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6-5

# **Small-Farm Access to High-Value Horticultural Markets in Kenya**

By:  
**Joseph Dever**

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Edited by:

Per Pinstrup-Andersen ([globalfoodsystem@cornell.edu](mailto:globalfoodsystem@cornell.edu)) and Fuzhi Cheng  
Cornell University

In collaboration with:

Søren E. Frandsen, FOI, University of Copenhagen

Arie Kuyvenhoven, Wageningen University

Joachim von Braun, International Food Policy Research Institute

## Executive Summary

The goals of poverty alleviation and rural agricultural development have long been elusive among poor Sub-Saharan Africa countries. Rural areas still lag behind urban ones in economic growth, and formerly lucrative export cash crops such as coffee and tea are no longer as profitable to the average small farm. Rural population growth and environmental degradation have made the challenge of developing the agricultural sector even more difficult.

It is in the context of these challenges that many have championed the expansion of the export horticultural sector to provide a significant boost to the rural economy and permit the participation of the small farm sector. In Kenya the development of the export fresh fruit and vegetable (FFV) and flower industries has been a clear success in private sector-led industry development, with significant gains accruing to participants at all levels along the FFV value chain. As the sector has grown over the past 20 years, changes in the industry have resulted in significant consolidation at all levels and in the exclusion of small farms from the industry, threatening the sector's ability to deliver poverty alleviation to its most vulnerable participants.

Many factors led to the consolidation of the export FFV industry in Kenya, including (1) the increased involvement of European Union (EU) supermarket chains in procuring FFVs directly from farms in Kenya, (2) competitive pressures to cut costs and increase supply chain efficiency among exporters and importers, (3) increased consumer and regulatory demands for more stringent production and food safety standards, and (4) the inability of small farms to gain access to credit, market information, cost-effective transportation, and drip irrigation technology necessary for high-value market participation. As small farms, traders, and exporters have been forced out of the export sector, the supermarket importers, commercial exporters, and large commercial farms that remain have strengthened value chain governance. There may still be a role to play for smaller, less well capitalized, and less management- and technology-intensive farmers, but barriers to successful participation by these entities remain high.

Many in the international development and humanitarian fields are concerned about the exclusion of poor, small farm households from high-value market opportunities and are seeking ways to increase participation of small farms and to encourage more broad-based dispersal of the benefits and successes of this industry. Recent studies have shown that the rural poor, particularly landless families and young women, can benefit greatly from participation as labor on farms or in processing sheds (McCulloch and Ota 2002). In the interest of maintaining competitive participation of small farms in the sector, others have promoted the benefits of contract farming practices and the organization of small farms into farmer marketing associations or cooperatives (Masakure and Henson 2005).

Thus far, the Kenyan government has not been heavily involved in regulating or promoting the export FFV sector. It could play a greater policy role in order to strengthen the global competitiveness of the industry and to enable greater participation of the rural poor in this sector, with the ultimate goal of increasing the broad-based benefits of the export FFV sector for economic growth and poverty alleviation.

Your assignment is to make recommendations to the Kenyan government on what policies should be pursued to enable the FFV export industry to make a greater contribution to the alleviation of rural poverty in Kenya.

## Background

### The Need to Increase African Exports

Over the past three decades Sub-Saharan Africa's (SSA) share of world exports declined by 60 percent, from 3.1 percent of world exports in 1955 to only 1.2 percent in 1990. In the 1980s developing-country governments encouraged the expansion of export-oriented agricultural sectors for several reasons: (1) as a means to accelerate rural economic development, (2) to promote poverty relief in rural areas, and (3) in response to the pressures to liberalize their economies through export-led growth, as part of the structural adjustment

programs encouraged during that period. Included in these efforts were measures to expand the non-traditional agro-export sector, based partly on the declining terms of trade for traditional developing-country export crops such as coffee, tea, cocoa, and cotton. Africa's proximity to the EU and Middle East, along with strong air freight transportation linkages from African capitals to cities in the EU, combined with Africa's comparative advantages of climate and low wages, created strong potential for increased export earnings in this sector (World Bank 2005).

### The Potential for High-Value Food Products

Although international trade in staple crops was growing only at 2 percent a year, trade in high-value agricultural products was growing at 7 percent per year in the early 2000s (World Bank 2005). These nontraditional exports include seafood, processed food, cut flowers, and fresh fruits and vegetables (Mannon 2005). Defined more broadly to include meat products such as poultry, pork, and fish, as well as fruits and vegetables, production of high-value food products (HVFPS) in the developing world is growing at 5–8 percent a year, with developing-country consumption of these products increasing at 3 percent a year (Delgado et al. 2001). This case study will focus exclusively on fresh fruits and vegetable exports, which are characterized by intended consumption as fresh products, are highly perishable, and possess a high value-to-volume ratio (World Bank 2005).

