

FCHNICAL MAY 2011

Urbanization and food prices

INTRODUCTION

Urbanization is affecting people's vulnerability to rising food prices, but is not driving these prices upwards. Having a larger share of a population living in urban settlements does not, as sometimes claimed, cause a significant loss of arable land. Nor does it, in itself, increase the demand for food. But urbanization is increasing the share of vulnerable people living in urban areas. Urban vulnerability to increasing food prices differs from rural vulnerability, and demands different policy responses. During price spikes, the most vulnerable urban groups need better access to food. They also need more secure livelihoods and higher incomes to cope with both food price spikes and longer term price increases.

RISING FOOD PRICES

Global cereal prices have more than doubled in the past two decades with a major spike that started in 2007 and ended with the world economic crisis in 2008 (see Figure 1). Despite continuing economic difficulties, food prices are once again resurging.

The immediate explanation for price spikes almost certainly lies in temporary factors, such as speculation, macro-economic shifts and cyclical droughts. But there is also a growing consensus in organizations such as the World Bank, IMF, USDA, FAO and OECD that structural changes are creating a long-term upward trend in real food prices, and possibly an international food market prone to large price fluctuations.1

There are a number of supply and demand factors that could be shifting us to a world of increasing international food prices. Supply side factors include declining agricultural productivity growth, climate change and increasing competition for water and land, and energy (including, most notably, oil). Demand side factors include population growth and increasing demands per capita from the emerging economies.

Urbanization is sometimes blamed for both decreasing supplies by building over arable land, and for increasing demands by shifting diets toward more food consumption generally, and more meat consumption in particular.^{1,2}

URBANIZATION: A KEY DEMOGRAPHIC PHENOMENON

In demographic terms, urbanization refers to the shift of population from dispersed (rural) settlements to concentrated (urban) settlements, mostly as the result of rural-urban migration. Statistically, the rate of urbanization is the rate at which the share of a population living in urban areas is increasing.

It is important not to confuse urbanization with urban population growth. Globally, the shift in population from rural to urban settlements (demographic urbanization) only accounts for about half of urban population growth, the rest being the result of natural population growth (the excess of births over deaths).

Urbanization varies across regions. Europe and the Americas are already largely urbanized, while most of Africa and Asia are in the middle of their urban transitions. Over the first half of the 21st century, the share of people living in urban areas is expected to grow by about 1.1 per cent annually in both Africa and Asia. But a higher overall population growth in Africa means that the continent's

IN ASSOCIATION WITH

Prepared by Gordon McGranahan, principal researcher of the IIED Human Settlements Group.

Briefing



1990=100 to 2002-2004=100

urban population is expected to grow at 2.9 per cent, compared with 1.8 per cent growth in Asia.

Such growth rates are not unprecedented, but they will significantly change where the world's population is concentrated. While Africa and Asia's urban population should more than double between 2000 and 2050 — from 1.7 to 4.6 billion — the rest of the world population should stay almost constant at about 4.5 billion. This means that, by 2050, half of the global population will live in urban Africa and Asia.

Historically, the increasing concentration of people and economic activities in urban centres has helped to provide the basis for economic growth. Indeed, urbanization can reduce production costs in most sectors and stimulate innovation. Urbanization has also contributed to lower overall population growth, with reduced fertility rates in urban areas.

In the following discussion, we use the demographic definition of urbanization, and carefully distinguish the impacts of urbanization on food prices from those of the economic growth that often accompanies it. While urbanization can stimulate economic growth, it can also make that growth less resource intensive. From the perspective of food prices and food security, it is misleading to blame urbanization for food price increases: the challenge is not to prevent or inhibit urbanization but to improve its quality.

URBANIZATION IS NOT TO BLAME²

Urbanization is part of the uneven process of economic growth and resource use that does seem to be imposing higher food prices on those whose incomes do not rise. But

urbanization itself is not driving the price rises. Having a larger share of a population living in urban settlements does not decrease food supplies by causing a significant loss of arable land. Nor does urbanization itself increase the demand for food.

Urban expansion does not cover enough land to threaten agricultural production. Researchers estimate that globally, urban settlements extend over less than three per cent of the world's land area, and have built over less than one per cent.

To the extent that urban expansion is covering over arable land, urbanization is not itself to blame because it only counts for a small part of urban expansion. Such expansion is driven by urban population growth — which as described above is only partly the result of urbanization — and, more significantly, by declining urban densities. Thus, a recent study³ of 120 of the world's cities found that between 1990 and 2000 the growth of urban land cover was twice that of urban population.

Moreover, at similar levels of income, dense urban settlement is less land intensive than dispersed rural settlement. In economic terms, urban land is expensive and there is a bigger incentive to conserve land by building vertically than in rural areas. As such, if economic growth could be achieved without urbanization, the impact on the availability of arable land would probably be much greater.

