Local produce is widely praised, but some argue that a reliance on it endangers food security.

FOOD SECURITY

Eating globally

Tom MacMillan gets a taste of the argument against consuming only locally grown food.

For all the fanfare about local food, you might think that we eat a lot of it. Yet in the United Kingdom and North America, almost everything people eat comes from far away, shipped from distribution centres and delivered by truck. Only a tiny fraction takes a short cut. So, although about one-third of UK shoppers say that they buy local food, the market share is nearer 2–3%.

In *The Locavore's Dilemma*, geographer

Pierre Desrochers and economist Hiroko Shimizu suggest that even that is too much. They say that it is ignorant to want shorter supply chains and dangerous to achieve them, whether in the developed or developing worlds. "The road to agricultural, economic and environmental hell," they argue, is "paved with allegedly fresher and more nutritious local meals". With this spirited polemic they want to nip the 'locavore' trend in the bud.

The Locavore's Dilemma: In Praise of the 10,000-Mile Diet
PIERRE DESROCHERS
AND HIROKO SHIMIZU
Public Affairs: 2012.
304 pp. \$26.99,
£18.99

Desrochers and Shimizu argue that encouraging localized supply, and thus diversified farming, strikes at the essence of agricultural development and socioeconomic progress. Hefting food over long distances allows regions to play to their strengths, unlocking productive efficiencies that release people from farm work. This has brought social benefits

by letting people engage in other activities, such as medicine and the arts. Against this backdrop locavore logic looks, the authors say, too foodie, protectionist and romantic.

The foodie fallacy is to assume that the answers to food-related problems must lie in the system. Farmers' markets and small grocery shops may enliven our gastronomic lives but, Desrochers and Shimizu remind us, food businesses don't have a monopoly on social capital. Spending less money and time on shopping and cooking leaves more for things such as community volunteering.

Local protectionism is a misguided way to achieve food security, they argue. The monocultures that make up the modern food system distribute risk across regions, and the associated division of labour has delivered financial means of risk-management, such as insurance and futures markets. By contrast, attempts at national self-sufficiency or autarky have fuelled imperialist expansion, whether in ancient Athens or twentieth-century Japan, as rulers have had to push their borders outwards to realize their ambitions.

To Desrochers and Shimizu, locavores are romantics who pine for a fictional yesteryear of 'natural' food and rustic idylls, whereas in fact, they say, shortening supply chains can push up costs, increase poverty and harm the environment. "If our agricultural past was so great," they ask, "why were modern animal and plant breeds, long distance trade in food, and modern production and processing technologies developed in the first place?"

The book's strength lies in the cheerful ruthlessness with which the authors challenge sloppy thinking, special pleading and the lazy logic that assumes that 'local' must be 'best'. Many of its weak points are symptomatic of the genre: its critical gaze points one way only, so the authors indulge in their own share of caricature, selective evidence and overstatement.

The biggest failure is that the argument hinges on an economic history that gives the free market credit for

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For an interview with locavore chef Alice Waters, see: go.nature.com/anrdri

every success but blames all problems on political meddling. Given that state intervention has produced notable successes, such as social programmes to reduce hunger, this is simplistic.

The effect is that the authors have little constructive to say about the role of politics in a world in which it inevitably mixes with markets. They fail to ask key questions. For instance, how much has public investment in transport infrastructure and agricultural research and development shaped the marketplace? And what if, rather than being ignorant of the thinking that an ever more specialized division of labour will yield ever greater health, wealth and happiness, locavores are actually challenging it?

For example, Desrochers and Shimizu celebrate the specialization in the food industry that has given us artificial sweeteners to fight type 2 diabetes. But that specialization has also given us abundant empty calories and poverty-wage work, which contribute to the incidence of diet-related diseases. Local food won't solve public-health problems, true, but the authors' critique leaves us no wiser or fitter. If, as they say, "the essence of progress is to create less significant problems than those that existed before", should we just be thankful that we're fat rather than hungry?

The authors' confidence that the system works sits oddly against evidence that above a certain point, growth in gross domestic product is not correlated with improved well-being. At the core of progressive locavore thinking are efforts to address this by questioning the association between material consumption and prosperity, pushing use of renewable resources and reducing economic inequalities.

By hanging their argument on the advantages that we enjoy over our ancestors, Desrochers and Shimizu give us little more than an entertaining defence of business as usual. The UK government's unloquacious Foresight unit, which advises on how to future-proof policy decisions, found last year that "nothing less is required than a redesign of the whole food system to bring sustainability to the fore". Desrochers and Shimizu's prescription not to mess with the market seems a missed opportunity to say something altogether more imaginative and more useful. Locavores don't have a blueprint, but we should welcome the ingenuity and challenge that they bring to this urgent redesign. ■

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Peter Piot co-discovered the Ebola virus and helped to coordinate the global response to HIV and AIDS.

VIROLOGY

The battle inside

José Esparza enjoys the memoir of a long-term veteran of the virus wars.

In 1933, Nobel-prizewinning physician Charles Nicolle said that infectious diseases "carry the traits of life that seeks to perpetuate itself, evolving and trying to achieve equilibrium". But this evolution has a high price for humans. The war between human and microbe is epic and ongoing.

In *No Time to Lose*, Peter Piot, director of the London School of Hygiene and Tropical Medicine, offers chronicles of two battles from that war: his front-line fights against the Ebola virus, which can trigger a highly lethal haemorrhagic fever, and HIV. The book does not pretend to be a history of those viruses, or a technical manual on infectious diseases generally. It is a memoir — although intertwined with epidemiology, science and politics — and, as such, it is Piot's prerogative to remember and to recognize what he chooses.

We witness Piot's evolution over 35 years, from idealistic young medical scientist in Belgium to skilful United Nations politician and diplomat in Geneva, Switzerland, as director of the Joint United Nations Programme on HIV/AIDS (UNAIDS). Piot is not always diplomatic: he paints a warts-and-all portrait of how science is done and public health protected. And, like many good storytellers, he identifies the good guys and the villains in the threads of his narrative.

Piot's first African adventure was in Zaire, now the Democratic Republic of Congo, in 1976. He was chasing an unusual epidemic caused, he and his colleagues learned, by a

**No Time to Lose:
A Life in Pursuit of
Deadly Viruses**

PETER PIOT
Norton: 2012. 304 pp.
\$28.95, £17.99

previously undiscovered pathogen that came to be known as the Ebola virus. As Piot works towards an understanding of Ebola haemorrhagic fever, the story becomes the stuff of high drama: the writing is so vivid that I felt as if I were beside Piot in the Congolese jungle.

The epidemic Piot witnessed was fast and furious, killing 431 people in Zaire and Sudan in the last four months of 1976. As it raged, Piot began to absorb the realities of research: the tensions between competition and collaboration and the need for priority recognition of scientific discoveries. He also started to learn how to communicate with affected populations, including Belgian nuns in the small village of Yambuku, Zaire, four of whom succumbed to Ebola. Rather than just studying it as a pathological phenomenon, Piot probed the epidemic's human dimension — an essential component of modern epidemiology.

During the epidemic, Piot collaborated and competed with several US scientists. These encounters led him to study sexually transmitted infections with epidemiologist King Holmes in Seattle, Washington. ►