

Global Food Chains—Constraints and Opportunities for Smallholders

Final Version

Bill Vorley and Tom Fox (IIED)

**Prepared for the OECD DAC POVNET
Agriculture and Pro-Poor Growth Task Team
Helsinki Workshop
17-18 June 2004**

Executive summary

Small-farm agriculture has been presented as a growth-equity ‘win-win’, and this has encouraged a resurgence of interest in agriculture in the poverty reduction debate. But the case for the efficiency of smallholder farming may be breaking down as the superior labour and land productivity of the small farm is trumped by the higher costs of dealing with ‘buyer-driven’ global food chains with new forms of private sector governance, imperfect competition in processing and retail, and little residual value to be shared with other actors in the chain. Furthermore, primary producers and processors face domestic markets that start to take on the characteristics of export markets, as restructuring spreads in the wake of global processors and retailers’ expansion into mid-income countries such as China, SE Asia and most of Latin America.

The associated risks are of a polarisation between agribusiness and small-scale farming systems, and a reduction in benefits of liberalisation due to problems of market structure.

Recommendations in this report to address this challenge include the following:

For governments and donor agencies:

- Seriously review opportunities to *re-regulate commodity markets*, using progressive supply management that reduces volatility and avoids surpluses, as well as building in social and environmental objectives.
- Develop a far better information base on the degree of market transition from bulk commodity/staple production to buyer-driven chains, and the real impacts of supermarkets in mid- and low-income countries relative to other drivers of agrifood restructuring.
- Build a comprehensive database on corporate concentration in trading, processing, manufacturing and retail sectors across borders.
- Understand the spill-over effects from restructured middle-income countries into fragile markets, and their impacts on domestic production, food security and dietary patterns.
- Take a fresh look at regional and global competition policy as a brake on excessive buyer power, with agrifood as a first priority.

For businesses:

- Research the options for incorporating fairness in trading as a corporate standard rather than a consumer choice. This could include rethinking supply chain management in favour of smallholders, and ensuring the inclusion of the standards ‘takers’ in standards-setting processes.

Introduction—why are Global Food Chains an important issue?

Small-farm agriculture has been presented as a growth-equity ‘win-win’, and this has encouraged a resurgence of interest in agriculture in the poverty reduction debate. But the case for the efficiency of smallholder farming may be breaking down as the superior labour and land productivity of the small farm is trumped by the higher costs of dealing with *global food chains* with new forms of private sector governance. The associated risks are of a polarisation between agribusiness and small-scale farming systems, and a reduction in benefits of liberalisation due to problems of market structure.

A close look at global food chains is an important part of any ‘new agenda’ for agriculture for a number of reasons. Private sector strategies in the agrifood sector—especially in global retailing—are moving fast, under the radar of public policy. If policy is to *anticipate* these changes, then they—and their implications for rural producers—must be better understood. And although developing countries have so far failed to significantly penetrate agricultural markets of rich countries, there are big hopes invested into the idea of small producers ‘upgrading’ into global buyer-driven food chains in order to escape from the *cost-price squeeze of commodity production*.

But there is growing concern that markets are increasingly distorted by excessive *corporate concentration* in trading, processing, manufacturing and retailing. Trade liberalisation will not bring the expected benefits when agricultural markets do not function competitively. And because corporate growth and consolidation is premised on expectations that larger buyers can extract more favourable terms¹ from suppliers, there is a risk of *declining share of value for rural actors*—the workers in the agriculture and processing sector, and primary producers—from the food chain. This can compromise agriculture’s potential to act as an effective route for small producers to exit poverty and contribute/benefit from broader economic growth, especially when food markets are already stagnant or have deflationary trend.

Furthermore, the increased ability of buyers to set *product and process standards* and their demands for *traceability* can exclude certain classes of producers from supply chains and thus worsen inequality.

Lastly, there is an appreciation that global food chains reach *in* to developing country markets, as well as potential stretching outwards. National and regional markets may be restructured to the extent that these markets are no longer a refuge for smaller farmers and processors, as markets are flooded with cheap export-grade produce from more competitive economies.

