sedentary lifestyle, this diet can increase the risk of chronic diseases, including obesity and cardiovascular diseases (Popkin).

In an odd juxtaposition, then, diseases of excess coexist in the same society, and sometimes in the same household, with hunger and malnutrition. Public health communities in developing countries, already burdened in dealing with the diseases of poverty, undernutrition, and underdevelopment, must then face the simultaneous, almost contradictory, challenge of confronting additional diseases most often associated with excess dietary intakes, poor food choices, and industrialization.

Environmental threats to nutrition and health

Good health is also essential to food and nutrition security. In general, urban dwellers do have greater access to health facilities, schools, safe water, sanitation, and garbage disposal than do rural dwellers, but city governments often cannot build infrastructure fast enough to keep up with rapid population growth. Wealthier residents still usually manage to get access to public services, but the urban poor are frequently not so fortunate. According to UNICEF and WHO, for example, globally less than 20 percent of the urban poor have access to safe water, compared to 80 percent of the rich (WHO/UNICEF).

Poverty, not availability, is a prime constraint to actual use of facilities. In Mozambique, for example, data from the 1996–97 national household survey showed that only 4 percent of urban dwellers said they did not go to the health clinic when they were sick because it was too far; 65 percent said they did not go because they did not have the money (authors' calculations). Aside from the cost of services, the inconsiderate and condescending treatment the poor receive or the useless prescriptions they get for medicines they cannot afford also discourage their use of available health facilities.

Surrounded by squalor, the urban poor have to work hard to prevent contamination of food and water, to maintain household hygiene, and to con-

A boy reads comics amid the rubbish, Manila, Phillipinnes.

trol disease carriers, like rats and mosquitoes. Compounded by crowding, these conditions contribute substantially to disease and death in children from acute respiratory infections, diarrhea, and malaria, and they cause illness among adults, threatening their ability to work and support their families (Atkinson, Harpham and Tanner).

Meeting the urban challenge

Food insecurity and malnutrition have never been solely rural problems, and in the new millennium they will become, more and more, urban problems. In rural areas, social and economic development can often be addressed through broadbrush interventions affecting agriculture, because agriculture drives the rural economy. But in urban areas, income sources are more diverse, as are the problems, causes, and actors.

Governments and communities must work together to develop strategies to meet the rising challenge of urban food insecurity and malnutrition. These strategies should address the following.

The food economy

- Promote a stable macroeconomic environment, favorable to the use of labor, that will increase incomes and reduce unemployment.
- Create a reasonable, but not burdensome, regulatory framework that encourages competition and business growth, including micro-enterprises.
- Ensure the urban poor can access the resources they need to get better, more secure jobs or expand their own businesses, including training, credit, and market information.
- Establish safety net programs to help households cope with temporary or seasonal illness or unemployment.
- Work in partnership with businesses and communities to identify and meet their needs in terms of labor skills and infrastructure.
- Cooperate with trader associations to build, improve, and maintain market areas and promote competition.
- Improve farm-to-market links and storage facilities and reduce internal or international trade restrictions, as appropriate, to lower costs.

Urban agriculture

- Establish regulations and policies to provide urban landowners and farmers tenure security so they will increase productivity and farm in an environmentally friendly way.
- Incorporate infrastructure and space needs for urban farming in urban planning, including provision for water and drainage infrastructure.

Health and nutrition

- Convey information about good care practices, including breastfeeding and child feeding practices, hygiene, and food preparation, to mothers and ease their access to good quality child care.
- Support expansion of women's education and em-

Mexico City at sunset.

ployment opportunities.
- Provide sanitation, garbage disposal, and clean water for each family, so they may live in a clean and healthy physical environment.
- Design and implement a public health and nutrition strategy that will improve dietary quality and address the dual challenge of dietary deficit and dietary excess, of undernutrition and poor nutrition.

Institutionally, sustainable projects must build on an understanding of what kinds of programs the community values, what actions the community is already taking, and how outside agents can contribute to solutions. Governments and nongovernmental organizations should work with the community to gather information about needs, resources, and constraints to action. Precisely because community cohesion may be weak in urban areas, initial efforts might concentrate on specific projects, such as improving roads or sanitation systems, to help the community establish trust and mechanisms for cooperation. Governments may need to establish secure property rights in an urban zone before programs can start. Otherwise donors and individuals may hesitate to participate when they know that land and housing tenure is insecure and they could lose their investment of labor or money in a moment.

Policies and programs to eliminate urban food insecurity and malnutrition must be multisectoral. Increases in income or food supply alone are not sufficient; they must be accompanied by improvements in education, health care, and the environment. The multiple actors in a community must also coordinate their actions so they address causes of the problems at different levels; some constraints, for example, are unique to each household (household incomes) while others affect an entire community (lack of water). Strategies must also support, and not replace, the poor's own dynamic strategies for coping with problems. Working together, the government, the private sector, and households can no doubt respond to and overcome the urban challenge to poverty, food insecurity, and malnutrition in the new millennium. ◘

■ For more information

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