

Supermarket Buying Power

Global Supply Chains and Smallholder Farmers

Oli Brown with Christina Sander

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International Institute for Sustainable Development 161 Portage Avenue East, 6th Floor Winnipeg, Manitoba Canada R3B 0Y4 Tel: (204) 958-7700 Fax: (204) 958-7710 E-mail: info@iisd.ca Web site: http://www.iisd.org

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Summary

In recent years there has been both expansion and consolidation of the global supermarket sector. Supermarkets now dominate food sales in developed countries and are rapidly expanding their global presence. At the same time, international consolidation and aggressive pricing strategies have concentrated market power in the hands of a few major retailers and strengthened their control over their suppliers.

This paper is about the impact of the supermarkets' increased market power on global supply chains and what this means for smallholder farmers in the developing world trying to sell their produce to the potentially lucrative markets of the developed world.

Supermarkets have become "global sourcing companies." Global sourcing has created new opportunities for labour-intensive and resource-intensive exports from low-cost locations. In sub-Saharan Africa, where smallholder farmers account for both 90 per cent of agricultural production and 73 per cent of Africa's rural poor, access to valuable international markets could play a crucial role in wider poverty reduction.

Developing countries have certain comparative advantages in the production of fresh fruit and vegetables (FFV): low land and labour costs; long growing seasons; and, in the case of sub-Saharan Africa, relative proximity to European markets. But global sourcing also results in a dramatic growth in the number of potential producers—which in turn heightens competition among the world's farms.

World trade in FFV has grown fast—rising more than 30 per cent between 1990 and 2001, when it reached a value of US\$71.1 billion. There is still considerable scope for growth in the export horticulture sector—but inclusion in the chain is contingent upon meeting the requirements of the supermarkets. These requirements have tended to favour the concentration of the export trade into a few large firms.

To stay competitive, farmers have to supply larger volumes per client and transaction. Smallholder farmers, with few economies of scale, poor knowledge of the markets and limited investment in inputs or infrastructure, are often squeezed out. Compounding problems of scale are supermarkets' own stringent private standards and aggressive business practices.

However, given the right support and incentives, smallholders in many countries can produce high quality fruit and vegetables with no reduction in social, environmental and food safety standards. This is particularly so in the FFV sector which is relatively free from economies of scale, which favour large producers of crops like wheat or soy beans.

The right mix of support and policy measures that could help smallholders access potentially valuable supermarket supply chains varies from country to country and from sector to sector. The paper concludes by briefly assessing four of these measures: cooperatives, outgrower schemes, public-private initiatives and regional initiatives.

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Abbreviations

ACP	African, Caribbean and Pacific group of states	
EU	European Union	
EUREP-GAP	Euro-retailers standards for good agricultural practice	
FDI	foreign direct investment	
FFV	fresh fruits and vegetables	
GATT	General Agreement on Tariffs and Trade	
IFPRI	International Food Policy Research Institute	
JIT	just-in-time (manufacturing or production)	
UNCTAD	United Nations Conference on Trade and Development	
UNEP	United Nations Environment Programme	
OECD	Organisation for Economic Co-operation and Development	
WTO	World Trade Organization	

1. Introduction

European Union as well as American and other Western nations standards and terms for international trade in such agricultural products make it very difficult for Ghanaian farmers and exporters to gainfully and freely enter such foreign markets.

Anthony Appiah, Kwadaso Agricultural College, Ghana²

Supermarkets are big business. In recent years, there has been both growth and consolidation of the global supermarket sector. They now dominate food sales in developed countries and are rapidly expanding their global presence. In fact, Tesco, the U.K.'s leading supermarket chain, now accounts for one in every eight pounds spent in British shops.³

The late 1990s saw a flurry of mergers and acquisitions as the supermarket sector consolidated in an attempt to counter the "Wal-Mart" threat to their market share. The U.K. food retailing industry, for example, is now dominated by just four supermarket chains who together account for over two-thirds of retail food sales.⁴ Likewise, the top five chains in the U.S. amount to over 60 per cent of food sales. The consolidation of retailers has strengthened their control over their suppliers.

Sector analysts predict that it is not unrealistic to imagine future global markets in which the sale of food is controlled by four to five global firms with a handful of regional and national companies, and in which food manufacture is dominated by some ten companies using only about 25 brand names.⁵

This paper is about the impact of the supermarkets' increased market power on global supply chains. More specifically, it investigates what this means for smallholder farmers in the developing world trying to sell their produce to the potentially lucrative markets of the developed world.

Section 2 discusses the ways that global supply chains have changed and the extensive role that supermarkets now play in controlling global supply chains. One of the few areas in which smallholder farmers might have some sort of comparative advantage is the export of horticultural products such as fresh fruit, vegetables and cut flowers. Section 3 discusses why this is the case particularly in sub-Saharan Africa, while Section 4 outlines the continuing challenges faced by smallholder farmers trying to sell their produce to the supermarket.

Section 5 argues that, given the right support and infrastructure, the prospects for smallholder farmers are not as bleak as they might first seem. Section 6 concludes by assessing a few of the public and private policies that might help smallholder farmers benefit from international trade.

² http://www.garstangfairtrade.org.uk/Farmers_Link.htm

³ BBC. "Is Tesco Taking Over?" 21st January 2005. (accessed 12 December 2006:) http://news.bbc.co.uk/2/hi/talking_point/ 4183965.stm

⁴ Tesco, Asda, Sainsburys and Morrisons – from Fearne, A., Duffy R. and Hornibrook, S. (2004) *Measuring Distributive and Procedural Justice in Buyer/Supplier Relationships: An Empirical Study of UK Supermarket Supply Chains*. Paper presented at the 88th Seminar of the European Association of Agricultural Economics, Paris, p. 2.