Turning to the demand side, urbanization does not increase the demand for food. Compared with rural dwellers, urban dwellers do spend more on food, and a higher share of their food expenditure is on meat. Indirectly, they consume considerably more grain per capita. But the evidence suggests that it is economic growth and not urbanization *per se* that is driving up the demand for food.

A 2009 review² found that in most cases, the difference in demand between rural and urban dwellers was very much what one would expect given the higher urban incomes. For example, in India, average spending on meat, fish, eggs and dairy products is considerably higher in urban, compared with rural, households. But their total expenditure is also higher, and as a percentage of total expenditure their consumption of meat, fish, eggs and dairy products is not significantly different (see Figure 2).

Of course, to the extent that urbanization is driving the income growth that allows higher urban expenditure, one could say that urbanization is indirectly driving up food demand. But the relationship between urbanization and income growth is far more complex than this suggests, and the policy implications of this indirect relationship are quite different than if urbanization were driving food demands without affecting incomes. Similarly, it is possible that urban markets help to create the basis for local speculation, amplifying international price swings², but it would be misleading to ascribe this speculation to urbanization.

Blaming urbanization for rising food prices diverts attention from the correlates of urbanization that do make food



unaffordable — such as uneven economic growth, where certain groups fail to benefit economically, no longer produce food themselves, and face rising food prices. While urbanization is usually accompanied by increasing inequality, measures to curb urbanization typically exacerbate these inequalities, particularly when they prevent vulnerable groups from accessing urban benefits by restricting access to urban land and services. From this perspective, a more inclusive urbanization is not part of the problem, and could even be part of the solution.

URBANIZATION AND FOOD INSECURITY^{4,5}

While urbanization may not be driving up food prices, it is changing the character and concentration of food insecurity, and for some it is increasing vulnerability to rising food prices. Consumers in urban areas are generally more affected by international price changes. Many urban groups were hard hit by the 2007–2008 food price spike and the latest round of international food price rises.⁶

But even before 2007, a review of food insecurity found that in 12 of the 18 low-income countries examined, urban food insecurity (measured by food-energy deficiency) was the same or higher than rural food insecurity — even though rural areas tended to be significantly poorer than urban ones.⁷

The urban poor are also particularly vulnerable to priceinduced food insecurity because they do not or cannot grow their own food. In rural areas, even those people who do not produce their own food may have direct alternative access to crops, or to foraged food. In effect, rural living can allow for better access to food among those living at or near the poverty line. Indeed, an international household survey of food production and consumption suggests that food price rises will generally increase poverty more in urban than in rural areas.⁸

The urban poor have a limited range of strategies to cope with rising food prices. Most often they simply spend less on other items and eat less. In many of the less urbanized countries, poor urban dwellers often have rural relatives that they can turn to for part of their food supplies, and they may move back and forth between rural and urban areas in an attempt to diversify their livelihoods.

A few can turn to urban agriculture, which has a long history and takes a wide variety of forms, some of which directly benefit low-income residents. Or they can try to fall back on their urban relatives and friends, or redouble their efforts to secure urban incomes.

Finally, they can protest or resort to violence. Indeed, the urban politics of food pricing often leads to protests and sometimes to uprisings and violence. There were protests during the 2007–2008 food price increases in more than 43 countries, and more are emerging in 2011. Almost all demonstrations have taken place in urban areas and in several instances the protests turned violent.⁴ Some populist

Figure 2: Average monthly per capita expenditure in major Indian states on meat, fish, eggs and dairy products as a function of overall expenditure, 2006–7.



political parties have traditionally built their support on such protests, but for most governments, such protests pose a real threat — the urban demonstrations in Northern Africa in early 2011, which originally focused on food prices and unemployment have toppled whole governments and caused international reverberations.

IMPLICATIONS FOR ACTION

Attempts to inhibit urbanization, particularly by taking action in urban areas, are likely to increase food insecurity, and should generally be avoided. Urbanization is not driving food price increases. Many urban measures that might prevent or slow down urbanization, such as restrictive zoning and building regulations, tend to force poor groups into informal settlement, putting them at odds with the local government, and undermining their livelihoods. Alternatively, some measures that encourage urbanization, such as strengthening rural-urban linkages, can reduce food prices in urban areas and increase rural production. The key, however, is not to take actions because they change the rate of rural-urban migration, but because they are an effective means of reducing price-induced food insecurity.

Urbanization will almost inevitably increase the share of vulnerable population living in urban areas. Indeed, the urban poor are particularly vulnerable to price-induced food insecurity. Urban vulnerability to food price rises is also different from rural vulnerability, and requires different policy responses. This makes it particularly important to act on urban as well as rural vulnerability.

