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# AFRICA

## Exploring Market Opportunities for African Smallholders

Xinshen Diao and Peter Hazell

**G**iven the predominant role of agriculture in the livelihoods of most Africans, any strategy for slashing poverty and hunger in Africa must center on rapid growth in the agricultural sector. African farmers clearly need governments and donors to make investments aimed at increasing agricultural productivity, but these investments could depress commodity prices and farm incomes if they are not linked to market opportunities for farmers. Poorly functioning markets, weak domestic demand, and lack of export possibilities are major constraints on Africa's agricultural growth prospects.





**W**ealthy countries' agricultural subsidies have also created unfair competition. African farmers not only have limited access to rich-country agricultural markets, but they also face unfair competition in their own domestic markets from subsidized imports of food staples. New challenges come from dramatically changed marketing chains that require African farmers to compete in markets that are more demanding in terms of product quality and food safety. What can be done to enhance market opportunities so that agriculture can become a more powerful engine of growth for the continent? Which markets and which products offer the greatest potential for raising incomes and food consumption? This brief addresses these questions and suggests policies that could help enlarge markets for African farmers.

## TRADITIONAL AND NONTRADITIONAL EXPORTS

Over the past two decades, Africa has lost ground in the global marketplace for its agricultural exports (Figure 1). Despite modest gains in the 1990s, the region's share of total world agricultural exports has fallen from about 6 percent in the 1970s to 3 percent today.

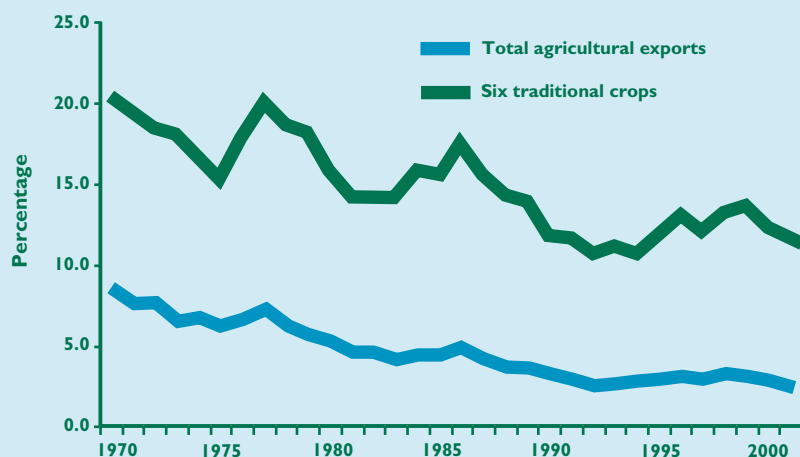
African countries are still heavily dependent on traditional export crops, with cocoa, coffee, cotton, sugar,

tea, and tobacco currently accounting for 50 percent of Africa's total agricultural exports. Due to downward trends in world prices, increased production of traditional export crops has not translated into much growth in farm incomes. The challenge posed by weak world demand is compounded by competition from many exporters in Asia and Latin America who have improved product differentiation and quality, features that rich importing countries increasingly demand.

Although the potential gains from traditional export crops are still high for some countries, the regionwide gain is expected to be small. Based on a model of the global economy, an IFPRI analysis shows that even if Africa's traditional exports regained ground and returned to their historic highs in terms of world market share—equivalent to growing at a rate of about 6 percent annually—per capita real agricultural income for all of Africa would grow by only an additional 0.3–0.4 percent per year. The gain would be even smaller if world prices for these commodities continue to fall, as is likely. The small income effect from more rapid growth in traditional export crops is due in part to these crops' small share of Africa's total agricultural GDP and their weak linkages to the rest of the domestic economy.

The most promising prospects for increasing income from traditional

**FIGURE 1** Sub-Saharan Africa's share of world agricultural exports, 1970–2001



Source: Data are from FAOSTAT 2003.

exports lie in exploiting opportunities for product differentiation (for example, by the type of branding that has popularized specialty coffees). Many countries could also secure higher prices by raising the average quality of the products they export, establishing grading systems, and segregating different qualities for export. Moreover, improvements in access to markets, inputs, and credits could, combined with low labor costs, enable African farmers to better compete with other countries in international markets for traditional export crops.

