

Awakening Africa's Sleeping Giant: Prospects for Commercial Agriculture in the Guinea Savannah Zone and Beyond

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Stimulating agricultural growth is critical to reducing poverty in Africa. Commercial agriculture, potentially a powerful driver of agricultural growth, can develop along a number of pathways. Yet many developing regions have failed to progress very far along any of these pathways. Particularly in Africa, agriculture continues to lag. During the past 30 years the competitiveness of many African export crops has declined, and Africa's dependence on imported food crops has increased. While the poor performance of African agriculture can be attributed partly to adverse agroecological conditions, experience from elsewhere in the developing world suggests that significant progress is possible. Africa's Guinea Savannah zone is a case in point. The Guinea Savannah covers some 600 million hectares in Africa, of which about 400 million can be used for agriculture. Less than 10 percent of this area is currently cropped, making it one of the largest underused agricultural land reserves in the world. During the past three decades, while the potential of the African Guinea Savannah has remained largely untapped, two relatively backward and landlocked agricultural regions elsewhere in the developing world—the Cerrado region of Brazil and the Northeast Region of Thailand—developed at a rapid pace and conquered

important world markets. Their success defied the predictions of many, who had seen the agroecological conditions, remoteness, and poverty levels characteristic of the two regions as challenges that would be difficult, if not impossible, to overcome.

A recent World Bank study, titled *Competitive Commercial Agriculture for Africa*, investigated how the successful agricultural commercialization experiences of Brazil and Thailand may be able to inform agricultural development initiatives in Africa. Based on detailed case studies carried out in Brazil and Thailand, as well as in three African counties extensively endowed with underdeveloped land resources in the Guinea Savannah zone (Mozambique, Nigeria, and Zambia), the study found that there are substantial opportunities for farmers in Africa to regain international competitiveness and improve national food security. Success in capitalizing on these opportunities will, however, depend on getting policies right, strengthening institutions, and scaling up investments in agriculture. Recent progress seen in a number of African countries, while encouraging, remains tenuous and could be reversed by bad policy choices. The recent global food crisis has created new opportunities for Africa's farmers, but it has also engendered calls for quick fixes that could undermine competitiveness for years to come.

FACTORS AFFECTING AGRICULTURAL COMPETITIVENESS IN THE AFRICAN GUINEA SAVANNAH

The potential competitiveness of agriculture in Mozambique, Nigeria, and Zambia was gauged through value-chain analyses of six commodities well-suited to the Guinea Savannah: cassava, cotton, maize, rice, soybeans, and sugar. A number of insights emerged from the analysis.

Farm-level production costs in Africa are competitive. Farm-level unit production costs in the three African countries are comparable to or lower than those in Brazil and Thailand, despite significantly lower yields per hectare.

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Africa's producers are generally competitive in domestic markets. In domestic markets, Africa's producers can compete with imports. High logistical costs raise prices of imported commodities and provide "natural protection" upon which African producers can capitalize.

Africa's producers are generally not competitive in global markets. The same high logistical costs that shield domestic producers are a significant barrier to exports. African producers must absorb these costs if their commodities are to compete internationally.



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Regional markets offer the most promising opportunities in the medium term. Given the high costs of reaching international markets, Africa's producers are favorably positioned to serve regional markets. Demand in regional markets will grow rapidly as a result of population growth, income gains, and accelerating urbanization.

Inefficient domestic logistics restrict the competitiveness of the three countries. Domestic costs are high owing to deficiencies in transport, processing, and storage infrastructure; lack of competition in vehicle import and trucking industries; cumbersome transport regulations; and the need to pay bribes at border crossings and police checkpoints.

Smallholders have a critical role as a source of competitiveness in the three countries. Contrary to expectations, few obvious scale economies were found in the production systems analyzed by the study. Compared to large commercial farms, smallholder farms typically had lower shipment values at the farm level and/or final distribution point (shipment values reflect production and delivery costs).

DOES FARM SIZE MATTER FOR RAPID AGRICULTURAL COMMERCIALIZATION?