The need to include these elements in new thinking in agriculture was compellingly made in Simon Maxwell’s introduction to the recent DFID consultation on “New Directions for Agriculture in Reducing Poverty”. He imagined the future of role of agriculture as follows:

- The growth potential of agriculture as a sector lies largely in *non-staple production*, where resources should therefore be concentrated;
- Individual agricultural enterprises will prosper to the extent that they are able to deliver *predictable and traceable volumes of high quality produce to increasingly sophisticated and integrated market agents*;
- Farms that cannot meet these requirements will survive only to the extent that they are subsidised by *non-agricultural incomes*, as homestead plots or part-time, often recreational enterprises;
- The ‘new economies of scale’ mean that *small-scale commercial farms will be increasingly disadvantaged*;

- There will be many benefits to poor people, partly indirectly through lower food prices, but also more directly, through new kinds of growth linkages associated with a prosperous commercial farming sector;
- However, these benefits will manifest themselves in new ways, for example as jobs in food processing or manufacturing, or in other ways in the supply chain.

What is being said here is that the small and mid-scale family farmers, who have been the economic pillar of rural areas throughout the world, risk being by-passed and marginalised by profound changes in the structure and governance of regional and global food chains.

In order to respond to these challenges and understand 'constraints and opportunities' of operating in global food chains, it is necessary to understand the business logic and strategy of the key actors that are restructuring agrifood systems.

The focus of the paper is on output rather than input markets, though control of genomics, pesticides and clustered linkages between the input and processing sectors are clearly also of importance. The focus is also on producers. But it is appreciated that 'poor people' are differentiated actors in markets, and that 'pro-poor' interventions depend on whether we are speaking of producers, consumers, or employees and entrepreneurs. There are many more consumers than there are producers, and pro-producer advocacy has to ensure that consumer welfare is not lost in the debate about producer prices. Protective border measures, for example, can insulate poor producers in marginal areas from intense competition, especially from spill-overs from neighbouring countries, but work against the interest of poor consumers. For employees and entrepreneurs, increasing the ratio of consumers to producers, such as through rural to urban migration, will expand the size of the market for agricultural produce.

Furthermore, the focus of this paper is not on the 'nuts and bolts' of connecting small farmers to markets, which is already covered by some excellent overviews (eg Bienabe *et al*, 2004), and is being well documented by Technoserve.

The paper follows on from another background paper prepared for the POVNET (Orden *et al*, 2004). Sources for this report also include a study on market concentration for the UK Food Group (Vorley, 2003), work commissioned by the UK Department for Environment, Food and Rural Affairs (DEFRA) and the IFC on sustainable commodities (with Rabobank and ProForest), and the recent DFID E-Forum on 'New Directions for Agriculture in Reducing Poverty'.

Commodities, buyer-driven chains, and the three rural worlds

The rubric of three 'Rural Worlds' (Vorley, 2002; Orden *et al*, 2004) has been helpful in describing how agricultural change is linked to rural differentiation in both the industrialised and developing world. When this model is viewed through a Global Food Chain lens, it is clear that Rural World 1 is changing in response to the liberalisation and deregulation of agriculture. From a group that has supported and benefited from state protection and/or subsidy of agriculture,² Rural World 1 now comprises more free market-oriented agribusinesses with high levels of collaboration and *associative relationships* with downstream processors and retailers. This new minority of commercial farmers and entrepreneurs are connected into the global food economy through contracts with a rapidly consolidating agricultural handling and processing industry, and even directly with food retailers. Consequently these farmers have become a vital part of agribusiness, and the lines between Rural World 1 and agribusiness are becoming increasingly blurred.

Rural World 2—the family farming bedrock of so many rural economies—finds itself in the position of residual suppliers to retail/wholesale or least cost suppliers to bulk commodity markets, and as Maxwell notes, often increasingly reliant on off-farm income.

