How can Africa grow more food?
Rising food prices are focusing minds on Africa's agricultural output, and on whether or not technology is the best way to boost production

African agriculture has become the focus of extraordinary attention and interest. Yesterday a big report was launched by the Harvard academic Calestous Juma with the backing of several African presidents, and next week Chatham House in London is hosting a major conference on food security where the International Fund for Agriculture and Development (Ifad) is launching a new report on rural poverty.

Meanwhile Olivier De Schutter, the UN special rapporteur on the right to food, warned that the current UN climate summit in Cancun needs to launch a "Green Marshall Plan for Agriculture" or risk a possible 40% increase in emissions by 2030 if current agricultural methods are extended.

Rising food prices and terrible future scenarios of the impact of climate change on food production, are focusing minds on what is perceived as Africa's huge untapped potential for agriculture. This week yet another report from the International Food Policy Research Institute warns that climate change could push prices up by 130%, and calls for unprecedented human ingenuity to meet the challenge of feeding a burgeoning population.

Some of this renewed interest from around the world is self interest; countries eyeing Africa as a source of food, which is prompting an unprecedented rush to buy or lease land. But the foreign interest is matched by that of many African countries keenly aware that improving agricultural productivity is key to entrenched problems of poverty – on average 64% of Africans depend on agriculture for their income – and hunger.

Central to all the discussion is the assertion that Africa could produce far more food than it currently does. In contrast with Asia, which has seen huge increases in
agricultural yields in the last 40 years, sub-Saharan Africa's track record has been abysmal. Food production is actually 10% lower today than in 1960, yet over this time period the aggregate world food production has increased by 145%.

The reasons are not hard to find. The use of fertiliser is strikingly low – only 13kg per hectare in sub-Saharan Africa compared with a north African average of 71kg. Only 24% of cereal is using improved seeds compared with 85% in east Asia. The lack of investment in nutrients has led to a catastrophic depletion of soils; 75% of farmland in sub-Saharan Africa has been degraded by overuse. As soil fertility has fallen, farmers have expanded into forests to maintain incomes, leading to deforestation – which in turn leads to more problems, for example with soil erosion such as I saw in my visit to Mali recently.

But if there is widespread agreement on the causes of the problem, there is an extraordinarily polarised debate about the best strategy to tackle the problem. On one side there is a powerful lobby which argues that biotechnology, massive investment in irrigation and mechanisation are the way forward, and on the other side are those who argue that these kinds of investments are usually tied up in big corporate deals in which local smallholder subsistence farmers lose out – either they lose their land or access to water, and often both.

Juma and his prestigious panel of international experts have attempted to pick a politically feasible path between these two positions. His report, A New Harvest, is being launched with the backing a clutch of presidents, including those of Tanzania, Kenya, Uganda, Rwanda and Burundi.

Inevitably, his enthusiasm for biotechnology will trigger anxieties among that alliance of European and African activists who believe that this entails Faustian pacts with multinational corporations. Another constituency will also be doubtful on the grounds that this kind of emphasis on biotech and science as the way forward in Africa lacks understanding of how development is largely a political process and crucially depends on the effectiveness of institutions – it is a weakness of westerners to believe that clever technology can sort any problem out.

One old hand in the field told me the other day that, on average, it takes 46 years for agricultural innovations to get from the laboratory to widespread use in the field in Africa; it's not lack of technology that is the problem but effective means to disseminate practical solutions. Technology might be able to achieve quick fixes in health on the continent, but they might be elusive in agriculture because it entails much more complex issues of land rights and power.

But what will delight these very critics is Juma's championing of the smallholder farmer – not as an encumbrance to development but as central to its achievement. At the very beginning – the first page of chapter one – he throws his weight behind the example of Malawi, which in 2005 defied USAid (and initially the World Bank) to put major investment into subsidised fertiliser and improved seeds in an attempt to boost maize production. Yields doubled and Malawi was meeting domestic need and exporting surplus maize within a year. Malawi became a poster-girl for western NGOs because it successfully challenged the best part of two decades of a consensus on aid in Africa – namely that the state should not subsidise smallholder agriculture.

The second example Juma chooses to highlight is even more striking. He argues that China's dramatic reduction of poverty has been achieved by growth primarily in the agricultural sector, not the industrial. Since the late 1970s, improvements in technology and infrastructure helped boost production in smallholder agriculture, with farmers' incomes rising at more than 7% a year. The result is that 200 million small-scale
farmers working an average of 0.6 hectare of land are now feeding a population of 1.3 billion.

China offers a fascinating model for Africa that is radically different from the western model of high-investment, export-orientated agriculture – the carnations from Kenya model. The key to China's success, argues Juma, is "a strong, competent, developmental state". Unfortunately, that is what has often been lacking in sub-Saharan Africa. And to be fair, the desperate state of African agriculture is also a product of a history of structural adjustment programmes, which insisted on cutting back the role of the state in funding research and agricultural extension services of many countries.

This report clearly draws a line under that history of neglect. But the question is whether it can really mobilise the kind of investment it believes is urgently needed. The political rhetoric surrounding its launch is warm, but a note of caution. We have been here before: the Maputo declaration of 2003 pledged African countries to 10% of government spending for agriculture. Seven years on, many countries have not even reached 4%.

Next
Previous
Blog home