BY DINA UMALI-DEININGER

FAR-REACHING CHANGES in domestic and global markets are creating big opportunities for farmers and agribusiness entrepreneurs. With rising incomes, expanding cities, liberalized trade, increased foreign investment flows to developing countries and new technologies, demand is growing for high-value primary and processed products, such as fruits, vegetables, meat, dairy and fish products. Markets for these products are expanding rapidly, driving faster agricultural and nonfarm growth in rural areas, boosting incomes and creating jobs. But these new markets also present challenges: farmers must deliver higher quality products and on time, and they must develop economies of scale in marketing.

In many developing countries, staple foods such as rice, maize, beans and root crops remain a mainstay for most households, many of them poor. The recent jump in world grain prices highlights the importance of staples not only for food security, but also to the overall economic well-being of people in developing countries. The price increases hold promise for smallhold farmers, but obstacles stand in the way of realizing that promise for many.

Staple food markets in developing countries often do not perform efficiently, as they are hampered by poor infrastructure, inadequate support services, and weak institutions, increasing transaction costs and the volatility of prices. How markets for staple foods function deeply affects livelihoods, welfare, and food security, especially for poor households.
Agricultural marketing systems that function well can reduce the cost of food and assure stability of supply, improving the food security of poor and non-poor households. By linking farmers more closely to consumers, marketing systems transmit signals to farmers on new market opportunities and guide their production to meet changing consumer preferences for quantity, quality, variety, and food safety. Efficient markets require good governance and public policy—infrastructure, institutions, and services that provide market information, establish grades and standards, manage risks, and enforce contracts. These demands present continuing challenges in many countries. Even when they are met, however, they do not guarantee equitable outcomes. For this, smallholders may need to build their bargaining power through their producer organizations, assisted by public policy.

**Linking farmers to staple food markets**

**The Domestic Market** for staple foods remains the most important one, by far, in many developing countries, because staples account for a major share of household food expenditures. With growing populations, demand for these staples rises, supplemented by that for livestock feed and, more recently, biofuels in middle-income countries.

At the same time, however, the market for staple foods faces challenges including high transaction costs, waste and loss of stocks, wide marketing margins, poor market integration, limited access to trade finance, and weak regulatory institutions (Figure 1). Improving transport infrastructure, information about access to markets, and promoting the development of commodity exchanges are options that can help reduce the transaction costs in marketing staple foods and other agricultural commodities.

Poor roads and other transport services in rural areas push up marketing costs, undermining local markets and exports. In Africa, for example, less than 50 percent of the rural population lives close to an all-season road. Trader surveys in Benin, Madagascar, and Malawi find that transport costs account for 50–60 percent of total marketing costs.

Improving road connections is critical to reducing these costs and strengthening the links of farmers and the rural economy to local, regional, and international markets. In Madagascar, simulations suggest that a 50 percent reduction in travel time per kilometer on roads would increase rice production by 1 percent.

Market information keeps farmers and traders attuned to the demands and changing preferences of consumers, guiding farming, marketing, and investing. Market information encompasses timely and accurate prices, buyer contacts, distribution channels, buyer and producer trends, import regulations, competitor profiles, grade and standards specifications, postharvest handling advice, and storage and transport recommendations.

In many countries, public market information systems are weak. Information is disseminated slowly, in the wrong form, or too infrequently to be of real use to market participants. Several innovative approaches are being piloted in different parts of the world, building on advances in radio, cellphone, television and internet communications. In India, the private sector is investing in telecommunications infrastructure, such as mobile phone networks and internet-linked rural kiosks, which aid in strengthening market information, extension, and other services to farmers. In West Africa, a public–private partnership set up TradeNet, a trading platform that allows sellers and buyers to make contact over the Internet and by cell phones.

Commodity exchanges offer a fast and low-cost mechanism for discovering prices, trading, and resolving contractual disputes. China, India, South Africa, and Thailand have agricultural futures exchanges to facilitate a wider range of financing and risk management transactions. The South Africa Futures Exchange (SAFEX) offers futures contracts on white and yellow maize, wheat, sunflower, and soybeans.

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**FIGURE 1: LAYERS OF INTERMEDIARIES CHARACTERIZE GHANA’S MAIZE MARKETS**

![Graph showing the layers of intermediaries in Ghana's maize markets.](source: Natural Resources Institute, personal communication 2006.)
Traders throughout southern Africa use SAFEX as a benchmark for pricing physical trades, and countries such as Malawi are looking into import and export contracts for maize through SAFEX.