⁵ Tickell S. (2004) in Sustainability, "The Taste for Commodities: Who Benefits?" *Radar*, London: Sustainability, April/May 2004, p. 6.

2. Supermarkets and global supply chains

The twentieth century witnessed a revolution in the nature of the food supply chain, the implications of which are only now being worked through at policy and institutional levels. The period was characterised by unprecedented changes in how food is produced, distributed, consumed and controlled—and by high levels of concentration of market share.

Professor Tim Lang, City University⁶

Over the past 20 years, the scope for supermarkets to buy from producers worldwide has dramatically increased. Tariff reductions, trade liberalization, innovations in communications, improved transport systems and increased capital mobility have revolutionized their supply chains. For example, the cost of sea freight fell almost 70 per cent between the early 1980s and the mid 1990s.⁷ The use of air freight has also jumped. Between 1993 and 2003, the total annual volume of air freight between Europe and Africa expanded at an annual rate of four per cent.⁸ As a consequence, supermarkets have become "global sourcing companies."

Global sourcing has created new opportunities for labour-intensive and resource-intensive exports from low-cost locations. It also offers farmers in the developing world the prospect of selling their produce in the valuable markets of the developed world. In sub-Saharan Africa, where smallholder farmers account for both 90 per cent of agricultural production and 73 per cent of Africa's rural poor, this opportunity could be a crucial element of wider poverty reduction.⁹

Given the right incentives and support, small farmers in developing countries can participate in these emerging supply chains and benefit from increased access to inputs (such as better fertilizer), the availability of credit, innovative technologies and "productivity spill-over" effects as they apply newly-learned agricultural knowledge to their staple crops. As Michael Lipton of the International Food Policy Research Institute (IFPRI) notes, there has been virtually no example of mass poverty reduction in modern history that did not start with sharp rises in employment and self-employment income due to increased productivity among small family farms.¹⁰

But global sourcing also results in a dramatic growth in the number of potential producers—which in turn heightens competition among the world's factories and farms. Meanwhile, at the other end of the chain, market share has tended to consolidate into a few leading retailers. These companies have tremendous power in their negotiations with producers. They use that power to push the costs and risks of business down the supply chain. The result is that smallholder farmers are often squeezed out.

Increasingly, the competitive advantage of supermarkets in the north is a function of how well they can manage their supply chains. Their business model—focused on maximizing returns for shareholders and keeping costs competitively low for consumers—demands increasing flexibility through "just-in-time" delivery, tighter control over inputs and standards and ever-lower prices.¹¹

⁶ Lang, T. (2003) "Food Industrialization and Food Power: Implications for Food Governance," *Development Policy Review*. 21(5-6):555.

⁷ Raworth, K. (2004) Trading Away Our Rights – Women Working in Global Supply Chains, p. 33.

⁸ Boeing World Air Cargo Forecast 2004/2005, p. 55.

⁹ Narayan, S. (2002) Globalization and the Smallholders: A Review of Issues, Approaches, and Implications. International Food Policy Institute, November 2002, pp. 5–6.

¹⁰ *Ibid*.

¹¹ Raworth, K. (2004) Trading Away Our Rights – Women Working in Global Supply Chains. p. 6.

2.1 Supermarkets and horticultural products

The Fresh Fruit and Vegetable (FFV) sector is particularly important for the supermarkets and they have worked hard to increase their share of the market. It commands high margins and can become a "shopping destination" in its own right. As FFVs are bought proportionately more by higher income bracket shoppers, the sector can be a crucial element in a supermarket's attempt to "trade up" the social ladder.

The supermarkets' share of the FFV market in OECD countries has been rising fast. In 1989, for example, supermarkets sold just 33 per cent of the U.K.'s FFVs but by 2003 the supermarkets' share had risen to 80 per cent—none of which was sourced through wholesale markets.¹² When people talk about supermarket power, more often than not, it is with the FFV sector in mind.

It can be good business for farmers selling top-quality and out-of season horticultural produce—but the big imbalance between buyers and sellers means that most of the gains are being captured at the top of the supply chain.¹³ For example, a 1999 study estimated that producers in Zimbabwe and Kenya earned between 11 and 14 per cent of the final price of their fresh vegetable exports while the supermarkets were taking more than 45 per cent of the shelf price—a mark-up of over 80 per cent.¹⁴

The fresh vegetables trade is now very much a "buyer-driven" global commodity chain. In such chains, retailers play the key role in governing the chain of activities that link widely dispersed producers to consumers in developed countries. While they generally do not own farms, processing facilities or importing companies, supermarkets still play a critical role in defining what is produced, where, how and by whom. Typically, they tend to shy away from buying produce from smallholder farmers.

Supermarkets are, of course, first and foremost business enterprises operating in a highly competitive environment with a bottom-line responsibility to their shareholders. They are not development agencies with a mandate to promote smallholder production. Sourcing from smallholder farmers can be risky and can reduce efficiency in a world of demanding and fickle consumers unwilling to buy spotty apples or peaches of uneven size. Likewise, relying solely on sales to supermarkets which have widely varying demands is also a risky strategy for smallholders.

However, the next sections argue that there is, in fact, a business case for supermarkets to source their produce from smallholder farmers and for smallholder farmers to try and sell their goods on international, as well as local, markets. Smallholder farmers tend to be good at producing low cost and high quality labour-intensive crops. Also, being seen to support farmers in the developing world is an astute branding move for supermarkets constantly trying to cement their "license to operate." The benefits can cut both ways. For smallholder farmers, selling to supermarket supply chains offers a price premium over local markets and gives them access to new technologies, knowledge and inputs that can dramatically increase their productivity. This is in turn can have implications for wider food security.