The expansion of the FFV sector promised increased farm income through access to international markets and added nonfarm wage options in rural areas, as well as rural economic diversification. A few SSA countries, including Côte d'Ivoire, Kenya, South Africa, Uganda, and Zimbabwe, have experienced sustained growth and expansion in export earnings from nontraditional agricultural exports (World Bank 2005). In these countries, the FFV export sector grew very rapidly in the 1980s and 1990s, with smallholder involvement not increasing substantially until the mid- to late 1980s in some countries (Kenya) (Dolan and Humphrey 2000) and not until the early 1990s in other countries (Zimbabwe) (Masakure and Henson 2005).

### Market Size and Growth Potential

The EU export market for FFVs is large enough to have made a significant contribution to the gross national product (GNP) of several African countries, but it is quite small compared with total EU FFV consumption and likely saturated after two decades of rapid growth and consolidation. Most of the FFVs consumed in Europe are produced there or in non-EU Mediterranean countries, and unless the economies of those countries move away from agriculture, there are not likely to be significant new opportunities for African producers to enter this market.

Compared with the 50 million metric tons of vegetables produced in the EU each year, only 1 million tons are imported (and the same amount exported). Of this amount imported from outside the EU, 43 percent comes from Africa, 37 percent from Asia and Latin America and the Caribbean, and 20 percent from non-EU Europe. Of the 430,000 metric tons (43 percent) coming from Africa, 262,000 tons come from Morocco alone, followed by Egypt (58,000 tons), Kenya (46,000 tons), South Africa (18,000 tons), and other countries (42,000 tons). Fruit imports represent a significantly greater portion of EU consumption, with SSA accounting for a far larger percentage of these imports than other regions of the world. Of the 7.5 million tons imported, 1.7 million come from SSA, with South Africa (900,000 tons), Morocco (266,000 tons), Côte d'Ivoire (370,000 tons), and Cameroon (200,000 tons) leading the pack. Thus, although Africa accounts for only a very small portion of the EU horticultural market (2 percent overall for vegetables and 24 percent for fruit), this market still represents a significant trade opportunity for African countries (World Bank 2005).

### The Kenyan Horticulture Industry

The importance of agriculture to the Kenyan economy cannot be overstated. Seventy-five percent of the total population is involved with farming, and 67 percent of the population lives in rural areas. The horticultural sector has its roots in World War II, when Kenyan farmers grew significant amounts of FFVs and other agricultural products for the Allied troops stationed in East Africa. In later decades coffee and tea became dominant export crops, until the growth of tourism and the decline of global coffee prices diminished their importance (Seo 2006).

Between 1963 and 1991, horticulture exports from Kenya rose by 12 times in tonnage and 40 times in value (McCulloch and Ota 2002). Between 1991 and 2003, Kenya's fresh vegetable exports increased from US\$23 million to US\$40 million (Jaffee and Henson 2004). By 1995 fresh produce exports were the third-largest source of foreign exchange earnings for Kenya (Mannon 2005). Although FFVs are still the fastest-growing agricultural sub-sector in Kenya today, they are now the fifth-largest export earner, accounting for 13 percent of gross domestic product (GDP) in 2003 (Lenne et al. 2005). Kenya is the largest exporter of vegetables to the EU (Dolan and Humphrey 2004).

The growth of the industry was fueled by a small number of Kenyan Asians who had horticultural production and marketing expertise and contacts with Asian ethnic markets in the EU. This expertise, combined with Kenya's agroclimatic zones and favorable climate for year-round production, led to the rapid growth of the industry. Vegetables exported from Kenya include French (green) beans, runner beans, snow peas, snap peas, okra, bitter melon, and chilies (Seo 2006).

Large exporters with sizable financial resources entered the market in the 1980s, along with a significant number of small entrepreneurs and farmers. By the early 1990s small farmer participation in the industry had peaked and then faced a steady decline as production was consolidated among exporter and commercial farms (McCulloch and Ota 2002). Although the FFV processing sector has not grown as much as the FFV export sector, additional value has been added to the sector by increased processing of fresh produce, including cutting, washing, and packaging of FFV export products. Indeed, the Kenyan industry has been able to exploit its cheap labor and ability to add value to FFV products in order to remain competitive against other exporting countries with much lower air-freight costs (Jaffee and Henson 2004).

Despite its success, the Kenyan FFV industry as a whole faces barriers to continued participation in the EU and other export markets, and these barriers affect constraints to small farms seeking access to this sector. On the industry level, competitive challenges include transport costs and product perishability issues, increasing quality standards from EU buyers, and severe price pres-

ures from competitors in other countries. Additional barriers to small farm participation include lack of access to credit, irrigation, seed stock for desired varieties, and market information on prices and quality requirements; high transaction costs for exporters sourcing from many producers; and EU food and phytosanitary standards. Although many of these constraints and challenges have been present for decades, the great increase in public awareness of and concern about food safety has recently led to ever more stringent standards for imported food products (Jaffee and Henson 2004).

