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Charles's fantasy farming won't feed Africa's poor

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A return to organic peasantry will feed only affluent angst. To take on global hunger, genetic modification is crucial

In response to 19th-century industrialisation the British aristocracy rediscovered medieval chivalry. The romantic fashion was in part comic: jousts, castles and armour. But it had darker consequences; the privileging of honour over intelligence, which became the bedrock vision of the English gentleman, had its apotheosis in the heroic stupidities of the first world war. Now, in response to modern agriculture, the aristocracy, with Prince Charles in the vanguard, has rediscovered organic peasant farming. Again it has its comic side: organic peasant produce is a luxury - you will find Duchy Originals, the prince's crested brand, in the better supermarkets; and the lifestyle is for sale in his attractive model village of Poundbury. But my concern is its darker consequences. Organic peasant agriculture is a solution for the angst of affluence, but not hunger. Its apotheosis is the ban on GM crops.

The origin of the ban was the BSE scare, whose cause was the capture of health regulation by the farming interest. Across Europe the national pressures for agricultural protectionism duly had British beef banned. BSE had nothing to do with GM, but it set the precedent: "genetically modified" food, so disastrously named as to be a car crash waiting to happen, became "Frankenfood", an experiment on consumers.

To cap it all, GM came from research by US corporations and so provoked hostility from the left. Although Monsanto has undertaken never to market a seed that is incapable of reproducing itself, there is a widespread belief that farmers will be trapped into annual purchases of "terminator" seeds from a monopolist. The result was a winning coalition: agricultural protectionism plus anti-Americanism and the paranoia of health-conscious consumers. Prince Charles represents an important additional constituency of opinion. His loathing of GM reflects his broader opposition to scientific-commercial agriculture.

The GM ban has three adverse effects. It has retarded productivity in European agriculture; grain production could be increased by about 15% were the ban lifted. More subtly, because Europe is out of the market for GM technology, the pace of research has slowed. GM research takes a long time to come to fruition, and its core benefit - the permanent reduction of global food prices - cannot fully be captured through patents. European governments should be funding this research, but it is entirely reliant on the private sector. Private money for research depends on the prospect of sales, so the ban has not only blocked public research - it has reduced private research.

However, the worst consequence of the European ban is that it has terrified African governments - with the exception of South Africa - into banning genetic modification. They fear that growing modified crops would shut them out of European markets. Because Africa banned GM, there was no market for discoveries pertinent to the crops that Africa grows, and so no research. In turn, this has led to the critique that GM is irrelevant for Africa.

Africa cannot afford the GM ban. Its cities, fed by imports, need global prices to be low. Without cheap food the children of the urban poor will be malnourished. Africa's farmers, broadly self-sufficient, need higher productivity. Productivity per acre has stagnated, so rising production has depended on expanding the area under cultivation. But with population growth this option is running out.

On the horizon is climatic deterioration due to global warming. The semi-arid parts will get drier, and rainfall variability will mean more droughts. In southern Africa, the staple food - maize - is likely to become unviable. Whereas for other regions the challenge of climate change is to reduce carbon emissions, in Africa it is primarily about agricultural adaptation.

It is conventional to say that Africa needs a green revolution. The reality is that the green revolution was based on chemical fertilisers, and even when fertiliser was cheap, Africa did not adopt it. With the rise in fertiliser costs as a byproduct of high energy prices, any green revolution will perforce not be chemical. What African agriculture needs is a biological revolution. This is what GM offers, if only sufficient money is put into research. There has as yet been no work on the crops specific to the region, such as cassava and yams.

We are still on the first GM generation: single-gene transfer - in which a gene that gives one crop an advantage is isolated and added to another. But even this stage offers the credible prospect of important gains. Maize can be made more drought resistant, buying Africa time in the struggle against climatic deterioration. Grain can be made resistant to fungi, reducing the need for chemicals and cutting storage losses (which currently waste about a quarter of the crop). GM is not the magic fix for African agriculture. But without it the task of keeping food production abreast of its population looks daunting.

Europe can afford romanticism, but the African poor cannot. The return to organic peasant agriculture is an appealing fantasy with disturbing consequences. The GM ban has already persisted for 12 years: how much more hunger must be endured before it is faced down?

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