Survival in the struggling underclass of Rural World 3 entails fractured livelihoods, including temporary migration. The policy of shifting Rural World 3 out of small-scale agriculture into the role of labour for Rural World 1 has renewed popularity, for instance in Sahelian countries, in the debate about the ‘modernisation’ and ‘competitiveness’ of agriculture in an era of globalisation of agrifood chains.

A current development policy consensus seems to have concluded that Rural World 2 must either compete with the lowest cost commodity producers, ‘upgrade’ to into higher-value chains, or get out of farming. Because only the most capitalised and tightly managed enterprises have been meeting the strict specifications of importing nations or processing and retail sectors, there is much attention on the organisation, technical and institutional arrangements by which small producers can build economies of scale to deal with the requirements of *‘buyer-driven’ chains* and thereby *‘create relationships with their downstream customers’* and *‘add value’ with differentiated (de-commodified) products*. This paper attempts to test this received wisdom.

Bulk commodity chains

Bulk commodity chains deal in undifferentiated staples, such as the majority of trade in wheat, soy, coffee, palmoil, cocoa, and sugar. They are usually bulky and storable. There are few buyers and many sellers. Marketing is at arms-length at central *spot markets*, and price determines when and where the product moves. Commodity systems are based on anonymity and standardisation, which keep information flow between trading partners to an absolute minimum.

The advantage of bulk commodity chains has been the great flexibility they provide processors; commodities can be bought quickly and at low cost using supply chains that exhibit well established trade practices, and they can be substituted or mixed based on universal grades and standards. However, signals cannot be sent from consumers (or more accurately, the processor or retailer) to producers.

The undifferentiated nature of these markets means that it is *easier for small and family-scale farms—Rural Worlds 2 and 3—to participate*. The downside may be national price penalties for poor quality, as seen in coffee exports from Bolivia and Indonesia.

Bulk commodity markets are characterised by instability, structural oversupply, stiff global competition, historic downward price trends and declining terms of trade for producing countries and regions (Figure 1). The prices of major commodities such as coffee, sugar, wheat, soy, processing tomatoes, milk and pork, as well as minerals and metals, are influenced by global interactions of supply and demand with underlying drivers of climate, global economic activity and national debt, as well as political force in the negotiation of trade agreements. Real commodity prices declined significantly from 1980 to 2002, with the World Bank’s index of agricultural prices down 47%. There has been a recovery in agricultural commodity prices since their lows in 2001, especially for oil crops (Table 1), though much of these gains are expected to be reversed as markets respond to higher prices and surpluses return (World Bank 2004).

Privatisation and liberalisation of commodity exports, such as cocoa, in producer countries, makes it more difficult for countries to control the flow of exports and thus influence world prices. Volatile markets encourage *futures* trading, which is said to

magnify volatility. For instance, the volume of futures trade for cocoa is ten times greater than world cocoa production; for each ton of wheat produced by US farmers in 2000, 16 tons were traded on commodity exchanges; and for soybeans one ton was produced for every 31 traded. Some observers, however, argue that speculator-induced volatility in futures is an occasional occurrence, and not a systemic problem that prevails most of the time. This is because 40 to 70% of transactions are closed on the same day they are initiated, which has no impact on day-to-day prices.

Figure 1. Evolution of non-oil commodity terms of trade

Indices 1980 = 100; prices deflated by the unit value of manufactures exports from the G-5 countries to developing countries