## **Policy Issues**

### Value Chain Consolidation

As supermarkets started to bypass the wholesale market and work directly with exporters in the early to mid-1990s, they shifted quality control and monitoring down the chain to exporters while increasing requirements for packaging, processing, and traceability (Delgado et al. 2001). "The basic actors remained the same—African growers, African-based exporters, UK importers, and the UK supermarkets—but the number of actors, the distribution of functions between them, and the relations between them changed" (Dolan and Humphrey 2000, 157). Meeting these demands required that exporters invest heavily in drip irrigation, cold storage, and packing sheds, leading to the exclusion of many small and medium exporters, some of which started to grow produce for the larger exporters. By 1999, 75 percent of all exports from Kenya were controlled by several firms (Dolan and Humphrey 2004).

### Supermarket Competitive Strategies

The consolidation along the value chain was driven by many factors but principally by changing supermarket strategies concerning product differentiation, increasing consumer concern about food safety and labor standards, and increased EU quality control standards (Dolan and Humphrey 2000). Although consumption has stabilized in relation to volume, owing to market saturation by the early 2000s, the value of food consumed continued to increase as additional improvements were made to processing and packaging, including pre-packaged and ready-to-cook products and increased year-round consumption of typically seasonal products (World Bank 2005). Sales of



ready-to-eat, prewashed salads, for example, increased by 34 percent in value between 1994 and 1996 alone. Although price is still a factor in this sector, the power has shifted from activities that lower costs to those that add value in the chain (Dolan and Humphrey 2004).

FFVs have long been a highly profitable and competitive segment of supermarket offerings, and they have become an even more important competitive tool among supermarket chains, to the extent that FFVs became a “destination category” for which consumers will switch stores. The competitive strategies in this more recent supermarket-driven value chain include quality, consistency, variety, processing (cut, chopped, or washed), product combinations, packaging (often at the farm level), reliability (to meet the needs of just-in-time supermarket warehouse operations), and price (which became important only in the late 1990s after market shares reached the saturation point) (Dolan and Humphrey 2000).

#### Tariff Trade Barriers to FFV Imports to the EU

The EU has imposed tariff-based trade barriers to importing FFVs, designed mainly to protect domestic temperate fruit and vegetable producers during the growing season. They are far less restrictive for tropical fruits and vegetables. Recently, a number of EU countries have taken additional measures to promote domestic horticultural industries by increasing tariffs, adding new tariff quotas, and occasionally introducing outright bans on FFV imports. EU tariffs are low (often under 8 percent) or seasonal on temperate and tropical fruit but more significant on vegetables (9–13 percent) (Hallam et al. 2004).

Although these tariff rates are significant on paper, the EU’s General System of Preferences (GSP) and Everything But Arms (EBA) initiatives provide relief from these tariff rates. The seasonal nature of many tariffs, combined with the extension of tariff concessions, allows most developing countries to export FFVs while paying low or no duties on most products. The maze of nontariff sanitary and phytosanitary (SPS) restrictions imposed by importing countries and the private standards imposed by global supermarket food retailers may pose a more significant challenge to FFV exports to the EU (Hallam et al. 2004).

#### Changing Food Safety Standards

Increased demand for nontraditional and year-round FFVs was driven by heightened consumer concern over healthy eating, related to both healthy foods and food sanitation and quality. In 1990 the UK passed a Food Safety Act requiring that retailers be accountable for quality issues related to food manufacture, transportation, storage, and preparation. EU Directive 91/414/EEC stipulated that EU member countries must monitor pesticide residues on fresh produce. Globally, between 1995 and 2000, approximately 270 SPS restrictions were imposed on imported FFV products (Hallam et al. 2004). These increasingly complex safety standards created challenges for existing suppliers while raising the bar for new entrants at the country, exporter, and farm level (Dolan and Humphrey 2000).

Over and above the governmental standards imposed by the EU, private sector importers are imposing additional standards both to protect their safety reputation and to differentiate themselves from competitors. More recently, EUREPGAP standards for fruits and vegetables have represented an attempt to combine a plethora of private sector standards, although buyers impose many requirements informally through individual supply chains (Jaffee and Henson 2004). In addition, supermarkets developed a perception that smallholders could not meet production process controls such as safe handling and pesticide regulations, and exporters became concerned about the cost of monitoring a large number of smallholders for compliance with increasingly strict regulations (Dolan and Humphrey 2000).

Although tougher standards can be viewed as catalysts for strengthening and improving the competitiveness of developing-country agricultural supply chains, they are also viewed as nontariff trade barriers to FFV imports. During the Uruguay Round of multilateral trade negotiations, exporters voiced this concern, leading to the adoption of the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) to provide rules for creating SPS measures while minimizing their trade-distorting effects (Jaffee and Henson 2004).

