



ORGANIC

MOSES ORGANIC FACT SHEET

Organic Farming CAN Feed the World

As an organic farmer, as a buyer of organic products, or as someone interested in what organic farming is all about—it helps to know the facts. Unfortunately there is a lot of misinformation out there about organic agriculture. Some of this is due to simple misunderstanding, but some of it is a deliberate attempt to discredit organic agriculture. Organic is a true success story of modern agriculture and with that success have come scrutiny, criticism, and sometimes even deliberate misinformation.

Myth: Organic Cannot Feed the World

This is by far the most common myth you will see. This criticism is mostly based on the “lower production per acre” premise. Here are some actual quotes that exemplify this myth:

“Organic is too small and unproductive to ever be the ‘solution’ to our need to simultaneously feed the world and protect the environment.”

Slate – *“Organic Crops Alone Cannot Feed the World,”*
March 10, 2011

“The real reason organic farming isn’t more green than conventional is that, while it might be better for local

environments on the small scale, organic farms produce far less food per unit land than conventional ones. Organic farms produce around 80% that what the same size conventional farm produces.”

Christie Wilcox, Scientific American, *“Mythbusting 101: Organic Farming”* July 18, 2011

Fact: Organic Can Feed the World

Rodale Institute 30-Year Farming Systems Trial

Rodale has recently completed their report on the longest side-by-side conventional vs. organic farming systems trial ever completed in the United States. Here are some of their conclusions:

- Organic yields match conventional yields in long-term trials.
- Organic outperforms conventional in years of drought.
- Organic farming systems build rather than deplete soil organic matter, making it a more sustainable system.
- Organic farming uses 45 percent less energy and is more efficient.
- Conventional systems produce 40 percent more greenhouse gases.
- Organic farming systems are more profitable than conventional.



Midwest Organic and Sustainable Education Service (MOSES) | PO BOX 339, Spring Valley, WI
715-778-5775 | info@mosesorganic.org | www.mosesorganic.org



The entire report is worth reading and confirms many of our assumptions and busts many of the anti-organic myths: www.rodaleinstitute.org/fst30years

The Long-Term Agroecological Research (LTAR) Experiment – Iowa State University

Organic crop systems can provide similar yields and much higher economic returns than a conventional corn-soybean rotation, according to 13 years of data from a side-by-side comparison at Iowa State University's Neely-Kinyon Research and Demonstration Farm. Some of the findings from this experiment:

- Averages from 13 years of the LTAR experiment show that yields of organic corn, soybean and oats have been equivalent to or greater than conventional counterparts.
- A 12-year average for alfalfa and 8-year average for winter wheat also show no significant difference between organic yields and the county averages.
- On average, returns to management (after deducting labor, land and production costs) for organic systems are roughly \$200 per acre greater than conventional returns, according to actual LTAR data and modeling.
- Organic systems have lower production costs because they eliminate the need for expensive herbicides and synthetic fertilizers.
- Total nitrogen increased by 33 percent in the organic system.
- The results suggest that organic farming can create greater efficiency in nutrient use and higher carbon sequestration potential.

Full details about the LTAR can be found here:
<http://www.leopold.iastate.edu/pubs-and-papers/2011-11-ltar-experiment>

Other Studies/Reports

- A United Nations examination of farming in 24 African countries found that organic or near-organic farming resulted in yield increases of more than 100 percent.
- Not only can organic agriculture feed the world, according to the U.N. Environment Programme (UNEP) in a report released in October, 2008, it may be the only way we can solve the growing problem of hunger in developing countries. UNEP reported that organic practices in Africa outperformed industrial, chemical-intensive conventional farming, and also provided environmental benefits such as improved soil fertility, better retention of water and resistance to drought.

Message: What We Can Say about Organic Feeding the World

- Yes, organic can feed the world. Long-term research studies show that organic production can equal conventional yields and even outperform it during drought. Organic production also yields better economic returns, needs fewer inputs, builds the soil, and lowers greenhouse gas emissions.
- Agriculture is not feeding the world now! Nearly one billion people are seriously undernourished, and two billion suffer from micronutrient malnutrition. Organic offers the best opportunity for people to feed themselves affordably.
- An expensive, fossil fuel dependent agriculture is not the answer. Our current conventional farming model worked only as long as fuel was cheap and water was abundant.

MIDWEST ORGANIC
& Sustainable Education Service
MOSES

The Midwest Organic and Sustainable Education Service (MOSES) provides education and resources to farmers to encourage organic and sustainable farming practices. To learn more, please see:

www.mosesorganic.org