But public policy needs to help smallholder farmers surmount their problems of market access, infrastructure and market information. Smallholder farmers can work together to improve quality and market their goods collectively. And supermarkets need to support both actively.

¹² Gibbon, P. (2003) "Value-Chain Governance, Public Regulation and Entry Barriers in the Global Fresh Fruit and Vegetable Chain into the EU," *Development Policy Review*. 21(5–6):621.

¹³ *Ibid*.: p. 68–9.

¹⁴ Dolan, C., Humphrey, J. and Harris-Pascal, C. (1999) Horticulture Commodity Chains: The Impact of the UK Market on the African Fresh Vegetable Industry. Working Paper 96, The Institute of Development Studies, University of Sussex, p. 13.

3. Horticultural exports from sub-Saharan Africa

World trade in FFVs has grown fast—rising 30 per cent between 1990 and 2001, when it reached a value of US\$71.1 billion.¹⁵ The longer growing seasons, low labour and land costs in many developing countries, coupled with trade preferences and incentives given by some developed countries has meant that FFV is one of the few areas where developing countries have managed to increase their share of world trade.¹⁶

This has resulted in valuable increases in exports from some regions. Between 1989 and 1997 the value of exports of fresh vegetables from sub-Saharan Africa to the EU increased by 150 per cent—albeit from a low base—helped by Africa's relative proximity to European markets.¹⁷ Previously, African fresh produce was in demand only during the European winter. However, with the introduction of year-round procurement and an increasing variety of produce, the volumes exported rose dramatically.

A 2001 study by Catherine Dolan and John Humphrey highlight a number of factors behind Africa's horticultural boom:

- *non-interference* by government in the commercial dimensions of the business;
- *preferential trade agreements* such as the Lomé convention and its successor, the Cotonou Agreement;
- the achievement of sub-regional/cross-border *economies of clustering*, which provide a critical mass of activity for technical learning, market information flows, the development/spread of trained labour power;
- *international technical and marketing strategic partnerships*—helping technology transfer, logistics, market penetration and the creation of a "market identity" for African products;
- the effective coordination of *internal and international logistics* at the industry level, involving intra-firm cooperation.¹⁸

Globalization, trade liberalization, changing lifestyles and demographics present opportunities for growing markets for African agricultural goods. According to Catherine Dolan, "...export horticulture has been one of the bright spots of African development. It has raised production standards in agriculture, created supporting industries, and provided considerable employment in rural areas."¹⁹

The dramatic increase of fruits, flowers and vegetable exports from Kenya and Zimbabwe, and to a lesser extent from Uganda, Zambia, Ghana and Cote d'Ivoire indicate the potential of the sector (see Box 1).²⁰ Meanwhile south-south trade is becoming increasingly important and, in future, selling to regional supermarkets may well exceed the value of sales to European supermarkets.

¹⁵ Diop, N. and Jaffee, S. M. (2005) "Fruits and Vegetables: Global Trade and Competition in Fresh and Processed Product Markets," (eds.) Aksoy, M. A., Beghin, J. C. *Global Agricultural Trade and Developing Countries*. World Bank, pp. 237–257.

¹⁶ While fresh and processed fruit and vegetable products accounted for 17 per cent of total exports from developing countries in 1980/1, this share increased to 22 per cent in 2000/1—despite a significant price decrease over the same period (Diop and Jaffee 2005).

¹⁷ Eurostat figures 1998 cited in Dolan, C. and Humphrey, J. (2001) "Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticultural Industry," *Journal of Development Studies*. 37(2):148.

¹⁸ *Ibid.*: p. 163–4.

¹⁹ Dolan, C. and Humphrey, J. (2001) "Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticultural Industry," p. 163.

²⁰ Gabre-Madhin, E. Z. (2002) Getting Markets Right in Africa: Opportunities and Challenges. International Food Policy Research Institute, p. 1.

Box 1: Horticulture in Kenya

In Kenya, export horticulture has grown from a small business centred on Asian vegetables in the 1960s (okra, chillies) to an extensive trade delivering approximately 75 products to dozens of overseas markets.²¹ This equates to a rise in earnings from US\$2–3 million at independence to over US\$150 million in 1999.²² Although coffee and tea continue to dominate agricultural exports in Kenya, the growth of tourism and horticulture has reduced the vulnerability of the Kenyan economy to price swings in those two commodity markets.

Horticulture is now one of Kenya's biggest sources of foreign exchange, earning the country US\$300milion a year. Fruit, flower and vegetable exports have increased 70 per cent since 1995 with 95 per cent of fresh produce exports destined for Europe.²³ Large scale agro-industries such as Homegrown Kenya Ltd. employ about 500,000 Kenyans, while there are as many as two million outgrowers, labourers and brokers in the informal sector.²⁴

There is still considerable scope for growth in the export horticulture sector—but inclusion in the chain is contingent upon meeting the requirements of the supermarkets. These requirements have tended to favour the concentration of the export trade into a few large firms, and have shifted production increasingly to large farms—many of which are owned by exporters. As a result, many small and medium-sized exporters, as well as smallholder farmers, are being excluded from the supermarket supply chains. Moreover, a potentially significant driver of poverty reduction is being lost.

²¹ *Ibid*.: p. 165.

²² From three per cent of agricultural exports to 17 per cent—Minot, N., and Ngigi, M. (2004) Are Horticultural Exports a Replicable Success Story? Evidence from Kenya and Côte d'Ivoire, p. 38.