The general forecast is somewhat brighter in the nontraditional export sector, where market opportunities offer prospects for significant growth. Newer, niche markets (fresh vegetables, cut flowers, and fish, for instance) may have the highest growth potential because they face fewer demand constraints in both the short and the medium term. For example, in the European market, imports of fresh and chilled leguminous vegetables rose by more than 130 percent between 1989 and 1997, with almost three-quarters of the imports coming from Sub-Saharan Africa. However, niche markets tend to be highly competitive and specialized, with rigorous quality standards. In addition, they account for a small share of total agricultural exports and agricultural GDP in most countries.

A few countries—Ghana, Côte d'Ivoire, Kenya, and Zambia among them—have achieved notable success in increasing these types of exports. Fruit and vegetable exports from Kenya have increased fourfold in constant dollar terms since 1974, and horticulture has become one of the largest sources of foreign exchange earnings. Fruit and vegetable exports from Côte d'Ivoire

grew at an annual rate of 4.4 percent through the 1990s, and in Zambia exports of fresh vegetables and cut flowers rose from \$6 million in 1994 to more than \$33 million in 2001, now accounting for almost 40 percent of total agricultural exports. Moreover, the bulk of these exports are grown on smallholder farms.

Although favorable geography and climate have played a major role in the expansion of horticultural production, market, policy, and institutional conditions are critical in realizing such growth. Replicating these gains with other commodities and in other countries will require appropriate investments and policies, including improvements in transportation infrastructure, limitations on direct government intervention in markets, incentives for private and international investment, and development of international commercial links. However, it is important to have a diversified regional strategy for nontraditional export development. If many countries focus on the same export opportunities, prices could easily fall, leading to disappointing results for all.

It would be unrealistic to look to these specialized exports for dramatic income growth at the regional level. An IFPRI analysis projects that even with an optimistic regionwide annual growth rate of 6 percent per year for nontraditional exports, the gains in per capita incomes would not be that great. Per capita agricultural real income for all of Africa would grow by only 0.2–0.3 percent per year more than in the baseline scenario. Again, because of the small initial value of these exports, even rapid growth would not translate into significant economic leverage within the next 10 to 15 years.

**Table 1—Size of Sub-Saharan Africa's Agricultural Markets**

Market	East Africa	Southern Africa	West Africa	Total SSA
Billion US\$				
Traditional exports to non-Africa	2.2	2.4	4.0	8.6
Nontraditional exports to non-Africa	1.3	2.8	2.0	6.1
Other exports to non-Africa	0.5	0.7	0.7	1.9
Intra-African trade	0.4	1.1	0.4	1.9
Domestic markets for food staples	17.6	12.1	20.1	49.7

Sources: Trade figures are from UN COMTRADE, 2002, and are 1996–2000 averages; domestic-market figures are for 2000 from FAOSTAT, 2003. Domestic market demand includes the value of own consumption.



# DOMESTIC AND INTRAREGIONAL FOOD MARKETS

Domestic and intraregional food markets are another potential source of demand for Africa's agricultural products. As Table 1 shows, the current value of Africa's domestic demand for food staples is about US\$50 billion per year, and this figure is projected to almost double by 2015. Only part of this output is actually sold (the rest is consumed on farm), but it still represents a large and growing market that ought to offer real income opportunities. Since Africa currently imports 25 percent of grain products such as maize, rice, and wheat, domestic production could potentially displace some imports.

Despite the promise offered by the production of food staples for domestic and regional markets, economy-wide simulations suggest that without increased demand induced by growth in other agricultural and nonagricultural sectors, even modest growth in grain productivity could depress domestic grain prices, given prevailing agricultural trade policies around the world and poorly functioning markets within Africa. This decrease in prices would benefit consumers and poor people in the region, but it would slow growth in agricultural income. Less than one-third of grain products can reach commercial markets, and linkages between grain and livestock production are extremely weak in most African countries. More promising scenarios would arise if African farmers were given better access to markets and if the productivity of the livestock and grain sectors could be increased in tandem. In the latter case, there would be an increase in the consumption of livestock products as well as grains, and an increase in the derived demand for feed grains. Agricultural income would then grow even while grain and livestock prices fell, leading to gains for both farmers and consumers.

One way for Africa to increase its competitiveness would be to invest in infrastructure and market development to reduce transport and marketing costs. This would reduce costs for a broad range of commodities, promoting trade and reducing domestic prices—with follow-on demand effects. A model simulation indicates that the combined impact of simultaneously reducing marketing margins and improving productivity across traditional and nontraditional export crops and the grain and livestock subsectors appears to hold the most promise for generating growth in income and food consumption. Per capita agricultural income would grow at 1.4 percent

annually, twice the cumulative growth rate generated by targeting each individual agricultural sector separately.