### Exclusion of Small Farms

As the supermarket industry started working more closely with fewer exporters, they also turned away from smallholders and started working with fewer, larger commercial farms, significantly changing the structure and governance of the export sector. Increased demands from supermarket chains for supply consistency, quality certifications, and product traceability made it increasingly difficult for smallholders to participate in the horticultural export market (World Bank 2005). Although the growth of this sector did create many direct sale opportunities for smallholders in the late 1980s and early 1990s in countries such as Kenya and Zimbabwe, the market share of smallholders and small export firms declined in the 1990s as the industry became dominated by fewer and larger supermarket chains, exporters, and farms (Dolan and Humphrey 2004). In 1992, for example, 75 percent of fruit and vegetables were grown by smallholders, but by 1998 the four largest exporters sourced only 18 percent of their product from smallholders (Dolan and Humphrey 2000).

### Competitive Advantages and Disadvantages of the Small-Farm Sector

Small farms maintain a distinct comparative advantage over larger farm operations in the production of certain seasonal and labor-intensive crops. Benefits to exporters from buying from smallholders include low investment requirements, reduced market risks from growing produce themselves, and cost-effectiveness due to the low labor costs of engaging small farmers in the production of delicate or labor-intensive crops (Lenne et al. 2005). Larger commercial farms utilizing small farms in outgrower schemes have the ability to quickly expand or reduce production based on market demand without needing to acquire additional land.

Small farms, however, face significant constraints as well. In the face of intense cost competition, buyers incur significant transportation-related transaction costs in sourcing products from a large number of small farmers. In addition to traditional constraints such as limited access to capital, technology, and inputs, small farmers do not have access to information about market requirements for entry into high-value markets, such as production practices and handling and quality standards. One study identified several specific constraints among farmers producing kale for the Kenyan market (either at a

higher price to supermarkets or in local spot markets). These constraints included (1) a lack of credit to purchase fertilizer and make capital investments in drip-irrigation systems mandated for supermarket sales, (2) the high cost of transportation to supermarkets, (3) cash flow constraints from infrequent payment by supermarkets (often monthly), and (4) lack of marketing experience or even aversion to marketing activities (Neven et al. 2006).

The risks to small farmers entering a high-value FFV market are also substantial. Just as buyers have no means of enforcing written or verbal contracts with farmers, small farmers have no recourse to force buyers to honor their agreements to purchase a farmer's output. There are also production risks with many FFV crops, such as snow peas and snap beans, which are not easy to grow and do not have a significant domestic market. The high quality standards of the export industry means that a large percentage of the crop could be rejected for export, leaving farmers with an unmarketable crop that, if not consumed locally, would often be fed to animals (Mannon 2005). In addition, not all smallholders participating in this market have the same level of support from exporters or lead firms. Farmers who are responsible for transporting produce to the processor or exporter and who also suffer from poor roads or unreliable transport are unable to maintain the quality required for the supermarket export chains (Dolan and Humphrey 2004).

### Changes in Traditional Horticulture Markets

A recent World Bank study suggested that traditional spot market structures are in fact obsolete and of no utility for producers and exporters wanting to participate in the export market. This 2005 study suggested that spot markets are "excuse" markets, where producers are forced to sell when faced with lack of market information, high quality standards, and forward contacts in the supply chain. Middlemen-controlled markets are nontransparent and opportunistic and create substantial chain bias that drains margins and promotes uncontrolled distribution. As more producers are linked with exporters through direct sourcing (and contracting) from importers and transnational supermarket buyers, the spot market controlled by middlemen will diminish and become much smaller (World Bank 2005).

Despite the large size of the domestic horticultural sector in Kenya, it is by all measures a less productive, less efficient sector than the export horticulture industry. The domestic industry suffers from significant technical constraints, including underuse of high-quality improved seed, poor adoption of improved production practices, and fragmented markets. Owing to transportation challenges and the unwillingness or inability to organize into marketing cooperatives, many farmers sell their FFVs at the farm gate at whatever price they are offered by middlemen—often at break-even prices (Neven et al. 2006). Even in the peri-urban areas near Nairobi, these markets are characterized by low prices during peak season, poor quality, high-cost transport, poor market information, and poor organization: “it is a highly inefficient system in striking contrast to the efficient, dynamic, and internationally competitive export-marketing system” (Lenne 2005, 230).

### Off-Farm and Farm Employment

The growth of the horticultural export sector has created hundreds of thousands of jobs for semi-skilled and unskilled Kenyans, often young females. Despite the concerns over gender discrimination in this sector, some studies have shown that wages and benefits for those employed in this sector are better than those involved in similar tasks outside the sector (McCulloch and Ota 2002). Another study in the Senegal FFV export industry showed that participation in the sector has strong, positive effects on poor rural households and that the benefits are greatest for those involved as farm labor, not as primary producers (Maertens et al. 2007).

In a study involving more than 250 households in urban and rural Kenya, McCulloch and Ota found that households involved in the export horticulture sector in any way are better off than those not involved with the sector, especially in rural areas. The rural and urban poor are involved in this sector through farm-based FFV production, as labor on other farms, and in weighing, grading, cutting, and packing activities. The study found that small farms engaged in export horticultural production were better off than those working as farm or processing labor, who were in turn better off than rural farms not involved with the sector (McCulloch and Ota 2002). Nonetheless, the study was not able to determine if participation in the sector was the cause of relatively high incomes

among “horticultural farms” or if these farmers were able to participate in the industry because of their higher incomes before participation.