**Linking farmers to modern supply chains**

**WITH CITY-DWELLERS, including women, earning higher incomes and watching ads on TV, consumer demand is growing for higher-value products, semi-processed and processed products, and convenience foods. Consumers are also focusing attention on food quality and safety. These new markets for higher-value agricultural products, manifest in the rapid growth of supermarket chains, food processing and food service industries in many countries, create new opportunities for farmers. But they also impose more stringent volume and quality requirements. Supermarket buying agents often prefer to deal with larger farmers to reduce transaction costs. But where small farms are the dominant structure, supermarkets have no choice but to get their produce from them.**

Both government and the private sector can help smallholders expand and upgrade their assets and practices to meet the new requirements of supermarkets and other coordinated supply chains (Table 1). Options include investments to increase farmers’ productivity, and to improve their connections to markets. They also include adopting new policies to facilitate trade and develop markets, as well as public–private efforts to promote collective action and build farmers’ technical capacity to meet these higher standards.

Some supermarkets help farmers, as well as improve their own business image, by providing technical assistance, including through extension services by supermarket field staff, as well as support to farmers to acquire inputs and obtain certification, and training to improve product quality and food safety. These initiatives often complement government efforts in the same vein.

In Madagascar and Slovakia, among others, supermarkets and processors have signed production contracts with farmers, covering supply of inputs, credit, and extension services. For many small farmers, these contracts are the only means to acquire needed inputs and support services. By supplying these inputs, along with assured markets and prices, contracting firms share production and marketing risks with farmers. The technical assistance to farmers also generates indirect benefits, as farmers apply the improved farm practices for the contract crops to other crops, increasing their productivity.

**Supermarkets also procure their produce through preferred suppliers or wholesalers who, in turn, conclude contracts with producer organizations or commercial farmer “leaders.” The latter groups supplement their own production with that of individual small farmers, while also providing technical assistance to ensure quality, quantity, and timing of delivery (Box 1). In addition, the preferred supplier or wholesaler often expects the producer organizations or farmer leaders to prepare or assemble the products—washing, sorting, grading,**

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<thead>
<tr>
<th><strong>TABLE 1: PUBLIC AND PRIVATE OPTIONS FOR STRENGTHENING FARMER LINKS TO THE MARKET</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue</strong></td>
</tr>
<tr>
<td>Lack of access to markets</td>
</tr>
<tr>
<td>Weak technical capacity</td>
</tr>
<tr>
<td>Meeting quality standards</td>
</tr>
<tr>
<td>Meeting contract conditions</td>
</tr>
<tr>
<td>Farmer exposure to risk</td>
</tr>
</tbody>
</table>

*Source: WDR 2008*
An unfinished agenda

Many producer organizations do not have the capacity to give their members the technical assistance needed to comply with quality, quantities and timing. Well-targeted technical and financial support from donors, governments, or nongovernmental organizations is often needed for producer organizations to overcome these hurdles and become professional entrepreneurs. Such support should be backed by a long-term commitment, but also include a clear phase-out strategy that leaves the organizations and their networks of farmers able to survive on their own.

An unfinished agenda

An UNFINISHED AGENDA remains to improve the performance of the marketing systems in developing countries to enable farmers—especially small farmers—to take advantage of opportunities in growing markets for their produce. Public investments to expand access to rural infrastructure and services—such as rural roads and transport services, physical markets, telecommunications, and electricity—will be critical to reducing transaction costs and physical losses and to enhancing transparency and competitiveness in traditional markets. Technical and institutional innovations that reduce transaction costs also show promise, especially the wider use of information technologies—mobile phones, the Internet, and commodity exchanges—and vertical coordination arrangements with individual farmers or producer organizations.

International experience highlights the roles of the government and the private sector to meet the higher quality and volume standards of modern supply change. A priority area for public action is to establish an enabling policy envi-


Linking Small Farmers continued from page 34

evironment, including effective competition policy, contract enforcement, setting grades and standards, and enacting and applying food safety legislation. In addition, many countries need to develop credible public institutions to enforce regulations to guard against uncompetitive behavior in the marketing system.

Public-private partnerships can also play an important role in fostering research and capacity-building to develop and sustain sound agricultural practices that meet new domestic and international food safety standards, and help farmers adopt them.

A collaboration between strong producer organizations and the private sector, built on their shared interest in achieving scale and market power, will be critical. The private sector can help smallholders to participate as partners in modern supply chains through innovative vertical coordination arrangements with producer groups. It can also facilitate farmer organizations to access credit, inputs, extension, and certification and training in good agricultural practices to meet quality, food-safety, and international sanitary standards. The producer organizations offer the vital link to farmers.

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