

Scientists offer blueprint for sustainable redesign of food systems

August 9 2022



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New research describes food systems designed not by the logic of growth such as efficiency and extraction, but by principles of sufficiency, regeneration, distribution, commons, and care. It argues that

food systems can instead be the foundation of healthy communities, ecologies and economies.

"For this agenda-setting article, we've reviewed the vast experience of diverse farmers, [food](#) cooperatives, home gardeners, alternative retailers, and other endeavors to re-claim what sustainability for [food systems](#) means in high and low-income nations," the authors say.

Growth paradigm

The authors call for policymakers, researchers and [community groups](#) worldwide to rethink their approach to developing new solutions beyond the current "growth paradigm."

"We have seen what food systems designed to achieve relentless economic growth and profit maximization do to the environment, farming communities, and our health, and it's not good," says Dr. Steven McGreevy, an assistant professor of institutional urban sustainability studies at the University of Twente.

The [current system](#) is exploitative of humans and animals, ecologically rapacious, hooked on [fossil fuels](#), and controlled by a small number of multi-national corporations from food to fork, this system produces massive quantities of the wrong foods at incredible social, ecological and economic costs. With food crises again looming on the near horizon, a strategy to tweak and maintain the current growth-driven food system is highly questionable.

Post-growth food system

"Fortunately, there are countless examples from around the world of post-growth agrifood system elements in action. We need to support these

models where they exist, and rediscover, transfer, or further develop them where appropriate," says McGreevy.

The authors identified post-growth agrifood system endeavors already in action around the world.

- **Food production:** The adoption of agroecological farming and gardening into the current food systems can enhance biodiversity, maintain fertile soils, and improve system resilience to social and ecological shocks.
- **Food business and trade:** Community-based [business models](#) such as cooperatives and benefit corporations without profit-maximizing motives can anchor sustainability in businesses and prioritize the health and well-being of the environment and the public.
- **Food culture:** Closer relationships with food and the processes which it goes through to reach us can create a culture of appreciation in which we value food as a "commons" and the people working in the agrifood system.
- **Food system governance:** Food is connected to multiple siloes of governance—agriculture, [public health](#), land planning, education, tourism, etc.—that are often working independently, rather than in an integrative way. Food policy councils (FPCs) are one example of new governance structures that are inclusive and representative of diverse public and private stakeholders and cut across multiple sectors of policy expertise related to food.

New research agenda

According to the study published in *Nature Sustainability*, the [conventional wisdom](#) of mainstream sustainability science—including its underlying logic of economic growth—is fixated on narrow solution space: increasing production efficiency, high-tech innovation and

individual behavior change.

To break free of these intellectual constraints, the redesign of the global agrifood system should be supported by a coordinated education and a new research agenda that challenges conventional wisdom and focuses on understanding and developing diverse solutions outside of the growth paradigm.

More information: Steven R. McGreevy et al, Sustainable agrifood systems for a post-growth world, *Nature Sustainability* (2022). [DOI: 10.1038/s41893-022-00933-5](https://doi.org/10.1038/s41893-022-00933-5)

Provided by University of Twente

Citation: Scientists offer blueprint for sustainable redesign of food systems (2022, August 9) retrieved 2 May 2024 from <https://phys.org/news/2022-08-scientists-blueprint-sustainable-redesign-food.html>

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