Despite the documented benefits of participation in the export FFV sector for rural and urban poverty, there are significant labor concerns associated with the temporary, seasonal, casual, and female characteristics of the work force. Women make up the majority of seasonal workers and face long work hours under difficult and hazardous conditions, primarily related to contact with pesticides. The female workforce also faces significant incidence of sexual harassment and discrimination if pregnant. Efforts are being made to develop and enforce workplace codes and standards, such as the Kenyan Horticultural Ethical Business Initiative (HEBI), although a broad range of actions including national legislation, improved international labor standards, and a multistakeholder approach will be necessary to make significant progress in farm labor conditions (Smith et al. 2004).

### Benefits and Drawbacks of Contract

#### Farming

One strategy that can increase or sustain smallholder involvement in the FFV sector is expanded use of contract farming schemes. “For such [smallholder] producers to remain engaged in growing high-value export markets, they must be able to contract forward with the main outlets for their produce, and must be organized in ways that reduce the risks that either party will be unable to complete the terms of their contract” (Delgado et al. 2001, 2). The main benefit and motivation for smallholder farmers to participate in contract farming is increased household income, which is sometimes three to five times greater than before the horticultural export market was available to these smallholders (Lenne et al. 2005). The second most important reason is price risk management (Masakure and Henson 2005).

In detailed interviews with several hundred Zimbabwean contract farmers, Masakure found that the most important motivators for smallholders to enter into contract production with exporters were (1) to earn extra income, (2) to avoid poor transport infrastructure, (3) to reach a guaranteed market for crops, (4) to obtain a reliable source of inputs and credit, (5) to acquire knowledge for new



or current crops, and (6) to earn a guaranteed minimum price. Farmers in this study even viewed their involvement with contract farming for the export sector as a means to acquire skills to improve production of crops for local markets. Thus, contract farming provides small farms with a package of benefits that cannot be matched by the public sector and traditional domestic markets in many African countries.

In many contract farming schemes, the buyer arranges for the farmers' access to credit, inputs, technical assistance, and the desired seed varieties. Typically, the lead firm (buyer) provides seed, fertilizer, and agrochemicals to farmers, and the costs of these items are deducted when the crop is sold to the lead firm (Jaffee 1994). Given these motivations for engaging in contract farming for the export market, this practice can be viewed as a means for farmers to avoid weak, even failed, local market institutions (Masakure and Henson 2005).

One common problem with contract farming occurred when farmers broke their contracts with buyers by selling produce on the spot market (or to other exporters) for higher prices. While somewhat understandable from the farmer's perspective, the losses and supply chain difficulties exporters encountered from this practice was one of the factors that led to reduced dependency on smallholder contract farmers to provide produce for the export market. In addition, exporters sometimes actively and aggressively encouraged this behavior when they had difficulty meeting their contracted export volume quotas, often sending trucks through rural areas to "poach" produce from farmers contracted to competing exporters (Mannon 2005).

### Domestic Supermarket Industry Opportunities

In a review of the horticultural export market, it is also important to understand the size and importance of domestic and regional markets, since almost all small farms sell to both markets. One study of Kenya's vegetable export system suggested that it could be a role model for the domestic vegetable production system in that country, demonstrating the benefits of improved, disease-resistant seed varieties, better delivery systems for agricultural inputs and technical assistance,

and more effective transportation and marketing systems (Lenne et al. 2005).

Despite the huge growth and success of the export vegetable sector in Kenya, only 5–10 percent of the total volume of FFV produced is exported, and the rest is consumed domestically. As of 2001, 70–80 percent of marketable produce was grown by smallholders. Between 1997 and 2001 the value of vegetables sold in local markets was more than four times greater than that exported, and local markets generated more absolute value than export markets. By 1995 the growing, indigenous supermarket industry in Kenya itself was already purchasing half the volume of exported FFVs (Neven and Reardon 2004), making this sector a significant new market opportunity for farmers producing high-value FFV products. Many of the same barriers that prevent small farms from participating in the export FFV sector, however, are already limiting or reducing their access to the high-value Kenyan supermarket sector.

## **Stakeholders**

### EU Supermarkets

EU supermarkets are the ultimate destination for the majority of Kenyan FFV exports to that region. In the 1970s and early 1980s they obtained FFV produce from Kenya through a network of exporters and wholesale market importers. When EU supermarket chains started entering the FFV market more directly in the 1980s, without going through exporters or importers, they did so without being able to specify product, process, or logistical parameters along the supply chain and with little control over quality or the timing of shipments (World Bank 2005).

