

Viewpoint: Can organic farming overcome its sizable yield lag and address climate change challenges?

Organic farming isn't more climate-friendly than conventional agriculture when looking strictly at emissions. In a [comparative analysis](#) of the environmental impacts of different agricultural production systems, Michael Clark and David Tilman at the University of Minnesota found that "organic and conventional systems did not significantly differ in their greenhouse gas emissions." But that's not all that matters.

Land use is organic's achilles heel. The analysis concluded that organic farms require [25 to 110 percent](#) more land to produce the same amount of food than conventional systems because organic yields are lower.

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Given organic's yield challenge and respective carbon opportunity costs, a large-scale shift to organic farming seems untenable if we want to maintain (or even increase) current harvest levels and consumption patterns. In that scenario, introducing some regenerative practices to large farms while continuing to rely on synthetic pesticides and fertilizers, as the USDA and many major agricultural companies promote, may be the best we can hope for.

But a better future for our lands and communities would be possible if we could revolutionize our relationship with food at a structural level. We'd need to shift to regional, seasonal, low-carbon diets that minimize food loss and waste and manufacturing emissions.

[This is an excerpt. Read the original post here](#)