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## Smallholder Market Access

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Increased attention and resources from governments and donors have been concentrated on helping smallholders gain access to markets in developing countries as a means to increase their incomes and in order to help their communities and countries become more food secure. Before describing the trends, impacts and US policy implications of smallholder market access, a few relevant definitions are first reviewed.

Despite significant migration to urban centers in the last several decades, estimates show that  $\frac{3}{4}$  of the world's poor live in rural areas. Most of these people rely on agriculture as their primary livelihood, producing food for their own consumption and sometimes selling excess production to markets. These **smallholder farmers** (or **smallholders**) commonly employ mostly household labor to farm less than two hectares of land. A **market** refers here either to a physical market, where producers sell directly to traders or consumers, or to the suite of transactions between producers and agents along a **supply chain**. A supply chain encompasses all the actors active in delivering a (possibly transformed) good from the primary producer to the domestic or international consumer. The supply chain encompasses farmgate aggregators, wholesalers, processors, manufacturers and retailers within the **agrifood industry**, which includes vegetables, fruits, grains, flowers and animal products, among other commodities.

### **Developing Country Agrifood Industry Trends**

The landscape of the agrifood industry has changed significantly over the last sixty years, both in the US and abroad. In the developing world, this transformation can be described by two general phases. In the first stage, occurring roughly between the 1950s and 1980s, governments commonly organized food supply chains into state-led, large-scale operations,

moving away from small-scale production. For example, marketing boards, largely prevalent in developing countries until the 1980s, were state-controlled or state-sanctioned entities with control over the sale or purchase of agricultural commodities. Marketing boards would commonly fix prices and absorb all surplus with well-established buying networks and storage facilities throughout the producing regions, thereby providing farmers with a guaranteed market, albeit often at prices below import parity. Because they reduce competition and induce large inefficiencies, marketing boards have largely been eliminated.

The second stage, since the 1980s and continuing today, is characterized by liberalized rules of trade and foreign direct investment, as well as improvements in logistics and infrastructure, which have spurred foreign and domestic private investment, especially in the processing and retail segments of agrifood supply chains. These trends, partly driven by broader income growth and urbanization, have led to the rapid emergence of supermarkets, convenience stores and fast food chains in the developing world.

In addition to these general trends, the last decade has also witnessed an increase in structured public sector demand for locally and regionally procured (LRP) food aid, a procurement tool that can increase the timeliness and reduce the cost of emergency food aid deliveries. For example, the LRP share of World Food Program (WFP) deliveries reached 50% in 2009, up from 10% as recently as 1999. Since launching a five-year pilot project called Purchase for Progress (P4P) in 21 countries in 2008, WFP estimates that in 2010 it purchased 14% of its food from smallholders. Since the 2008 Farm Bill authorized USDA to begin a LRP pilot program, and a sequence of supplemental appropriations acts authorized USAID to finance LRP, the US

government has quickly become the world's largest donor supporting LRP.

At the same time, there is growing demand by consumers and regulators for information regarding the sustainability attributes of products. Purchasers seek additional product information including the economic gains to historically disadvantaged groups ("fair trade"), energy use in delivery, food safety and environmental contaminants used. Leading retailers are developing multi-dimensional sustainability indices that aim to incorporate these different environmental, economic and social attributes. To date, there is limited consistency, however, in establishing such indices and little understanding of how consumers might view the tradeoffs among social, environmental, nutritional and economic product attributes.

### ***Smallholder Market Participation***

Growing private investment in modern agrifood supply chains, an increase in structured public sector demand, and an increase in consumer social awareness have led to a restructuring of the production, wholesale, processing and retail sectors in most middle-income and many low-income countries. This restructuring has had several important implications for smallholders.

Smallholder participation in modern supply chains is difficult to generalize because their decision to participate depends on crop-, firm- and household-specific attributes. More specifically, a household's decision to participate in a market will depend on several factors, including the market prices of the goods the household consumes as well as the goods it produces, the transactions costs (including, for example, transportation costs) associated with buying and selling goods, the available production technologies, other sources of revenue and the local infrastructure. Thus, while some households in a region may be net sellers of a certain crop, other households may be net buyers if, for example, they do not have access to the same production technology or inputs. Indeed, throughout the world most smallholder producers are actually net food buyers, not net food sellers. Therefore, pricing policies that aim to increase prices in an attempt to induce greater production can harm the majority of smallholder households that on net buy the same product.

Meanwhile, the sourcing decisions of wholesalers, processors and retailers also tend to vary depending on the commodity and region. In some cases, wholesalers or processors source predominantly from larger farms or even vertically integrate to run their own farms. For example, a study in Kenya shows that in the 1990s the fresh vegetable export sector sharply reduced their purchases from small farms to 18%, sourcing 40% from their own farms and 42% from large commercial farms. However, in other cases, sourcing from small farms is more common and seen as advantageous. Sourcing from small farmers can be less risky for processors or wholesalers because they do not have to rely solely on one or a few suppliers. Furthermore, small farmers may be more willing and able to perform highly labor-intensive field management practices that are difficult to perform on larger plots.