Rather than continue to deal with producers at arm's length in the undifferentiated, wholesale spot market, during the 1990s multinational supermarket and food-processing companies developed tighter control over and stronger linkages with firms in their supply chains, in what was becoming a buyer-driven global value chain (Dolan and Humphrey 2004). Supermarkets became the new legislative power in the sector; supermarket standards dictated what FFVs were produced and how, and these standards overruled and often exceeded increasingly restrictive EU legislation. "This new power also provided opportunities for those having



the capacity to respond to supermarket chains in their quest for reliable sources, chain standardization, lowest trade margin, highest retail margin, maximum reliability, and [increased] supply chain management” (World Bank 2005, xii).

### Exporters and Importers

In the 1960s and 1970s the majority of FFVs sold in the EU came through wholesale importers who acquired produce from exporters procuring from the undifferentiated spot market. With low barriers to entry for both producers and exporters, many small and medium-sized exporters and farmers entered the market. Indeed, by 1986, 15,000 small farms engaged in production for this market in Kenya alone. This trade grew until Kenya accounted for 30 percent of EU vegetable imports by 1990 (Dolan and Humphrey 2000).

Until the 1990s the FFV export community consisted of two distinct groups: (1) a small exclusive group characterized by high quality, consistency, and traceability, and (2) a large spot market characterized by “a relatively unsegmented structure, fluctuating supply and prices, unidentified source/origins, and vague quality perception” (World Bank 2005, 55). Increased volume, delivery, and quality standards that came into the industry through the increased involvement of EU supermarket chains, combined with the problems caused by poaching activity on the production level, led exporters to move toward using fewer, larger farmers in their supply chains. Still, in order to reduce risk and ensure a consistent, high-quality supply of produce, exporters and importers used a variety of sources for their products. These other options included acquiring land for plantation-style production and purchasing produce on the spot market or through outgrower schemes (Mannon 2005).

### Commercial Kenyan Farms

Commercial farms in Kenya produce a significant and growing percentage of FFVs for export to EU supermarkets and for the high-value domestic supermarket sector, with the four largest exporters sourcing 82 percent of their product from their own farms or from large commercial farms by 1998 (Dolan and Humphrey 2000). Many enterprises play dual roles as farmers and exporters. They often use small farms in outgrower schemes that allow them to exploit the small farm advantage in certain labor-intensive crops, to maintain flexibility

in producing products with fluctuating or seasonal demand, and to gain access to farmland in situations where it is politically inexpedient to purchase new land. This class of farmers produces for exporters or EU supermarket-importers using extensive and highly specific contracts. Alternatively, these farmers play the role of long-term “preferred providers” for export firms or supermarket buyers. They have often invested significant resources in irrigation and packaging infrastructure, production technologies, and EUREPGAP or organic certification regimes.

### Poor Rural Farmers

Approximately half of Kenyans live below the poverty line, according to recommendations on daily caloric intake from the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO). Rural poverty is only slightly higher than urban poverty rates (McCulloch and Ota 2002). Small farmers in Kenya face severe economic and natural resource pressures and concerns. In addition, they have limited access to technology, capital, packaging and transportation infrastructure, and information on market prices and quality requirements (Seo 2006). These farmers are not able to increase their income from the production and sale of either traditional food staples like maize and legumes or traditional cash crops such as tea, cotton, and coffee. They seek on- or off-farm economic activities that will increase their income to more than US\$2 a day and improve their household food stability situation.

Small to moderate-size farms that supply produce to lead firms (exporters) usually do not have a written contract, because those are largely unenforceable in rural areas of developing countries. Instead, the lead firm usually provides inputs as in-kind credit, and the cost of these inputs is subtracted from the value of the delivered produce. A minimum price is stipulated before planting, although in some cases the lead firm provides a premium to the producer when the export market price increases above the agreed-upon price, to prevent poaching or side-selling of contracted produce (Masakure and Henson 2005).

### The Kenyan Government and Government-Supported Agencies

The Kenyan government has been little involved in setting regulations and standards to govern the

FFV industry and is generally not credited with making significant contributions to the growth of the sector. In fact, many authors have attributed the commercial success of the sector to the relative absence of government intervention. Although the government does issue export licenses, it does not impose significant export taxes or attempt to control marketing and distribution of FFVs (McCulloch and Ota 2002).

The government has, however, been involved in creating various research and extension agencies to support and facilitate the growth of the domestic horticulture industry and is likely to seek greater involvement in the continued growth of the export FFV and domestic supermarket industries. The Kenyan Agriculture Research Institute (KARI) was developed in 1979 as a semi-autonomous government institute to research crop and livestock production and marketing systems. The Horticultural Crops Development Authority (HCDA) was developed in 1967 as a government parastatal intended to promote and strengthen the horticulture industry by providing training, consulting, licensing, and market promotion services (Seo 2006). A private sector entity, the Fresh Produce Exporters Association (FPEAK), was established in 1975 as a membership organization with the mission of enhancing the competitiveness of the horticultural export industry (Seo 2006).

