Are large-scale commercial farms the answer to Africa's agricultural prayers?

To produce the food necessary to reduce high world food prices and meet the future demands of a growing and more affluent population, large-scale commercial farming needs to be encouraged. Any romantic illusions about small-scale farmers should be set aside. Or so Professor Collier writing recently in *Foreign Affairs* (November/December 2008) argues. This is particularly important in Africa where:

> African peasant agriculture has fallen further and further behind the advancing commercial productivity frontier, and based on present trends, the region's food imports are projected to double over the next quarter century.

Large-scale commercial farms (LSCF) have the advantages of being technically more advanced, able to reap economies of scale, mobilise funds and invest, and to react to evolving market demand:

> In modern agriculture, technology is fast-evolving, investment is lumpy, the private provision of transportation infrastructure is necessary to counter the lack of its public provision, consumer food fashions are fast-changing and best met by integrated marketing chains, and regulatory standards are rising toward the holy grail of the traceability of produce back to its source.

Small farmers, on the other hand, have had their day:

> … their mode of production is ill suited to modern agricultural production, in which scale is helpful. …
>
> Innovation, especially, is hard to generate through peasant farming.

If we need a model of what can be done, then Brazil provides one:

> In Brazil, large, technologically sophisticated agricultural companies have demonstrated how successfully food can be mass-produced. To give one remarkable example, the time between harvesting one crop and planting the next -- the downtime for land -- has been reduced to an astounding 30 minutes.

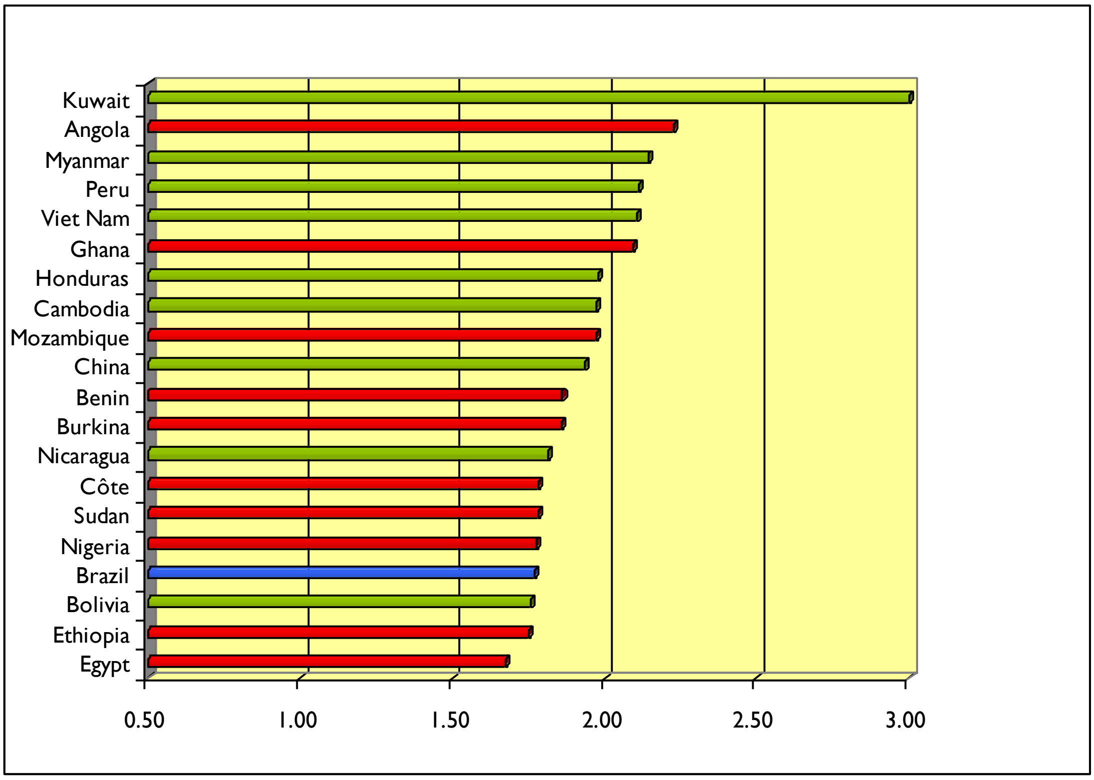
Is Professor Collier right? Yes, he is correct to emphasise the need for commercial farming. But no, he is wrong to imagine that this requires doing so on a large-scale. His solution is unnecessary, flies in the face of history, and carries important dangers.

Large-scale farms are unnecessary in Africa

Does Africa need to imitate Brazil? Let's look at the record of Brazilian farm output from the early 1990s to the mid-2000s. During that time the index of production in Brazil rose by 77%, at an annual average rate of just over 4% a year: a good performance, one of the best twenty in the world. But no less than eight African countries — Angola, Benin, Burkina Faso, Côte d'Ivoire, Ghana, Liberia, Mozambique and Nigeria — did better, while Ethiopia fell short of Brazil by the smallest of margins — see Figure. The African countries concerned all have farm sectors dominated by smallholdings — as applies in the cases of Vietnam and China that also have better records than Brazil. If Africa needs models, then it might be better to look to at its own success stories, or to some Asian experiences, rather than to Brazil.