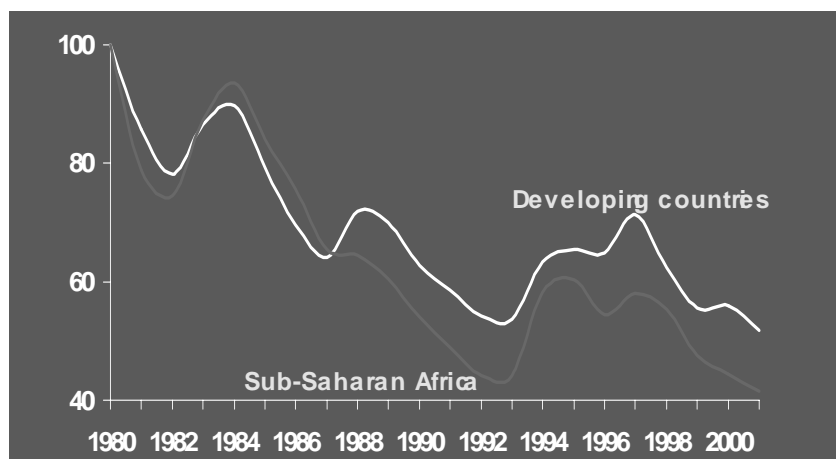


Table 1 World Bank commodity price indices for low and middle income countries (1990 =100)

	1970	1980	1990	2000	Jan-Dec 2002	Jan-Dec 2003	Jan-May 2004
Agriculture	163.3	175.2	100.0	93.0	86.4	94.7	107.1
Beverages	202.8	230.2	100.0	90.9	84.6	87.1	90.3
Food	166.5	176.7	100.0	87.0	90.1	96.4	116.0
Fats and Oils	229.5	188.6	100.0	99.0	101.2	120.6	157.5
Grains	166.6	170.4	100.0	81.8	88.1	90.2	104.2
Other Food	114.9	170.5	100.0	80.0	82.1	80.1	88.7

Source: 1970-2000: World Bank Global Economic Prospects 2004 (Appendix 2)
2002-2004: World Bank Commodity Price Data Pinksheet - June 2004

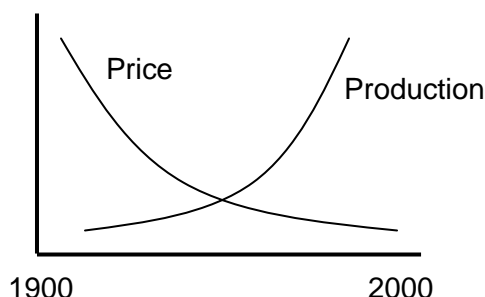
Prices of upstream manufactured inputs such as fertilizer and the value of land adjust to the extent that producers usually don't benefit from commodity price booms (Qualman, 2001).

The Sustainability Institute (2003) has modelled the historical 'treadmill' which drives oversupply in primary bulk commodities such as maize, marked by growth in production and decline in price (Figure 2). When profits in an industry are high, reinvestment leads to increased production. As industry-wide production rises, prices fall, and producers receive lower profits because demand is relatively 'inelastic', i.e. does not increase as prices drop. Producers respond by (1) reducing costs and/or (2) expanding production to spread machinery and/or labour costs across a greater area or volume of commodity

production, and/or (3) supplementing income with off-farm employment, where available. While rational at the individual farm scale or even at the national scale, expansion of production across the industry causes prices and profits to fall further, thus locking full-time producers into an 'expand or die' cycle.

Figure 2. Generic commodity behaviour

Source: Sustainability Institute (2003)



Associated public services and private industries in the industrialised world respond to the demand for greater productivity with advisory services, equipment, seeds and chemicals.

Even when a farm goes under, the size of the agricultural industry is not reduced, unlike industries where the closure of factories reduces output. Except at the geographical margins of production, other farmers will rent the land which becomes available, to spread their labour and equipment costs over more hectares. The situation is confused, of course, by the tendency for wealthier governments to intervene with subsidies that underwrite production costs even when crop or livestock prices fall below the cost of production.

Trade in bulk commodities is characterised by *flexible sourcing from diverse locations*. A small number of firms control key elements of production, trade, processing and marketing. Much trade is intra-firm (e.g. soy from Cargill in Argentina to Cargill in Europe, or cocoa from Barry Callebaut in Côte d'Ivoire to Barry Callebaut in the Netherlands) rather than inter-firm or inter-country trade. These companies can take advantage of economies of scale in transport, storage and finance. Profit margins on globally traded bulk commodities are usually very slim; the global commodity traders seem to rely more on market instability for their profitability. Disruption and instability in trading patterns allow multinational traders (Cargill, ADM, Bunge, Louis Dreyfus, Nidera, Rice Corp et al.) to use their superior market intelligence to capture the profit resulting from such instability. Having diverse sources of supply to draw from also allows traders to exploit good prices and temporary opportunities for profit. And having interests in substitute products, such as Cargill's investments in both sugar and—since their purchase of Cerestar—in wheat and maize-based sweeteners, follows a similar logic.