What is the optimal farm size for driving rapid agricultural commercialization? Despite recent efforts, mainly by foreign investors, to launch large-scale agribusiness ventures in Africa, there is little evidence that the large-scale farming model is either necessary or even particularly promising for Africa. Even the apparently successful settler farms of eastern and southern Africa were nurtured by streams of preferential policies, subsidies, and supporting investments.

The value-chain analysis carried out for the study suggests that large-scale farming may be advantageous in Africa under three sets of circumstances:

- When economies of scale are present as, for example, in "plantation crops" (sugar, oil palm, tea, bananas, and many horticultural crops grown for export).
- When Africa's producers must compete in overseas markets that have stringent quality requirements and demand traceability all the way back to the farm—which is not feasible in contract farming.
- When relatively fertile land must be developed in areas with relatively few people. Without a large, local labor force, large-scale mechanized farming may be the best model, even for growing staple foods.

In all three cases, land tenure problems are likely to arise when extensive tracts are allocated to farming enterprises. Virtually all areas are claimed by some individuals or groups or used in some way. Land tenure issues may be as contentious as the political issues surrounding immigration of farmers and agricultural workers.

While large-scale farming is often unlikely to be the most appropriate avenue for commercializing African agriculture, important investment opportunities do exist. For the foreseeable future, the main opportunities for private domestic or foreign investors remain in seed development, input supply, marketing, and processing.

POTENTIAL ENVIRONMENTAL IMPACTS OF AGRICULTURAL COMMERCIALIZATION

Everywhere in the world, agricultural intensification—including intensification associated with the rise of commercial agriculture—has affected the environment. Potential negative outcomes of intensification include deforestation, biodiversity losses, degradation of soil and water resources, and illness caused by crop chemicals. In the case study countries described in *Competitive Commercial Agriculture for Africa*, the available empirical



data do not always show that these outcomes have occurred. This suggests that the prospective environmental impacts associated with commercial agriculture must be better understood, so that better policies and methods can be developed for limiting negative impacts.

When assessing the likely environmental impacts of commercial agriculture, it is important to consider the counterfactual: What environmental effects would occur in the absence of commercialization? The probable environmental impacts of commercial agriculture must be assessed alongside the environmental problems associated with agriculture more generally. Localized environmental damage caused by intensive commercial agriculture may be acceptable if the alternative is much more extensive environmental damage, occurring when low-productivity agriculture and unsustainable farming practices spread into highly vulnerable areas.

COMMERCIAL AGRICULTURE IN AFRICA: BRIGHT PROSPECTS, BUT SOME CONSTRAINTS

On balance, the evidence suggests that today commercial agriculture has the same or better prospects in Mozambique, Nigeria, and Zambia as it did 40 years ago in Brazil and Thailand. This conclusion is based on a number of considerations, including: strong demand prospects, favorable domestic policies, an improved business climate, increased incentives to invest in agriculture; and new production technologies. At the same time, Africa's entrepreneurs face major constraints in equaling the success of their peers in Thailand and Brazil, including tougher international competition; exogenous shocks including HIV/AIDS, global climate change and global markets; weak national commitment; weak donor commitment; and lack of social cohesion, political stability, and bureaucratic capacity.

NEEDED INTERVENTIONS: POLICY REFORMS, SCALED-UP INVESTMENTS, STRONGER INSTITUTIONS

Continue macro policy reforms. Agricultural exports are still taxed at higher levels in Africa than elsewhere. Governments can continue moving domestic prices toward export prices by removing export taxes and replacing them with less distortionary taxes. Governments must rapidly implement regional integration agreements that support regional trade, such as banning arbitrary export restrictions, streamlining border logistics, and harmonizing standards and regulations.

Reform land policy. Land policy, legislation, and implementation arrangements, more than any other factors, determine the pattern and distributional consequences

of agricultural growth. Secure transferable land rights are needed to protect the interests of local populations and enable entrepreneurial farmers to acquire unused land in regions with few people. Over time, land must be able to change hands, moving to those who can use it most productively. Secure land rights also provide incentives to invest in increasing land productivity. The challenge is to build the institutions and equitable enforcement structures that help smallholders access land and engage in profitable commercial agriculture.

