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Food Price, Quality, Security

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Urban population growth in the next 30 years will increase the number of people living in cities from 3.9 billion to 6.5 billion (up 67%), which will have dramatic consequences on our food supply chain. As people move further from their source of food, it becomes more processed and packaged. It tends to have a higher protein content, but it requires more intensive farming to produce, and is less “protein-efficient.”

This effect can have three consequences, each of which is a potential major disrupter of our modern lifestyle. Food price is usually pretty stable, but in times of uncertainty it can fluctuate wildly. The Food and Agricultural Organisation of the United Nations publish monthly statistics on global food prices, adjusted for inflation, which show that from 1990 to 2007 the aggregate food price didn't vary by more than $\pm 20\%$, taking 2002 as the baseline. However, in 2007 a series of rapid spikes started, where food prices peaked at 180% of the previous average and then crashed back down, followed almost immediately by a second, even higher peak, at the end of 2010. Since the end of 2004 the food price index has not been below the mean value of the previous 15 years. If this pattern sounds familiar it was mirrored almost exactly by fluctuations in the price of crude oil. As Al Gore asked in *An Inconvenient Truth*, “Did they ever fit together?” The weird thing is that the first food price spike was a month ahead of the rise in oil prices, and the second was four months ahead. As Gore went on to say, “The relationship is actually very complicated.”

The issue of food quality is less obvious. I don't mean whether the toast is burnt or the potatoes are moldy, but rather the nutritional value of what is being eaten. It is estimated that about 15% of the global population do not get enough to eat, but that a further 15% are almost as severely undernourished despite seeming to have large enough portions, because the food they eat lacks the necessary vitamins, proteins and minerals for healthy living. In this light the move to cities and consequent

change of diet should be a good thing provided it doesn't lead to the other end of the scale; the 15% who are significantly over-consuming. Nearly half the global population has a suboptimal diet. We need to ensure that dealing with the challenge of increasing the food supply and transitioning to the urban food market doesn't make this food quality situation worse.

The third factor, food security, has only recently become a major consideration. It will be essential to make our food production more sustainable if we are to hit the necessary growth targets but it is impossible to farm sustainably in the face of massive disruptions to the food supply, whether they are caused by weather, pestilence, warfare, mass-emigration or simply by political wrangling. A British government report, not the only document to make this point, said that “nothing less is required than a redesign of the whole food system to bring sustainability to the fore.” I am not yet convinced that we are paddling hard enough in that direction.

One major disadvantage of the move to urban living in terms of food security is that food production becomes sanitized and impersonal. If someone else is responsible for planting, picking, packing, preparing, packaging and purveying my food then I am more vulnerable to severe disruption and less able to take corrective or evasive action. We need to mount a charm offensive with the general public to make sure that they understand the innate fragility of the system that keeps them well-fed. ■

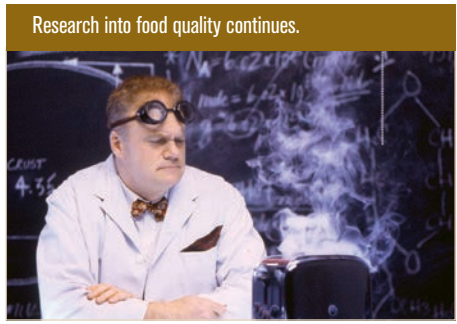


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