²³ Vorley, B. and Fox, T. (2004) Global Food Chains – Constraints and Opportunities for Smallholders. Paper presented at the Prepared for the OECD DAC POVNET Agriculture and Pro-poor Growth Task Team Workshop, Helsinki, p. 20.

²⁴ Ibid.

4. "Poor farmers are feeling the squeeze"

Food industry reform has had a particularly profound effect on the agricultural sector. Two and a half billion farmers across the globe rely on the production of primary agricultural products like rice, coffee, sugar, wheat and cotton for their livelihoods... And it is here, in the cost containment part of the equation, that poor farmers are feeling the squeeze.

Sophia Tickell, 2004²⁵

To stay competitive, farmers have to supply larger volumes per client and transaction; they have to compete with farmers around the country or region rather than just the local area; and they have to meet the supermarkets' stringent product quality standards. Unsurprisingly, in many developing countries, the farmers who are able to rise to the challenge are the large-scale farmers already accustomed to producing for export.

In Kenya and other major horticultural exporting countries in sub-Saharan Africa, the market share of smallholders—previously the backbone of production—has declined. Instead the industry is dominated by a few large exporters sourcing predominantly from large-scale production units (see Box 1). In 1992, nearly 75 per cent of the FFVs grown for export in Kenya were produced by smallholders. By 1998, the four largest exporters in Kenya sourced only 18 per cent of produce from smallholders. In the same year, in Zimbabwe the five largest exports sourced less than six per cent of produce from smallholders.²⁶

In essence, small and medium-sized producers and exporters in the FFV chain are being marginalized by supermarkets in the developed world in favour of "dedicated" suppliers who can provide assurances of due diligence and quality control. While there are over 200 licensed fresh produce exporters in Kenya, only 50 are continuously active. The other 150 exporters exploit favourable short-term market conditions, entering and exiting the market sporadically during the October to April peak season.²⁷

Smallholder farmers face particular problems when trying to sell to the supermarkets. Firstly, their farms tend to be widely scattered and often remote from centralized collection facilities, while poor roads and unreliable transport in rural areas means farmers have to pay high transport costs and find it difficult to maintain the consistent quality required for the export market. Secondly, smallholders are at a disadvantage in their interactions with supermarket suppliers because of lower levels of education and often limited business and negotiating skills.²⁸

Thirdly, growers have to be prepared to respond quickly to changes in supply and demand. This requires a degree of market information and capital investment that is out of the reach of many smallholders. Finally, supermarkets are often wary of sourcing from smallholders. Not only are there increased transaction costs in dealing individually with many small farmers but the supermarkets realize that failure to meet food safety or environmental standards can result in bad publicity and undermine their position in the market place. Consequently there is a belief that concentrating their grower base will reduce their exposure to risk by giving them greater control over production and distribution.

²⁵ Sustainability, (2004) "The Taste for Commodities: Who Benefits?" p. 6.

²⁶ Dolan, C. and Humphrey, J. (2001) "Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticultural Industry," *Journal of Development Studies*. 37(2):175.

²⁷ Ibid.

²⁸ Ibid.

Meanwhile, the widespread abolition of marketing boards and the end of many commodity agreements since the end of the 1980s have further undermined the bargaining power of smallholder farmers. Individual exporters have replaced agricultural marketing boards in many countries. Such a shift typically raises efficiency and product quality but it also tends to erode farmers' leverage with overseas buyers.²⁹ Until the 1980s, many commodity markets were regulated by multilateral agreements on price bands, production limits and export quotas which were designed to keep the price relatively high and stable. The collapse of these agreements led to the entry of newcomers eager to sell their commodities on the global market and has undermined the incentive for collective action.

The lengths some suppliers go in order to win bids from supermarkets are often out of reach of mid-size farmers, let alone smallholders. Getting into a supermarket's supply chain may mean investing in irrigation, greenhouses, trucks, cooling sheds and packing technologies. Farmers need to be able to sort and grade their produce, document their farming practices and meet timing and delivery deadlines. The demands for rapid and reliable delivery make securing air cargo space a priority. Approximately 93 per cent of Kenya's fresh horticultural exports are shipped by air.³⁰ The largest exporters have the most leverage when it comes to negotiating air cargo space with commercial airlines. Kenya's largest exporter, Homegrown Kenya Ltd., has entered into a joint venture with MK airlines which flies each night to the U.K., which ensures the continuity of supply.³¹ Small exporters have to wait for space to become available on passenger airlines—often while their product deteriorates on the tarmac.

4.1 Raising the bar: The growth of private standards

The gains to producers and exporters from the growing fresh vegetables trade have clearly been distributed inequitably. While some have clearly benefited from the move toward direct supermarket sales due to increased access to markets and product information, many more producers and exporters have fallen out of the market.

Catherine Dolan et al. 1999³²

Supermarkets have to meet strict regulatory requirements for the safety and quality of their products. In the U.K., for example, the 1990 Food Safety Act requires retailers to demonstrate they have shown "due diligence" in the manufacture, transportation, storage and preparation of food. To comply with the existing food safety legislation in most European countries, retailers have developed systems that trace products from the field to the supermarket shelf.³³

But there is also a trend for supermarkets to go beyond mandatory regulations to implement their own private standards that go beyond those required by law (see Box 2 on EUREP-GAP). Supermarkets have come under some pressure to ensure that their production systems are socially and environmentally sound.

²⁹ Raworth, (2004) Trading Away Our Rights – Women Working in Global Supply Chains. p. 67.

³⁰ Dolan, C. and Humphrey, J. (2001) "Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticultural Industry," *Journal of Development Studies*. 37(2) p. 17.

³¹ *Ibid*: p. 28.

³² *Ibid*: p. 23.

³³ *Ibid*: p. 25.