### The Donor and Development Community

The donor community operating in Kenya does not speak with a unified voice on issues of trade and poverty alleviation and is motivated by many different issue and policy goals. Bilateral donor agencies such as the U.K. Department for International Development (DFID) and U.S. Agency for International Development (USAID), and the contractors and Western NGOs that implement their projects on the ground in Kenya, are directly influenced by their governments' foreign policy goals and by political relations with the Kenyan government. Their goals are philosophically supported by neoclassical economic thinking and are largely consistent with the liberalization and structural adjustment policies advocated by the World Bank and International Monetary Fund (IMF) in the 1980s and 1990s.

Therefore, donor projects that relate to or could impact the FFV sector in Kenya are likely to promote export agriculture, free markets, and few

restrictions on multinational corporations or foreign direct investment (FDI) practices. At the same time, these agencies and organizations are committed to promoting broad-based poverty alleviation in Kenya. Those NGOs that receive both government and significant private funds often operate with more autonomy from foreign policy concerns (including Oxfam, Catholic Relief Services, CARE, World Vision, and Save the Children). They are more likely to consider poverty alleviation, child survival, and economic justice issues first and more directly than the needs of the private sector and overall economic growth.

### **Policy Options**

It is well documented that the growth and current strength of the high-value horticulture market in Kenya, both for export crops and for high-value domestic markets (supermarkets), evolved with very little government intervention. Continuing along current trends, the sector is likely to grow but with continued consolidation of supply chains and continued marginalization and exclusion of small farms. As it currently stands, there are few incentives for this private sector-led industry to reverse trends in supply chain consolidation and take measures to increase participation of small farms.

The NGO and donor community has and will continue to make some efforts to facilitate participation of small farmers through donor-funded projects and social advocacy. Given the relatively low level of involvement by the Kenyan government to date, however, there may still be opportunities for new policies and a greater governmental role in an effort to increase participation of small farmers in the high-value FFV sector. The policy options mentioned here are intended to be implemented by the Kenyan government in the interest of broader dispersal of profits in this sector and greater small-farm participation.

### Expand Export Trade

The Kenyan government could take a more proactive role with domestic and EU players in the sector to expand market penetration into EU supermarkets and food-processing industries and to gain entry to other FFV export markets in Eastern Europe, the Middle East, and even the United

States. Expanded market participation could occur by focusing on untapped EU countries and importing firms and by identifying additional FFV products to export to existing clients. Government-to-government advocacy for further reduction of seasonal EU tariffs on FFVs imported from developing countries could lead to additional competitive benefits. The development of new export markets outside the EU might involve sending trade delegations to new countries to promote Kenya as a source of FFV products and providing tax incentives to encourage the private sector to explore and develop new markets.

### Develop Local and Regional High-Value Horticulture Markets

The catalyst for development of this sector is the growing Kenyan and East African supermarket industry. Between 1994 and 2003, supermarket floor space in Kenya grew from 475,000 square feet to 2 million square feet in more than 225 stores (Neven and Reardon 2004). The time lag between new store openings and the addition of FFV sections in these stores should ensure that small farms have growing opportunities to sell FFVs to these stores even without significant additional growth in store numbers.

This approach would involve an acknowledgement that the combination of high market entry requirements for the FFV export industry combined with the relative maturity and saturation of these export markets will make it difficult to significantly increase small-farm participation in this sector. Instead, the Kenyan government could work in partnership with local private supermarkets, agro-processors, and donor agencies to forge public-private partnerships that would increase small farm participation in a domestic market that has lower entry requirements and greater potential for increased growth. This option may in the medium run actually facilitate significant participation of small farmers in the export market as well, as small farmers and farmer associations acquire the production, transportation, and business skills to compete in both high-value FFV sectors.

### Promote Increased Employment of Rural People in the Export Sector

The export sector is out of reach for most small farms, but nonfarm participation in the export

sector offers significant benefits for rural income and poverty alleviation. This option would involve regulatory actions and industry consensus-building efforts to make labor conditions in this sector more humane and less gender-discriminatory and to maximize the ability of rural households to maintain their farms at the same time they work as laborers on others' farms.

### Increase Small-Farm Participation by Promoting Small-Farm Marketing Associations

This option would entail addressing an area in which development assistance over decades has been challenged to produce significant results—organizing African farmers into production and marketing cooperatives. The government would need to provide training and technical assistance in forming and developing cooperatives to those farm and rural entities that emerge as motivated and entrepreneurial leaders in Kenya's FFV-producing regions. On the industry side, the government could develop policy incentives for the FFV buyers themselves to more proactively seek small farms and small-farm associations from which to buy FFV products. Public-private partnerships between government agencies in South Africa and national supermarket chains have resulted in significant use of small farms in the Fort Hare region. USAID-funded market access projects in Kenya have significantly increased small to medium-sized farm participation in the tree fruit value chain for domestic and export markets (Snodgrass and Sebstad 2005).

