



Organic can feed the world

Genetic modification is necessary to feed the world...

That's the claim commonly made by its advocates; and yet after 40 years of biotech 'innovations' there is still no evidence that this claim is true.

Study after study shows that organic or near organic (often called agroecological) techniques can provide much more food per acre – particularly in the developing countries that need it the most – than conventional high input chemical-based agriculture.

One [report](#) published by the United Nations Environment Programme (UNEP) and the UN Conference on Trade and Development (UNCTAD) found that in 114 projects, involving nearly two million African farmers, yields were more than doubled by introducing organic or near-organic practices.

It seems hard to believe. Indeed, Achim Steiner, UNEP's executive director, says the report [gave him the biggest surprise of any that have crossed his desk](#).

In the UK, a study at the University of Essex looked at similar projects in 57 developing countries, representing 3% cent of the entire cultivated area in the Developing World, [and found an average 79% increase in yield with organic practices](#).

Research at the [University of Michigan](#) concluded that organic farming could increase yields on developing countries' farms three-fold.

Even more important, as the UN's International Fund for Agricultural Development points out, teaching organic techniques to small Developing World farmers almost always [boosts their incomes](#) because they no longer have to buy expensive chemicals.

This is vital, as three quarters of the world's poorest people depend on small-scale agriculture to eke out a living. Those that have land often do not have enough to grow crops for sale and for their own consumption, so have to buy food as well. Half of the world's undernourished people are smallholders and their families.

The landless are even worse off, and have to seek work as labourers. Again, a switch to organic agriculture can help, for it employs many more people. In 2007 the rise in organic farming in Mexico alone created more than 170,000 jobs.

Most importantly, the world's biggest and most authoritative study by the World Bank, United Nations, World Health Organization, FAO, GEF, UNDP, UNEP, UNESCO and an international

panel of 400 distinguished scientists – the [International Assessment of Agricultural Knowledge, Science and Technology for Development \(IAASTD\)](#), unambiguously concluded that organic agriculture was part of a “radical change” needed in the way the world grows its food.

IAASTD’s most important insight was that 70% of global food production came from small farms (90% in Africa). It warned that continued reliance on simplistic technological fixes – including transgenic (GM) crops – is an approach unlikely to address persistent hunger and poverty. What the world’s poorest people needed most, said the report, was access to land and water, not expensive technologies.

IAASTD warned “Business as usual is not an option...continuing to focus on production alone will undermine our agricultural capital and leave us with an increasingly degraded and divided planet.”

To date over-reliance on intensive agriculture has not succeeded in reducing the one billion people globally who are starving or malnourished. Currently the UN calculates that we produce enough calories to feed 14 billion people. Indeed in 2012 UN Deputy Secretary General noted that “over the last 20 years, food production has kept pace, so much so that, [were it distributed adequately](#), there would be enough to feed every person on Earth.”

“Hunger” he added “is basically an issue of equity and poverty, not of shortage”.

It is clear that we don’t need to produce more food. A recent report from the Institution of Mechanical Engineers entitled ‘[Global Food: Waste Not, Want Not](#)’ highlights that waste and not just production has to be tackled because of the 4 billion metric tonnes of food crops we produce, between 1.2 and 2 billion tonnes never makes it to our plates. This 50% is disposed of because of aesthetics, sell-by dates, over-purchasing and in developing countries, inadequate storage and distribution; leading to unnecessary spoilage."

None of this is to argue that all farming should go organic, nor is such a change possible overnight. But a transition from what we have, which isn’t working, to more sustainable models is needed over time to get farmers off the current unsustainable ‘treadmill’.

Cheap food policies by the rich countries of the world drive wrong behaviour at every turn.

Closer attention to process, and provenance would mean less soil erosion, more drought resistance, more natural nutrition for plants, animals and man.

It also means [less need for so much grain and the land that goes with it](#) (livestock production accounts for 70% of all agricultural land, for grains, and 30% of the land surface of the planet, for grazing; not to mention land used for biofuels), less toxic chemical inputs that go with industrial practices, plus much better animal welfare!

With an organic mindset we all win.