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Consequently, supermarkets have "raised the bar;" moving beyond regulatory compliance to addressing broader issues such as integrated crop management, human rights and environmental protection, and "plough to plate" traceability.

Several factors induce the rise of private standards in the supermarket chains:³⁴

- a) as strategic tools by the supermarkets to differentiate themselves from their competitors;
- b) as instruments of the coordination of supply chains by standardizing product requirements across all suppliers;
- c) as substitutes for missing or inadequate standards in less developed regions; and
- d) as a strategic tool over the informal sector by claiming better food safety.

While the intent behind these standards is often admirable—more environmentally sensitive production methods, lower pesticide residues and so on—the standards place added burdens on growers and exporters. As a result, producers and exporters have had to develop new systems of reporting and documentation to demonstrate that retail requirements have been met. In effect, the growth of private standards is acting as a further barrier to smallholder farmers.

Smallholders have difficulty getting access to the credit necessary to invest in the equipment and training to meet the technical, transporting and reporting requirements of the supermarkets. For example, Homegrown in Kenya requires that all its outgrowers have toilet and washing facilities, a pesticide store, spraying equipment and waste pesticide disposal facilities. For producers with small plots of land and little or no access to credit, such an investment may be impractical and/or not economically viable.³⁵

There are also quite significant business risks for small producers who are trying to produce to strict quality requirements. In the case of Hortico (a Zimbabwean vegetable exporter to European supermarkets) up to 40 per cent of small growers make a loss on their first crop of baby corn because of poor yield and/or quality.³⁶

Susanne Freidberg, Assistant Professor of Geography at Dartmouth College, points out the double standards in many supermarkets' private standards. "This is the contradiction masked by the 'fetishism' of standards guaranteeing clean, green ethical trade. Namely: standards cost, and the retailers are not willing to pay. The costs of crèches and clinics and chemical storage facilities, of protective clothing and medical check-ups for all the pesticide sprayers, of the labour to keep records and monitor workers—all these are borne by the supermarkets' suppliers..."³⁷

³⁴ Reardon, T., Timmer C. P. and Berdegué, J. A. (2003) The Rise of Supermarkets and Private Standards in Developing Countries: Illustrations from the Produce Sector and Hypothesized Implications for Trade. (Paper presented at the Agricultural Policy Reform and the WTO: Where are We Heading? Capri, 23–26 June, 2003), p. 5.

³⁵ Boselie, D., Henson S. and Weatherspoon, D. (2003) "Supermarket Procurement Practices in Developing Countries: Redefining the Roles of the Public and Private Sectors," *American Journal of Agricultural Economics*. 5(2003):1158.

³⁶ *Ibid*.

³⁷ Freidberg, S. (2003) in Vorley, B. Food, Inc.: Corporate Concentration from Farm to Consumer. London: IIED, 2003, p. 70.

Box 2: EUREP-GAP Standards³⁸

EUREP-GAP began in 1997 as an initiative of the Euro-Retailers Produce Working Group (EUREP) with the laudable goal of harmonizing supply-chain standards worldwide for good agricultural practice (GAP).

The main focus of the 2000 EUREP-GAP Protocol is a standard for food safety and traceability designed to calm consumer concerns about pesticides and food hygiene, with environment and worker welfare issues as secondary concerns. Growers need independent certification from an approved certification body.

But representatives of developing country producers have expressed alarm at the imposition of EUREP-GAP standards by retailers without due consideration of local conditions. They claim that the standards favour large producers and become, in effect, a barrier to market entry. For example, EUREP-GAP requires growers have an annual farm audit. An audit costs about £300 and this would absorb perhaps 70 per cent of the profit of a typical Ghanaian grower. However, if producers wish to sell to supermarkets they have little choice but to comply.

4.2 Aggressive business practices

Buyers work in a business culture of performance targets and incentives which encourages them to squeeze suppliers on price and delivery times, with scant attention to the ethical repercussions down the supply chain.

Kate Raworth, Oxfam³⁹

Compounding the challenge for smallholder farmers, certain business practices by the supermarkets exacerbate the problem of unilaterally imposed private standards.

Supermarkets stamp their authority on the supply chain: Before a supplier is included in the supermarket chain it is usually subject to an audit of its facilities. Monitoring and auditing of production and processing systems are carried out by supermarkets and importers. Supermarkets may visit twice a year to ensure that produce is grown, processed and transported in compliance with their requirements. Exporting companies will typically visit more often and may station staff in the region to offer technical support and advice. The seriousness with which retailers view compliance was reflected by Tesco's (the U.K.'s leading supermarket chain) formation of a "hit squad"—ready to inspect any supplier without prior notice.⁴⁰

High cosmetic standards: Rigorous standards on the appearance of fresh produce lead to large amounts of produce being rejected. This is a significant financial loss to growers and is also undesirable from an environmental viewpoint since much of the rejected produce is wasted.⁴¹ The supermarkets' stringent cosmetic standards for produce and high rejection rates also mean that the risk of substandard harvests is almost entirely transferred to growers.⁴²

³⁸ Fresh Produce Journal, 19th September 2003 in Vorley, B. (2003) Food, Inc.: Corporate Concentration from Farm to Consumer. London: IIED, 2003, p. 71.

³⁹ Raworth, K. (2004) Trading Away Our Rights – Women Working in Global Supply Chains. p. 66.

⁴⁰ Dolan, C. and Humphrey, J. (2001) "Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticultural Industry," *Journal of Development Studies*. 37(2) p. 163.

⁴¹ Fritschel, H. (2003) "IFPRI Forum – Will Supermarkets be Super for Small Farmers?" International Food Policy Research Institute, p. 11.