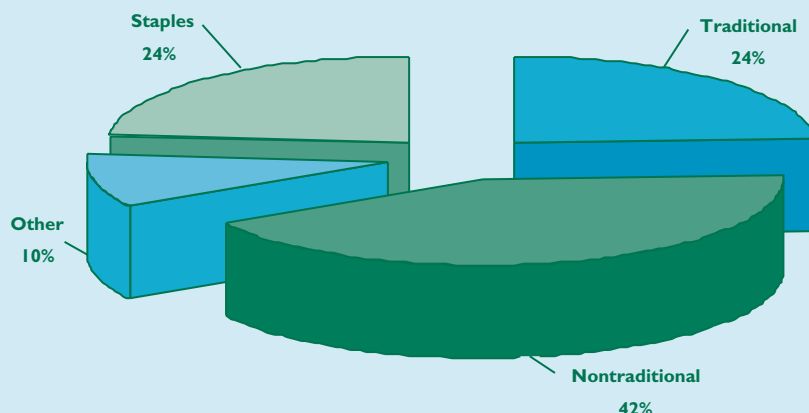
Another way to accelerate growth in domestic demand for foods is by increasing incomes in the non-agricultural sector. Agricultural growth is one avenue for raising nonagricultural incomes because when agricultural incomes increase, rural people have more resources to spend on nonfoods. A second major avenue for increasing demand is through investments that increase productivity in the nonagricultural sector itself. Model simulations show that if productivity increases in both the agricultural and nonagricultural sectors (a two-engine growth strategy), demand for agricultural output can increase much more rapidly. For example, if productivity in the export (traditional and nontraditional) and the food (livestock and grain) subsectors grows at a rate of 6 percent and 1.5 percent per year, respectively, while productivity in some manufacturing and service sectors grows by 4 percent per year, then per capita agricultural income in Africa grows by 3.0 percent per year, per capita food consumption grows by 3.5 percent per year, and per capita agricultural exports grow by 8.0 percent per year more than in the baseline scenario; this is four times the cumulative agricultural growth rate obtained by focusing on the agricultural sector alone. These results show the high payoff of a two-engine growth strategy.

Stimulating intraregional trade in Africa can also help agricultural growth. Intraregional trade is currently small—officially only about \$2.0 billion per year, but there may be at least an equal amount of unrecorded trade. There are significant differences in resource



**FIGURE 2** Intraregional Trade in Sub-Saharan Africa (\$1.9 billion)

(1996–2000 average)



endowments among African countries. Countries with abundant land and scarce labor adjoin others with abundant labor and scarce land, providing the potential for mutually beneficial trade. A recent IFPRI study shows that the greatest potential growth in intraregional trade lies with food staples. For example, consumers have a strong preference for white over yellow maize, yet most trade is in yellow maize and comes from outside Africa. Poor infrastructure and institutional barriers are among the major constraints preventing African countries from exploiting their comparative advantages better. Model experiments show that reducing African countries' own trade barriers and improving market efficiency could significantly increase intraregional agricultural trade and per capita agricultural incomes. In fact, the latter could grow at 0.9 percent per year more than in the baseline scenario.

In addition to domestic demand for staple foods, demand for a diverse range of food products will continue to grow rapidly in Africa's large metropolitan areas. An urbanized population tends to consume more fish and meat, vegetable and animal oil and fats, fresh fruits and vegetables, and prepared foods, offering African farmers important new opportunities for diversification into high-value products for domestic and regional markets. Trade of this type already accounts for 42 percent of the total value of agricultural products traded across borders in the region (Figure 2). Informal cross-border trade occurs as well, so these figures may actually underestimate intraregional commerce. African farmers are well positioned to capture substantial shares of these growing

markets, as illustrated by the recent rapid rise of periurban dairy farming in some East African countries. But competition from high-quality imports, growing market chain integration, and the emergence of supermarkets all place a premium on quality and cost considerations, which can be challenging for many small farmers to meet.

## THE WAY FORWARD

**T**he evidence is clear, both from historical trends and future projections. If Africa is to break out of the vicious cycle of hunger and poverty, it needs to increase agricultural productivity.