Scale up public investments. Agricultural development cannot be done on the cheap, ignoring the fundamentals of productivity growth in the food system, as governments and donors have done in Africa over the past 20 years. Particular damage has been done by neglecting to invest in agricultural research and by creating many small, underfunded research institutions. Africa also needs investments to replenish agricultural education at all levels, from the postgraduate level to the technical level to the vocational level. A major, unresolved challenge is to develop cost-effective and demand-driven advisory services, based on partnerships between farmers, public agencies, and civil society. Finally, Africa's aging infrastructure cannot launch or sustain internationally competitive commercial agriculture without investment, especially in irrigation, roads, energy, and logistics, especially port infrastructure.



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Induce private investment. Efforts to improve the business climate must continue, especially to facilitate the entry of private seed and processing companies, which played an important role in developing commercial



agriculture in Latin America and Asia. Strong farmer organizations and vigorous private-sector and civil-society organizations are also vital.

Reform institutions to make markets work better. Commercial agriculture needs institutions that make markets more efficient and less risky. The state must offer critical services that the private sector currently has few incentives to provide. As markets mature, a key challenge is to know when the state should yield to the private sector. Access to finance is fundamental to commercial agriculture, but little progress has occurred in creating self-sustaining rural financial systems with significant outreach to the farm population. Rural savings and loan associations must be linked more effectively to broader commercial banking systems to provide greater financial intermediation and diversification of risks.



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Undertake public sector and governance reform.

A major challenge is to develop governance structures and capacities for the state to play its vital role in developing a dynamic and equitable commercial agriculture. Ministries of agriculture require far more capacity and skill in marketing and business development services, as well as in forging the public–private–civil society partnerships that typify the state's new roles. These skills must extend well beyond ministries of agriculture to local governments and a range of other ministries that have important complementary roles in commercial agriculture.

Manage social impacts. Commercial agriculture cannot support national objectives of broad-based growth and

poverty reduction unless the wealth it creates is shared widely. Thailand's agricultural transformation, dominated by smallholders, seems more compatible with the employment generation objectives of many African countries than Brazil's transformation, which was dominated by farmers with the wealth and political power to secure large areas of land and leverage the capital to invest in large-scale, highly mechanized production technologies.

Manage environmental impacts. The current low-input extensification of African agriculture incurs especially high environmental costs: deforestation, land degradation, lost biodiversity, and the release of carbon sequestered in soils and trees. A more intensive land use pattern could limit these costs by limiting the land converted to agriculture. However, more intensive agricultural strategies can also deplete or degrade water and pose health hazards. Experience from many parts of the world, including Brazil and Thailand, shows that the environmental costs of developing commercial agriculture can be reduced and managed by using appropriate technologies, vigilantly monitoring environmental impacts, and effectively enforcing environmental rules and regulations.

THE ROAD AHEAD

There are good reasons to be optimistic about agriculture in the African Guinea Savannah, but it is important to be clear-eyed about the challenges ahead. While the constraints facing African farmers are problematic, the experiences of Brazil and Thailand provide important practical lessons that African policy makers can clearly benefit from in addressing these constraints and in moving along the multiple paths to agricultural commercialization. A particularly significant general lesson is that modern commercial agriculture is not synonymous with vast, mechanized farms. Thailand and Brazil show that agricultural revolutions can be catalyzed by smallholders or by large-scale farmers. On balance the evidence suggests that the fruits of those revolutions are more widely shared when smallholders participate. Second-round employment and poverty-alleviation effects are likely to be much larger when smallholders lead the way, because growth in smallholders' incomes tends to generate more demand for locally produced, nontradable goods. It is unlikely, however, that land-constrained households growing staples on one or two hectares or less will earn enough income to exit poverty. For this reason, commercial agriculture must develop in the African Guinea Savannah in ways that provide opportunities for producers to diversify out of low-value crops.

This ARD Note was prepared by Michael Morris and edited by Gunnar Larson of the World Bank. It is based on the report *Awakening Africa's Sleeping Giant: Prospects for Commercial Agriculture in the Guinea Savannah Zone and Beyond* from the Directions in Development Series.