⁴² Raworth, K. (2004) Trading Away Our Rights – Women Working in Global Supply Chains. p. 68–9.

trade knowledge network

Late Payment: For goods that are accepted, payment is often delayed up to 60 days after delivery—a time lag that is too long for many small farmers. Smallholders need a steady cash flow to afford the inputs that ensure quality and maintain sustainable farming systems.

Last minute orders: Late orders or changing orders at the last minute can cause wastage of crops that have already been planted/harvested.⁴³

Promotional activities: Producers and exporters are also expected to participate in the supermarkets' promotional offers. The standard way to promote fresh fruits and vegetables is to lower the on-shelf price of certain commodities for a short period or to give away extra produce. Exporters need to have sufficient cash flow to withstand temporary losses in the hope of future gains.⁴⁴

Cartel pricing: In October 2000, the Competition Commission set up by the U.K. government concluded that the five major domestic chains—Asda, Safeway, Sainsbury, Somerfield and Tesco—had increased their purchasing power to such an extent that they adversely affected supplier competitiveness and distorted competition.⁴⁵ The report showed that the largest supermarket, in this case Tesco, could consistently obtain discounts from their suppliers at four per cent below the industry average.⁴⁶ This was before their extraction of additional discounts for promotions (normally 5–10 per cent of the value of sales).⁴⁷

Box 3: The U.K. "Banana Wars"

A 2002–3 price war in the U.K. market initiated by Asda-Wal-Mart led to the culling of less competitive suppliers as all major supermarkets demanded deep price cuts from suppliers.⁴⁸ International buyers in effect obliged all banana-exporting countries to replicate Ecuador's poor labour and environmental conditions. *In Costa Rica, plantation workers' daily wages fell from around U.S.* \$12–15 a day in 2000 to \$7–8 in 2003.⁴⁹ Bill Vorley and Tom Fox of IIED characterise this price war as, in effect, a transfer of wealth from poor producers in the south to rich consumers in the north.⁵⁰

⁴³ NRET. Applying Codes of Practice in Third World Countries – What Can Supermarkets do to Help? (Accessed 2001:) http://www.nri.org/NRET/supermarkets.pdf

⁴⁴ Singh, B. P. (2002) "Non-traditional Crop Production in Africa for Export," in *Trends in New Crops and New Uses.* (eds.) Janick, J. and Whipkey, A. Alexandria, VA: ASHS Press, p. 89.

⁴⁵ N.B. – Safeway has since been bought by the Morissons Group. The Competition Commission report related primarily to sourcing within Britain but does still apply to the international supply chains of the supermarkets. FarmersLink, *Tracking Supermarkets' Performance*. (Accessed 2004: http://www.farmerslink.org.uk/tsp.htm)

⁴⁶ Vorley, B. and Fox, T. (2004) Global Food Chains – Constraints and Opportunities for Smallholders. Paper presented at the Prepared for the OECD DAC POVNET Agriculture and Pro-poor Growth Task Team Workshop, Helsinki, p. 17.

⁴⁷ This seems to relate more to suppliers in the U.K. but the principle stands for all sources. Gibbon, P. (2003) "Value-Chain Governance, Public Regulation and Entry Barriers in the Global Fresh Fruit and Vegetable Chain into the EU," p. 623–24.

⁴⁸ Vorley, B. and Fox, T. (2004) *Global Food Chains – Constraints and Opportunities for Smallholders*. Paper presented at the Prepared for the OECD DAC POVNET Agriculture and Pro-poor Growth Task Team Workshop, Helsinki, p. 22.

⁴⁹ *Ibid.*

⁵⁰ Personal communication.

5. Prospects for smallholder farmers: Not entirely bleak

While the preceding sections have painted a somewhat grim picture of the future of smallholder farming for export in the developing world, that future is not predetermined. On the contrary, smallholders in many countries can produce high quality products with no reduction in social, environmental and food safety standards. The key to success is for farmers to have the necessary support and market information to get their produce to market. If that is the case, then smallholders can still retain some comparative advantages over larger producers that they may be able to exploit. This is particularly so in the FFV sector which is relatively free of the economies of scale that favour the large producers of agricultural crops like wheat or soy beans.

For example, smallholders typically employ labour intensive production techniques that allow the careful attention required by some crops—such as some herbs, spices, vegetables and fruit—to meet the strict quality requirements of the supermarkets. In addition, smallholders use family labour which tends to be low-cost and self-supervising (albeit potentially exploitative).⁵¹ One study of pineapple production in Ghana estimated that production cost per hectare for smallholders is 22 per cent less than for large plantations.⁵²

Occasionally, traditional agronomic and production practises employed by small farmers are more attractive to the supermarkets that the more intensive methods typically used by the larger growers—a good example is fruit and vegetables produced to organic standards. Small, inter-cropped plots can also help reduce problems of disease and wind damage.⁵³ In Thailand, TOPS (a domestic supermarket chain) found that small producers are better able to adapt to organic production methods because practises such as crop rotation and selection of resistant varieties are long-established elements of traditional farming.⁵⁴ Sourcing from small producers is perceived to be an important element of socially responsible business practices and can also prove an effective response to the problem of land scarcity.

Certainly, those few smallholder farmers who do manage to sell their produce into the supermarket supply chains can benefit. A recent study measured the impact of supermarket procurement practices on 10,000 farmers in the Highlands of Madagascar contracted to produce vegetables for European supermarkets. The authors found that smallholders' micro-contracts were combined with farm assistance and supervision programs to help the farmers fulfill the complex quality requirements and safety standards of the supermarkets. They argued that this resulted in higher overall welfare, greater income stability and shorter lean periods. They also found unforeseen consequences such as improved technology adoption, better resource management and a "spill-over effect" which increased the productivity of their staple rice crop.⁵⁵

⁵¹ *Ibid*.