Governments and donors must increase their investments in agriculture and technology development and dissemination. However, in today's more integrated world economy, success in productivity-based agricultural growth crucially depends on the expansion of market opportunities. Improving the competitiveness of African agricultural products in international, regional, and domestic markets is the key to expanding market opportunities. While production-side investments that improve productivity and product quality can definitely increase Africa's competitiveness, poorly functioning domestic and regional markets and costly transport systems add enormously to farmers' costs and squeeze them and African traders out of their domestic and regional markets. Despite low productivity, the producer costs of many African agricultural products are among the lowest in the world, primarily because of low labor costs and minimal use of purchased inputs. However, this cost advantage is lost in the marketplace. It is not uncommon for African farmers to receive only 10 to 20 percent of the market value of the products they sell, with the remaining 80 to 90 percent being lost to transportation and marketing costs.

Although many African countries have undertaken market reforms in recent years, these reforms are not sufficient to generate greater supply response and competitiveness. Market liberalization may have removed price distortions, reduced marketing margins, and improved market integration, but most agricultural markets in Africa remain underdeveloped, and most small-scale farmers, especially those living away from roads and markets, have not benefited much from the reforms.

What is needed now is increased market development. High transaction costs and limited development of private trade have forced many small-scale producers back to subsistence modes of farming. Agricultural markets continue to be characterized by limited and asymmetric market information, lack of coordination, inadequate markets for storage and finance, lack of contractual arrangements to transfer risk, lack of smallholder market power, and increased market risk for producers. In domestic and regional markets for staple foods, the role of market institutions in supporting exchange is especially weak, and public policies do little to help informal trade and small-scale traders.

African countries must design appropriate market development policies to address these issues, tailored to country needs. In countries such as Ethiopia, where food staple markets dominate and small traders play an important role, priority should be given to promoting more formal trading through the creation of institutions to set and enforce grades and standards, provide market information, and enforce contracts. In the case of horticulture in Kenya, self-help growers' organizations have enabled small farmers to enter into contractual arrangements that provide more reliable market outlets and to obtain extension advice and seed on credit. The government's recognition and encouragement of the development of a wide range of private marketing institutions, local producer associations, and self-help groups has been important for farmers seeking market access, as has access to credit and other financial services, transport, refrigeration, and storage. Such institutional development, however, does not necessarily fully depend on government; the private sector and nongovernmental organizations have also made important contributions.

Growing competition in export and domestic markets requires that African farmers meet more stringent demands for grades and standards. Moreover, farmers also need instruments to help them manage price and market risks, such as efficient, targeted safety-net programs and market-based risk-management vehicles—weather insurance, for instance, and futures price contracts. Fortunately, new institutional possibilities for these kinds of instruments are emerging. At the same time, if farmers are to become better integrated into today's increasingly competitive markets, they must have technologies to help them reduce production costs and improve quality, postharvest storage, and processing.

For further reading see C. Barrett, T. Reardon, and P. Webb, "Non-farm Income Diversification and Household Livelihood Strategies in Rural Africa: Concepts, Dynamics, and Policy Implication," *Food Policy* 2 (No. 4, 2001): 315–331; X. Diao, P. Dorosh, and S. Mahfuzur Rahman, "Market Opportunities for African Agricultural Products: An Examination of Demand-Side Constraints on Agricultural Growth," Development Strategy and Governance Division Discussion Paper No. 1 (Washington, D.C.: IFPRI, 2003); C. Dolan and J. Humphrey, "Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticulture Industry," *Journal of Development Studies* 37 (No. 2, 2000): 147–76; C. Dolan, J. Humphrey, and C. Harris-Pascal, "Horticultural Commodity Chains: The Impact of the UK Market on the African Fresh Vegetable Industry," IDS Working Paper No. 96, Institute of Development Studies, University of Sussex, U.K., 2002; E. Gabre-Madhin, *Market Institutions, Transaction Costs, and Social Capital in the Ethiopian Grain Market*. Research Report No. 124 (Washington, D.C.: IFPRI, 2002); M. Schapiro and S. Wainiana, "Kenya's Export of Horticultural Commodities," *Public Administration of Development* 11 (1991): 257–261.

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Xinshen Diao ([x.diao@cgiar.org](mailto:x.diao@cgiar.org)) is a research fellow in IFPRI's Development Strategy and Governance Division. Peter Hazell ([p.hazell@cgiar.org](mailto:p.hazell@cgiar.org)) is the director of IFPRI's Development Strategy and Governance Division.



**INTERNATIONAL FOOD  
POLICY RESEARCH INSTITUTE**  
2033 K Street, NW  
Washington, DC 20006-1002 USA  
Telephone: +1-202-862-5600  
Fax: +1-202-467-4439  
Email: [ifpri@cgiar.org](mailto:ifpri@cgiar.org)

[www.ifpri.org](http://www.ifpri.org)



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