Increases in agricultural output, 1990/92 to 2004/06

Horizontal axis shows production in 04/06 as a multiple of that in 90/92



Source: FAOSTAT data, comparing three-year averages. First 20 countries shown out of 138 countries with more than one million inhabitants.

The history of African farming reveals numerous episodes where there have been remarkable spurts of growth in agricultural output coming from small farms. Coffee farms in Central Kenya in the 1950s and 1960s, cocoa in Ghana in the late C19th, cotton in Francophone Africa in the 1990s, maize in Zimbabwe in the 1980s are just a few examples.

These cases show that when small farmers are given the incentives to produce more and the means to do so, they invest, innovate and respond to opportunity. It is not a lack of large-scale farms that lies behind the disappointments of African agriculture, but a lack of conditions to allow small farmers to fulfil their potential.

Large-scale farming has often failed in Africa

Professor Collier is not the first person to believe that larger-scale farms in Africa would lead to major increases in production. Others have been beguiled by the prospect of rapid transformations. But the record of schemes to introduce large farms has many failures.

Back in the late 1940s Britain saw opportunity in southern Tanzania to grow a crop that would meet the post-war demand for vegetable oil and jump-start agricultural development in a remote colony. Large mechanised farms would be opened in the bush on which groundnuts would be grown. The result was a shambles.

In the 1970s, a US agribusiness took over land in Senegal with the intention of growing vegetables for export. By the end of the 1970s Bud Senegal planned to export 100,000 tonnes of irrigated fruit and vegetables, but the result was failure and bankruptcy.

Ghana promoted large-scale privately-owned rice farms in the Northern Region in the late 1970s with subsidies: they failed once the subsidies were ended. This was not Ghana's only bad experience of large scale farming: Nkrumah's ill-starred attempts at large-scale state farms had been earlier failures.

Yes, there are successful large-scale farms in Africa, but generally for those relatively few crops where economies of scale exist in production; for example in flowers, horticulture, and sugar cane. When it comes to the main food crops and other export crops, there are few examples of large-scale farms outside of South Africa.

Why is this? The main obstacle to farming on a large scale is the same one that hit Soviet state farms: the management of labour. Small farms have the advantage that family labour is generally self-supervising, prepared to work long and diligently in ways that hired hands are not. When large farms try to minimise the labour problem by mechanising, not only do their costs of production rise, but keeping machinery operating well in rural areas remote from supplies of spares and skilled mechanics is not easy.

Promoting large-scale farming is risky

The obvious danger is that allocating land for commercial farms in large holdings would take land away from the rural poor, or block them off from land that their children may need in the future. Socially unacceptable, any such moves involve high political exposure: expropriation is easy to justify on the basis of historic wrongs.

But other less obvious and more insidious risks lurk.

What happens to agricultural policy when a large-scale farm sector is created? With relatively few farmers that can readily be organised, who are rich and politically well-connected as well, large-scale farmers in Africa have a track record of lobbying for special favours. Government is expected to support the large farms with roads, irrigation, and power supplies. Research stations are encouraged to devote their attention to the issues that concern the large farms. The result is that the large farms get these public goods, while any small farms do not. Worse, the large farmers demand subsidies on inputs, guaranteed prices for their outputs, and exclusive rights to grow crops or to market them.

Look at the record of the commercial farming unions of South Africa and Zimbabwe in the recent past. Look today at the large grain farms of Kenya's Rift Valley. Owned by the political elite, the price paid for maize by the government marketing board is way over the import parity price, conferring substantial rents on the wealthy producers — all in the name of national self-sufficiency.

The record of model Brazil is not so encouraging in this regard either. During the 1980s the commercial farm lobby managed to get the government to offer subsidies on interest rates for farm credit that by 1979–80 were equal to 19–20% of the gross agricultural product, or 2% of GDP. Whilst the majority of Brazil's farms were of 10 ha or less, only 4% of such smallholders had a bank loan in 1980: 85% of the agricultural portfolio went to the more prosperous South, Southeast and Centre-West regions—with only small amounts going to the needy Nordeste.

Commercial farming, yes; agri-business, yes; but it doesn't need to be large farms

This is not to deny that large-scale private investors seeking to produce more in Africa should be welcomed. Their capital, their expertise can be put to good use, to the advantage of both the companies and many African (small) farmers as well. But let's get the economies of scale where they are needed: in the supply chains, in processing, transport and marketing —where lumpy investments and sophisticated know-how count. But let's leave the farming to the local experts, the family farmers, who have all the incentives to work hard and carefully.

This is not romanticism: it is simply a reflection of the empirical record. Small farmers in Africa have repeatedly shown that they can increase production. Let's give them the chance to do so again.

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