### Improve Governance and Industry Transparency

This option—the least invasive or expensive of the five options—accepts that free-market forces have shaped Kenya's horticultural industry and that allowing private-sector actors to pursue efficiencies is the best way to keep the sector competitive and profitable and ultimately to benefit the country overall. It requires that the government take policy actions not to strengthen the sector, but to strengthen the business environment, including sound macroeconomic policy and market structures within Kenya. This policy does not assume or directly promote increased participation of small farmers, but rather creates a transparent and relatively level playing field for the industry actors to



organize and compete to maximize efficiencies, which may or may not result in increased small-farm participation. Policies options include (1) reinforcing the business climate, (2) establishing a sound legal framework, (3) safeguarding consumer interests, (4) reducing transaction costs, and (5) managing risk [Ruben et al. 2006].

## Assignment

Your assignment is to make recommendations to the Kenyan government on what policies should be pursued to enable the FFV export industry to make a greater contribution to the alleviation of rural poverty in Kenya.

## Additional Readings

Aksoy, M. A., and J. C. Beghin, eds. 2005. *Global agricultural trade and developing countries*. Washington, DC: World Bank.

Narayanan, S., and A. Gulati. 2002. *Globalization and the smallholders: A review of issues, approaches, and implications*. Markets and Structural Studies Division Discussion Paper No. 50. Washington, DC: IFPRI and World Bank.

Ruben, R., M. Slingerland, and H. Nijhoff, eds. 2006. *Agro-food chains and networks for development*. Dordrecht, the Netherlands: Springer.

## References

- Delgado, C., N. Minot, and N. Wada. 2001. High-value agriculture. Policy Brief 6 in *Shaping globalization for poverty alleviation and food security*. 2020 Vision Focus 8. Washington, DC: International Food Policy Research Institute.
- Dolan, C., and J. Humphrey. 2000. Governance and trade in fresh vegetables: The impact of UK supermarkets on the African horticulture industry. *Journal of Development Studies* 37 (2): 147–176.
- . 2004. Changing governance patterns in the trade in fresh vegetables between Africa and the United Kingdom. *Environment and Planning A* 36 (3): 491–509.

Hallam, D., L. Pascal, G. Lavers, P. Pilkauskas, G. Rapsomanikis, and J. Claro. 2004. *The market for non-traditional export crops*. FAO Commodities and Trade Technical Paper 3. Rome: Food and Agriculture Organization of the United Nations.

Jaffee, S. M. 1994. Contract farming in the shadow of competitive markets: The experience of Kenyan horticulture. In P. D. Little and M. J. Watts, eds., *Living under contract: Contract farming and agrarian transformation in Sub-Saharan Africa*. Madison, WI: University of Wisconsin Press.

Jaffee, S., and S. Henson. 2004. *Standards and agro-food exports from developing countries: Rebalancing the debate*. Washington, DC: World Bank.

Lenne, J. M., D. A. C. Pink, N. J. Spence, A. F. Ward, J. Njuki, and M. Ota. 2005. A role model for local vegetable production in Kenya. *Outlook on Agriculture* 34 (4): 225–232.

Maertens, M., L. Dries, F. A. Dedehouanou, and J. F. M. Swinnen. 2007. *High-value supply chains, food standards, and rural households in Senegal*. Wallingford, UK: CABI.

Mannon, S. 2005. Risk takers, risk makers: Small farmers and non-traditional agro-exports in Kenya and Costa Rica. *Human Organization* 64 (1): 16–27.

Masakure, O., and S. Henson. 2005. Why do small-scale producers choose to produce under contract? Lessons from nontraditional vegetable exports from Zimbabwe. *World Development* 33 (10): 1721–1733.

McCulloch, N., and M. Ota. 2002. *Export horticulture and poverty in Kenya*. IDS Working Paper 174. Sussex, UK: Institute of Development Studies.

Neven, D., and T. Reardon. 2004. The rise of Kenyan supermarkets and the evolution of their horticulture product procurement system. *Development Policy Review* 22 (6): 669–699.

Neven, D., M. Odera, and T. Reardon. 2006. Horticulture farmers and domestic supermarkets in Kenya. Department of Agricultural Economics Staff Paper 2006-06. Michigan State University, East Lansing, MI.



- Ruben, R., M. Slingerland, and H. Nijhoff, eds. 2006. *Agro-food chains and networks for development*. Dordrecht, the Netherlands: Springer.
- Seo, T. 2006. Lessons from the evolution of vegetable export industry and its technology transfer in Kenya. Masters of Professional Studies Project Paper, Cornell University, Ithaca, NY.
- Smith, S., D. Auret, S. Barrientos, C. Dolan, K. Kleinbooi, C. Njobvu, M. Opondo, and A. Tallontire. 2004. *Ethical trade in African horticulture: Gender, rights, and participation*. IDS Working Paper 223. Sussex, UK: Institute of Development Studies.
- Snodgrass, D., and J. Sebstad. 2005. *Assessing the impact of Kenya BDS and horticulture development projects in the tree fruit value chain in Kenya: Baseline research report*. Washington, DC: United States Agency for International Development.
- World Bank. 2005. *The European horticulture market: Opportunities for Sub-Saharan African exporters*. World Bank Working Paper No. 63. Washington, DC.