Democratizing food systems

Citizen-centred innovations offer an opportunity to transform food systems by shifting power concentration and restoring autonomy in the individual's relationship with food.

Power concentrations in the global food sector mean that a limited number of actors positioned along the food supply chain have great influence on what, where, when and how food is grown, processed, distributed and consumed. It could be argued that the result of this is increased food availability for many, but the individual has simultaneously been divested of autonomy in many aspects of their food supply. As food systems dialogues are increasingly inclusive — the onus for transformation lies with us all — serious attention must be given to the political economy of food systems.

Innovation is key to democratizing food systems, and there are examples of networks, governance mechanisms, technologies and business models that have been successful. Communal urban gardens enable people to grow their own food and use public spaces more efficiently. Seed-saving networks help farmers increase the diversity of what they produce and reduce their reliance on the acquisition of new seeds from seed companies. The redistribution of good food destined for waste to those in need has been catalysed by mobile phone apps. Kitchen sharing offers entrepreneurs an opportunity to test business ideas at low fixed costs. These innovations may be described as

'disruptive' and yet among their salient features are the restoration of autonomy, equity and human connectedness.

These citizen-centred innovations could radically reshape the food system. Amplifying access to food and restoring freedom of choice, they open up a range of exciting livelihood possibilities with the development of new products and services — driving creativity and agency. At the societal level, they reconnect production and consumption and reduce the dependence on technological packages offered in the market. By enabling people to make the best use of the capital they possess — be it financial, human or social — these initiatives empower the individual in the food system.

In light of so many benefits, more initiatives such as these should be fostered. Research is key in this process, as it can shed light on how to make innovations more efficient, how to upscale them, how to ensure that the sum of local initiatives is consistent with planetary boundaries, and how to tackle health concerns and food safety standards. Policy efforts are equally needed to ensure that innovation is steered in a positive direction and used responsibly, instead of becoming a mechanism of exclusion in itself.

The discussion on food-related freedom of choice and sovereignty isn't new. Ebenezer Howard's *Garden Cities of To-morrow*, published in 1902, offered a vision of how food production could be integrated into the urban fabric of self-sufficient and self-governed communities. Growing public awareness of environmental problems and unprecedented levels of market concentration have offered additional reasons to think of grassroots food solutions. But local initiatives remain incapable of replacing our current agricultural model; large agribusinesses play a crucial role in research and development, while processors and distributors ensure a regular food supply around the world. Rather, the citizen-centred innovations described here have a complementary character, and should be seen as hopeful entry points for change.

If well coordinated, innovations could become powerful game changers, breaking the vicious loop of 'what's produced determines what's consumed, which in turn shapes consumers' preferences'. At the very least, innovations will encourage people to rethink their role in the food system. □

Published online: 16 July 2020
<https://doi.org/10.1038/s43016-020-0126-6>