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There is no simple solution

for addressing food insecurity in Africa... but organic agriculture is a good start

» Is a high-tech future the only pathway to achieve food security for African people? Will conversion to organics keep African farmers poor and hungry? In short, the answer to both these questions is no!

What leaves people hungry in Africa is not simply a result of the adoption of one farming practice over another, rather, hunger is intimately tied to the on-going political and economic disadvantages experienced by African farmers. It is irrelevant whether farmers have adopted genetic engineering, organic, or any other farming practice for that matter, when global food manufacturers and retailers, as well as international trade agreements, are able to set the prices and terms of trade for African farmers².

Food security in Africa will not be achieved from the wave of a magic wand - despite the promises of genetically engineered crops able to withstand drought, or able to tolerate high doses of herbicides and other chemicals. Genetic engineering is prohibitively expensive, and therefore out of reach for most African farmers. Genetic engineering also locks farmers into buying seeds (and other inputs, including chemicals and equipment), rather than saving seeds

each year. South African farmers have been growing genetically engineered varieties of cotton, maize and soya beans since at least the mid 1990s. Yet people remain hungry as local food prices continue to rise, placing further pressures on families unable to afford to meet their basic food needs³. In short, the argument that a high-tech agriculture will deliver food security is hard to swallow.

In contrast, organic agriculture offers an alternative - and sustainable - future for African farmers. Organic farming can be integrated within traditional and subsistence farming practices, and offers environmental benefits including increased soil fertility and water holding capacity in the soil, as well as increased plant diversity⁴.

Organic certification is also creating new economic and social opportunities for African farmers. In Lira, in Uganda, for example, organic cotton farmers receive price premiums of 19 percent above world cotton prices⁵. While in Tanzania, organic coffee growers report a 50 percent price premium⁶. In addition organic certification enables farmers to establish secure international buyers that demand regular supplies of organic produce. I have interviewed dozens of farmers in Uganda and Ghana who stress that establishing secure buyers for their produce enables them to make personal and financial plans into the future⁷. While African farmers have been able to secure international markets for their organic

produce - and bringing with this a range of economic and social benefits - it is unlikely genetically engineered crops would afford such market security. In contrast, African farmers cultivating genetically engineered crops are likely to face trade restrictions, alongside opposition amongst consumers in overseas markets - many of whom continue to resist buying genetically modified products⁸.

Meanwhile, the uptake of organic farming also has specific benefits for women farmers. In Kamuli, an isolated community in Uganda, for example, the Kamuli Women's Development Group has trained over 700 women in organic farming. This has enabled these women to establish income-generating activities independent from their husbands, and this financial independence is improving women's quality of life⁹. A similar trend is occurring elsewhere, including Kumasi, in Ghana. Here, NGOs are training both women and men in organic farming and management. Following this training, many women are choosing to manage their own block of land, thereby enabling them to maintain autonomy in decisions related to land management and income use¹⁰.

Conversion to organic agriculture, however, offers more than simply a way of farming. It also offers new opportunities to establish fair relationships between producers and consumers. In so doing, the uptake of organic agriculture in Africa can

RIGHT: Bob Kasule, Ugandan organic farmer standing in front of cassava and bananas. the WWOOF (Willing Workers on Organic Farms) contact for Uganda.

OPPOSITE: Palm kernels for manufacturing into oil palm, Ghana.

make a contribution towards un-doing the social and economic inequities that characterise international trade.

First, organic standards outline strategies to address a range of social justice challenges that plague international trade, including child labour, gender equity, as well as health and safety issues. It ensures that in those circumstances where children do participate in household and farm work (which often occurs, given the household is the organising unit of production in Africa) that this does not interfere with their education or general well being¹¹.

Second, the development of a group organic certification scheme provides new opportunities for smallholder farmers to participate in trade. Smallholder farmers are often excluded from international trade: they have only small quantities of produce, they are unable to afford the cost of organic certification, and have little bargaining power compared to larger farmers, wholesalers and retailers.

Group certification involves the organization of farmers into groups, and certification is then awarded to the group, rather than individual farmers. The group certification system represents a way forward for African farmers, and many state that this has "changed their lives"¹². For some of the 4,000 organic coffee growers living in Sipi Falls in Uganda, some of whom I have interviewed, group certification has also provided them with training in organic farming methods, and has led them to adopt a range of new farming techniques which has in turn increased coffee production for some farmers¹³. Importantly, by working collectively as part of a group certification scheme, organic farmers are able to access diverse markets - and generate increased incomes - from the sale of their organic produce.

When I ask African organic farmers to define food security, most see it as growing enough food to feed themselves and their families¹⁴. During one interview a farmer stated poignantly: "it doesn't matter how much money I have, it doesn't mean there will be food in the shop for me to buy to feed my family". This farmer reminds us that cash crops alone will not ensure farming families will be food secure. Increasing the rate of agricultural production via the application of new technological innovations - including genetic engineering - will not alter the social, economic and political inequities that plague agri-food systems. In contrast, genetic engineering is likely to exacerbate these



inequities, by increasing corporate ownership and control of genetic plant material.

In short, achieving food security will require more than a technological fix. It requires the transformation of the social, economic and political foundations of contemporary agri-food systems. Organic agriculture has an important part to play in this transformation and there is a mounting body of evidence to demonstrate the extent to which this is already occurring across Africa.

The expansion of organic agriculture across Africa brings with it a new set of challenges and questions. For example: Do all farmers have equal access to support for conversion to organic practices? Does the emphasis on international trade for organic produce restrict local people from eating organic food? And what is the ecological footprint associated with the transport of organic produce from Africa to other parts of the world? Despite these challenges, the international organic movement is already making - and is likely to continue to make - a significant contribution towards addressing food security in Africa. <<◆

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Major research reports: Organic farming 'could feed Africa'

NEW EVIDENCE suggests that organic practices are delivering significant increases in yields, improvements in the soil and a boost in the income of Africa's small farmers.

A major study by the United Nations concludes organic farming offers Africa the best chance of breaking the cycle of poverty and malnutrition it has been locked in for decades.

The head of the UN's Environment Programme, Achim Steiner, says the report "indicates that the potential contribution of organic farming to feeding the world may be far higher than many had supposed".

It has been conventional wisdom among African governments that modern, mechanised agriculture is needed to close the gap. More recently, the global food crisis has led to calls to push ahead with genetically modified crops and large industrial farms to avoid starvation.

But the research conducted by the UN Environment Programme suggests that organic, small-scale farming can deliver the increased yields which were thought to be the preserve of industrial farming, without the environmental and social damage which that form of agriculture brings with it.

An analysis of 114 projects in 24 African countries found that yields had more than doubled where organic, or near-organic, practices had been used. That increase in yield jumped to 128% in east Africa.

The study found that good organic practices outperformed traditional methods and chemical-intensive conventional farming. It also found strong environmental benefits such as improved soil fertility, better retention of water and resistance to drought. And the research highlighted the role that learning organic practices could have in improving local education.