⁵² Mainly due to the lower labour cost of smallholders' use of family labour and reduced costs of supervision. Takane, T. (2004) "Smallholders and Non-Traditional Exports under Economic Liberalization: The Case of Pineapples in Ghana," *African Study Monograph*. 25(1):36.

⁵³ Dolan, C. and Humphrey, J. (2000) "Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticultural Industry," *Journal of Development Studies*. 37(2) p. 176.

⁵⁴ Boselie, D. *et al* (2003) "Supermarket Procurement Practices in Developing Countries: Redefining the Roles of the Public and Private Sectors," p. 1159.

⁵⁵ Minten, B., Randrianarison, L. and Swinnen, J. F. M. (2005) Supermarkets, International Trade and Farmers in Developing Countries: Evidence from Madagascar. Strategies and Analysis for Growth and Access (SAGA), Cornell and Clark Atlanta universities, in cooperation with USAID, September 2005.

6. Public and private policy options

Experience shows that it can be difficult to identify and implement the sort of policies that support smallholder farmers in ways that lead to poverty reduction and economic development. Some Asian countries, most notably China, only attempted such policies after disastrous experiments with large-scale, collectivized farming. Meanwhile, the political power of large landowners in Latin America has tended to make a development strategy focusing on smallholders politically difficult. In sub-Saharan Africa, strategies to use agriculture as an engine of growth and poverty reduction were either not put in place or did not work very well.⁵⁶

In general the policy instruments that were implemented, such as price stabilization measures and marketing boards, as often as not exploited, rather than benefited, small farmers. Meanwhile, other policy instruments such as input subsidies tended to benefit large farmers more than small farmers. Once in place, such policies tend to be hard to remove even if the original problem that justified their implementation disappears.

The right mix of support and policy measures that could help smallholders access potentially valuable supermarket supply chains varies from country to country and from sector to sector. Policies which are appropriate at an early phase when a country is trying to kick-start its agricultural development may not be relevant at a later stage when the country is trying to export high-value speciality crops. Nevertheless, without descending into specifics there are a few general directions that can help guide policy:

- Public policy needs to promote good business practices that optimize retailer-supplier relations. For example, in Argentina a law was adopted in March 2002 that requires payment to FFV growers within 30 days.⁵⁷
- 2. Public and private policy needs to support smallholder cooperatives and outgrower schemes that can help smallholders get over the "scale problem."
- 3. More generally, it is important to foster competition in the supermarket sector.⁵⁸
- 4. Meanwhile, supermarkets can help in a number of ways: by simplifying their codes, being flexible, agreeing on reasonable time frames, providing technical and financial support, reviewing buying practices, supporting the harmonization of codes and treating producers and exporters in the developing world as equal partners.

⁵⁶ Birner, R. and Resnick, D. (2005) Policy and Politics for Smallholder Agriculture. IFPRI.

⁵⁷ Reardon, *et al.* (2002) "Supermarkets and Farming in Latin America: pointing directions for elsewhere?" p. 6.

⁵⁸ Ibid.

6.1 Cooperatives

One of the main, and obvious, challenges facing smallholder farmers is their small size—both in terms of negotiating power and difficulties in competing with larger producers who can benefit from economies of scale. Banding together in a cooperative or a grower's association can increase smallholders' collective ability to negotiate effectively with authorities and buyers, as well as sharing the cost of inputs, and investment in infrastructure (see Case study 1). They can also help disseminate new ideas and market information to farmers and reduce the costs of certification. Often, strengthened producer organizations are essential if smallholders are to establish a stronger bargaining position in the supply chain.⁵⁹

Case Study 1: Pineapples from Farmapine Ghana Ltd.

In 1999, a new export company, Farmapine Ghana Limited, was established with the assistance of the Government of Ghana and the World Bank. The company was based on the farmer ownership model promoted by the World Bank. By creating farmer ownership of a company through the acquisition of shares, the model aims to provide smallholders with commercial access to working capital, production inputs and output markets. In the case of Farmapine, 80 per cent of the shares in the company were acquired by five smallholder cooperatives with the financial assistance of the World Bank. The five cooperatives had 178 members and the company sourced pineapples from the members' farms, providing a guaranteed market for the smallholders.⁶⁰

In addition to purchasing produce from the cooperatives, Farmapine provided them with agricultural inputs, credits and technical assistance. It distributed agro-chemicals to the members and occasionally gave them credits to employ farm labour. The company also employed three agronomists who regularly visited members of the cooperatives and instructed them on a specified cultivation practice to assure the export standards of pineapples. In addition, the company scheduled harvests of the members' farms to meet the timing requirements for export. The costs of the agro-chemicals and the amount of credit provided to farmers were deducted from the value of the harvest when the company made payments to them.

These various activities enabled Farmapine to bridge the information gap that had previously hindered the small holders' access to export markets. The company was also able to arrange consistent supply. *The initial success of the new institutional arrangements was obvious, as the company exported over 3,500 metric tons in 2000; making it that year's second largest pineapple exporter*. By 2003, Farmapine purchased from 341 smallholder farmers and sold over 4,854 metric tons of pineapples, valued at \$1.52 million.⁶¹

For this company to be successful in the future, however, two problems inherent in the arrangement need to be dealt with. One is the cost of the venture which is likely to reduce farmer participation over time; the cost of the inputs, visits from the agronomists, procurement from a large number of farms and administration resulted in a return to farmers that was *10 per cent to 25 per cent lower than the price paid by other exporters*.