Smallholder production is often limited by production inputs such as fertilizer, water or credit to buy tools or seeds, so ***resource providing contracts*** have emerged between wholesalers, processors or retailers and small farmers. Under such arrangements, buyers give smallholders access to credit, farm inputs or extension services in exchange for a commitment to sell the firm a pre-specified quantity of their output. These contracts can make smallholders more competitive by relaxing key input or informational constraints. Under some contract farming schemes firms agree to buy products at a pre-specified price, without necessarily providing farmers with inputs or other resources. These ***forward contracts*** insure smallholders against uncertain future prices. Partly in order to attract either sort of contract, smallholders sometimes organize themselves into cooperatives or other groups in an attempt to make themselves more competitive vis-à-vis larger commercial farms or to give them greater bargaining power with firms.

### ***Smallholder Participation and Welfare Effects***

Modern supply chains favor those small farmers that can produce consistent volumes of a satisfactory quality. The smallholders capable of supplying this quantity and quality tend to have reliable access to irrigation and/or greenhouses, and thus are typically better off than the average smallholder. Because wholesalers or processors

aim to minimize their transaction costs, smallholders closer to roads or those with their own transportation means are typically also favored. And those farmers enrolled in NGO smallholder improvement projects likewise exhibit a greater propensity to join supermarket supply channels.

Most careful evidence to date finds that, even controlling for the initial advantages enjoyed by those who participate in modern agrifood value chains, smallholders suppliers tend to enjoy higher net earnings per hectare or per unit of output marketed, although this is by no means universal nor uniform. These benefits commonly arise from better access to agricultural inputs and improved technologies, steadier demand and less volatile prices through forward contracting, as described in the boxed case study on Nicaragua.

### ***Supplying supermarkets in Nicaragua***

A recent study of smallholder suppliers to supermarkets in Nicaragua found significantly positive effects on farmer incomes, productive asset holdings and access to irrigation from channel participation, with larger effects accruing to farmers with longer tenure in the supply chains. The main benefits appear to have come from reduced price risk exposure as the supermarket supply contract fixed both minimum and maximum prices the buyer would pay, thereby safeguarding growers against catastrophic price collapses. Supermarket channel participation was not equally available to all farmers, however. Geographic and natural resource endowments, such as reliable access to year-round water sources or proximity to tarmac roads, heavily influence supermarkets' decisions as to the specific communities from which they procure and even the specific farmers within the community to whom they offer contracts.

Participation in modern supply chains can nonetheless expose small famers to increased risk of catastrophic loss. Especially if farmers reallocate land and other scarce inputs to an export crop, they become vulnerable to disruptions due to factors outside local market control, such as changing foreign consumer preferences, exchange rates or trade barriers. In Ghana, for example, shifting European preferences toward a

new pineapple variety combined with local value chain saturation to spark a market collapse that especially harmed smallholder growers who had relied on informal, oral contracts that were readily breached by buyers. The collapse drove many pineapple growers from the value chain, especially more recent entrants. A similar story emerges from Kenya, as recounted in the text box.

### ***Baby corn and French bean producers in Kenya***

A package of credit, extension and marketing support services offered through an NGO project, DrumNet, helped induce smallholders to grow and sell baby corn and French beans for export, leading to significantly higher farmer incomes. However, the epilogue of the study notes the subsequent catastrophic effect on farmers when their export crops could no longer meet the new Euro-Retailer Produce Working Group Good Agricultural Practices (EurepGap) requirements established in 2005. The shock cost many farmers a season's harvest and drove them back to growing staple crops.

### ***US Policy Implications***

US agricultural assistance, development assistance and trade policies affect smallholder market access in three main ways: through food aid, trade policies and economic growth and development.

Food aid distribution can affect market access in several ways. If not carefully planned and timed, food aid deliveries into a market can cause prices to fall, become more volatile, or both, creating disincentives for smallholder producers who might otherwise supply the market. In principle, new local and regional food aid procurement programs could help stimulate smallholder market access. These effects must be thought through and studied as the Congress reauthorizes US food aid programs with the next Farm Bill.

Trade policies affect the international demand for and supply of agrifood products potentially produced and/or consumed by smallholders. Beyond the familiar cases of import tariffs or quotas that protect US producers at the expense of exporting smallholder producers or domestic producer subsidies that increase US output and drive down world prices, key policies concern

nontariff trade barriers associated with food safety and quality standards. Higher standards often make it more difficult for smallholders to participate in modern agrifood value chains.

Development assistance that helps promote economic growth and poverty reduction, enhance agricultural productivity, improve infrastructure and promote sociopolitical stability can help foster smallholder market participation. Much of the rapid evolution in agrifood value chains in the developing world traces back to rapid income growth, urbanization, improving communications and road networks, and increased local farm yields that both stimulate local market demand for agrifood products and facilitate increased sourcing from rural producers.

### **Conclusion**

The majority of the world's poor work in agriculture. They typically benefit from participating in modern agrifood value chains. US policies concerning agriculture, development, food aid and trade affect the conditions under which agrifood marketing channels emerge and adapt, the extent to which they engage smallholder producers, and the risks to which growers are exposed.

### **Further Recommended Reading**

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