Both rural and urban vulnerability will be reduced by measures that moderate food price increases or improve the economic

Briefing

status of poor groups generally. The two principal routes of particular relevance to urban vulnerability are: providing the most vulnerable urban groups with direct access to more food; and improving their livelihoods and incomes.

Increasing direct access to food. Food assistance can be targeted to vulnerable urban groups. Emergency food programmes such as soup kitchens, bread lines or meal centres provide prepared food free or at a nominal cost. These have been used for centuries to provide minimal amounts of food to underfed urban dweller (mostly adults) at times of economic distress, and are particularly appropriate when food prices are or have been rising rapidly.

Other forms of targeted food subsidies have also been used, including food stamps for selected households, lunch coupons for workers and free school meals for children. The results have been mixed and the food does not always reach the poorest urban dwellers. But the cost is generally lower than that of untargeted food subsidies, which also reduce prices for wealthy urban dwellers, can decrease local food production, and can easily become financially unsustainable

Food supplies for some vulnerable urban populations can also be boosted by increasing their access to land on which to practice urban agriculture. In most urban areas, only about half the land is built over, and some land can be used for agriculture without fuelling urban expansion or fragmentation. A small but significant share of low-income urban residents already practice urban agriculture, and a growing number of cities are trying to provide low-income residents with land to grow food and supplement their incomes.⁹ More generally, urban food production, even by more wealthy farmers, can decrease local food prices.

Unfortunately, conventional urban planning does not encourage urban agriculture, while regulations to protect agricultural land often conflict with the housing needs of growing low-income urban populations. Successfully integrating urban agriculture into urban development requires sound urban planning, efficient urban land markets and a commitment to inclusive urban development — all of which would also help improve the livelihoods of vulnerable urban groups.

Enhancing livelihoods and incomes. Urbanization is usually associated with increasing economic inequality, which, in turn, creates food insecurity. But the extent of the inequality, at least locally, depends on how urbanization is handled.

Failing to plan for urban population growth often means poor groups are excluded from the benefits of urbanization and are particularly hard hit by food price increases. This can be mitigated by proactively planning for urbanization, and by actively supporting the collective aspirations and actions of low-income urban populations. More generally, food insecurity can be reduced by social transfers to the urban poor or, over the longer term, measures to improve the livelihood opportunities of vulnerable groups.

This is the first in a series of Technical Briefs prepared by UNFPA and IIED on urbanization and emerging population issues.

UNFPA, the United Nations Population Fund, is an international development agency that promotes the right of every woman, man and child to enjoy a life of health and equal opportunity.

CONTACT:

Jose Miguel Guzman joguzman@unfpa.org 605 Third Avenue New York, NY 10158 USA www.unfpa.org

The International Institute for Environment and Development (IIED) is an independent, nonprofit policy research institute working in the field of sustainable development.

CONTACT:

Gordon McGranahan gordon.mcgranahan@iied.org 3 Endsleigh Street London WC1H 0DD, UK www.iied.org



BIBLIOGRAPHY

¹ McCalla, A.F. 2009. World food prices: causes and consequences. *Canadian Journal of Agricultural Economics* 57, (1) 23–34. ² Stage, J., Stage, J., McGranahan, G. 2009. *Is urbanization contributing to higher food prices*? Working Paper Series on Urbanization and Emerging Population Issues 1. IIED and UNFPA, London. (A shorter version is also available as an article in *Environment and Urbanization*, 2010) ³ Angel, S. *et al.* 2011. *Making Room for a Planet of Cities*. Policy Focus Report. Lincoln Institute of Land Policy, Cambridge, Massachusetts. ⁴ Cohen, M. J., Garrett, J. L. 2009. *The food price crisis and urban food (in)security*. Human Settlements Working Paper Series on Urbanization, and Emerging Population Issues 2. IIED and UNFPA, London. (A shorter version is also available as an article in *Environment and Urbanization*, 2010) ⁵ Satterthwaite, D., McGranahan, G., Tacoli, C. 2010. Urbanization and its implications for food and farming. *Philosophical Transactions of the Royal Society B-Biological Sciences* 365 (1554) 2809–2820. ⁶ Ruel, M.T. *et al.* 2010. The food, fuel, and financial crises affect the urban and rural poor disproportionately: A review of the evidence. *Journal of Nutrition* 140(1) 170S–176S ⁷ Ahmed, A.U. *et al.* 2007. *The World's Most Deprived: Characteristics and causes of extreme poverty and hunger.* 2020 Vision for Food, Agriculture, and the Environment Discussion Paper No. 43. International Food Policy Research Institute, Washington DC. ⁸ Ivanic, M., Martin, W. 2008. Implications of higher global food prices for poverty in low income countries. *Agricultural Economics* 39 405–416 ⁹ Redwood, M. 2009. *Agriculture in Urban Planning: Generating livelihoods and food security*. Earthscan, London.