A second problem is moral hazard on the part of the farmers; because of the large number of farmers involved, it is difficult to completely enforce farmer's compliance with the recommended farming practices. They may use the credits and inputs for purposes other than pineapple production, and so leading to sub-optimal farming practices that affect the quality of the final product.

⁵⁹ DFID, ODI (2004) Rethinking Agricultural Commodities DFID, August 2004, p. 4.

⁶⁰ Takane, T. (2004) "Smallholders and Non-Traditional Exports under Economic Liberalization: The Case of Pineapples in Ghana," p. 39.

⁶¹ *Ibid*.

6.2 Outgrower schemes

An alternative to cooperatives are outgrower schemes that are managed by centralized agri-businesses such as Homegrown in Kenya (see Box 1) or Hortico in Zimbabwe (Case Study 2). In these sorts of arrangements, the smallholder provides their land and labour in return for technical assistance, credit and infrastructure support. Of course like any business relationship, it is open to abuse and exploitation of the weaker partner, i.e., the smallholder. However, outgrower schemes in Kenya have proved to be an effective way of coordinating smallholder farmers, providing them with market knowledge and sharing the cost-burden of inputs and infrastructure.

Case Study 2: Hortico in Zimbabwe

Hortico, a Zimbabwean agri-business, operates an outgrower scheme producing baby corn and mange-tout beans for the European markets. By early 1999, Hortico was contracting 3,000 smallholders, two-thirds of them women, to grow its vegetables at a price that was guaranteed at the beginning of the crop cycle. The amount grown by each farmer was deliberately restricted to ensure that other staple food crops were not neglected and that adequate attention was paid to the export crop. Hortico provided training, technical support, inputs and frequent contact while the smallholders provided the land and labour.

6.3 Public-private initiatives

Where projects are in place to "upgrade" small farmers to meet the needs of the supermarket, experience shows that the supermarkets are willing to participate in these schemes. For example, a small-scale melon growers association in North Eastern Brazil has been chosen by the French retailer Carrefour to supply not only Carrefour's 67 stores in Brazil but also its distribution centres in 21 countries.⁶²

Public-private partnerships can also help supermarkets source their produce from smallholder farmers (see Case Study 3). A program launched in November 2002 by INDAP (the Chilean rural development agency) has helped groups of small farmers supplying berries to supermarket chains to increase the quality and safety of the berries supplied. The actors include the berry growers associations and two supermarket chains. The latter are supplying 70 per cent of the training funds of the project.⁶³

Case Study 3: The Food Industry Development Project

The Food Industry Development Project, funded by USAID, is helping connect small producers in South Africa's Eastern Cape Province with Pick'N Pay, the country's second largest supermarket chain. The farmers have agreed to a three-year growing project in which they supply squash products and sweet corn to the chain. Pick 'N Pay specifies what varieties the farmers must plant, the farming practices and processing methods they must use, and exactly when they must deliver the produce. In return for participating in this rigorous program, the farmers gain access to a profitable and reliable market.⁶⁴ This was a new departure for the supermarket, which was previously only used to dealing with large commercial farmers.⁶⁵

⁶² ACIAR. The rise of supermarkets: how will smallholder farmers fare? (Accessed March 2004:) http://www.linkingfarmerswithmarkets.net/ index.php?p=3&id=9

⁶³ Reardon, (2003) "The Rise of Supermarkets and Private Standards in Developing Countries: Illustrations from the Produce Sector and Hypothesized Implications for Trade," p. 30–31.

⁶⁴ Fritschel, (2003) "IFPRI Forum – Will Supermarkets be Super for Small Farmers?" International Food Policy Research Institute, December 2003, p. 11.

⁶⁵ *Ibid*.

6.4 Regional initiatives

Finally, regional initiatives can also help to coordinate consistent supply, increase the market leverage of smallholders and spread new technologies. For example, a recent UN capacity building initiative is promoting organic farming in East Africa (see Case Study 4). One of their targets is to create a regional standard for organic agriculture; developed and implemented by Africans, for Africans. This could drastically reduce the current costs of organic certification which is typically carried out by expensive certification organizations based in Europe or North America.

Case Study 4: UNEP/UNCTAD Organics

In October 2004, the UNEP/UNCTAD Capacity Building Task Force on Trade, Environment and Development launched a project to promote production and trading opportunities for organic agricultural products in East Africa.

Confusing standards, lack of transparent requirements and fragmented knowledge are barriers for producers trying to meet international health and safety standards. The project aims to build the capacity of regional organic institutions to have a stronger voice internationally and develop policies supportive of organic agriculture.

One of the main objectives of the project is to produce a regional organic standard for East Africa. The hope is that a regional organic standard could reduce the certification costs of farmers who were previously forced to certify through expensive European companies.

The market for organic products is expanding, and when producers can access such opportunities, such as by creating certification cooperatives, the benefits can be great. Paradoxically, it is the smallholder farmer who cannot afford inputs such as fertilizers and pesticides; and is already cultivating (nearly) organic products that could gain most from such programs of market information and technical support.

6.5 Conclusions

International markets are changing fast. Adapting to these changed realities is a daunting challenge for farmers in the developing world. However, this paper has argued that the smallholder farmer trying to sell to an international market is not automatically doomed to failure.

There are a variety of public and private policy measures that can help reduce the risks and increase the incentives for supermarkets and smallholder farmers to work together. Better infrastructure and technical support will help farmers get a higher quality product to market more quickly. Clearer market information and collective bargaining power will enable farmers get a better deal for their produce.

Supermarkets themselves have the reach and resources to enable farmers surmount many of these market barriers. And, if the comparative advantages of smallholder farmers as well as consumer perceptions are taken into account, there is a strong business case for supermarkets to invest in smallholder production.

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