Corporate concentration in many bulk commodity markets is often very high, with a handful of often privately owned companies dominating each sector, such as grain and oilseed trading and processing, banana trading and marketing, and coffee and cocoa trading and processing. Critiques of corporate concentration or cartels in agrifood have indeed generally focused on bulk commodities. The dominance of Cargill in grain trading, for example, has attracted widespread criticism in the US; the merger with the grain business of Continental, which gave the company a 25% share of US grain exports, meant that grain farmers were left feeling at the mercy of very few buyers who were in a position to ship from wherever they could obtain the cheapest sources.

But profit margins in bulk commodity production and handling are relatively thin, and some businesses involved in agricultural commodities are pursuing strategies to *escape the volatility and low margins of the commodity business*. Integrated produce companies such as Dole (fruits), Heinz (tomato products), ContiGroup (meat--formerly Continental Grain Company) and ConAgra (food processing), are focusing instead downstream, on distribution, brand management and marketing. Risk management and quality assurance and (where required) traceability are assured through contracts with 'preferred' suppliers.

Other international trading companies have *integrated backwards* into the producing countries, either directly or via local partners, as demonstrated by Cargill and ADM's moves into cocoa supply and processing in Côte d'Ivoire. As Gilbert and Wengel (2001) note, these multinational companies' superior access to credit and risk markets *'gives them a competitive advantage over indigenous competitors. Producing countries benefit from the increases in productivity that result, but lose from the fact that the profit arising from these advances goes to multinational rather than local firms...'* Other losers in these situations of backwards integration are the traditional commodity trading houses and brokerages, which are being squeezed out of the industry. This reduces the number of commercial players on the futures markets.

Increasingly it is industrialised country companies who are capturing *value added* on developing country products through branding and re-exportation. The developing country contribution to value-added in the cocoa sector, for example (measured as value of exports of cocoa beans, cocoa products and chocolate), declined to around 28% in 1998-2000, down from around 60% in 1970-72 (Östensson, 2002). This is only partly driven by tariff escalation which limited the ability of developing countries to compete in the markets for value-added products.

At the producer end, the withdrawal of the state from direct involvement in commodity markets and the abandonment of International Commodity Agreements (ICAs) exposes producers and labourers to price fluctuations, without the traditional safety nets of credit and state trading institutions. Relocation of risk from the state to the individual means that farmers now bear the opportunities and risks of direct exposure to volatile and unpredictable markets. As Ponte (2001) writes about coffee, *'As governments retreat from the regulation of domestic coffee markets, farmer organisations lose a political forum of negotiation. The weakness and inherent instability of the institutional framework falls straight on the shoulders of farmers.'*

Relocation of risk to the farmer while removing the safety nets (border measures, price supports, production subsidies and access to credit) has been described as a double manipulation (McDonald, 1999). The replacement of marketing boards with direct transactions may give producers a better share of export prices, but less opportunity as a lobby to influence the overall market, as the capability of producing countries to control exports and build up stocks has been greatly diminished.

Buyer-driven chains

For products where *uniformity* and high *quality* are necessary for further processing, branding and large-scale buying by food service and supermarket chains, such as poultry, it is necessary to introduce forms of *traceability and preservation of identity*. In sectors such as poultry, market exchange of undifferentiated commodities has not been the norm since the 1950s. The most extreme example of buyer-driven chains are pre-packed 'baby' fresh vegetables, which are low weight-to-value, highly perishable, high risk specialised products, and are also highly capital-intensive, including in areas of Information, logistics, and process. But the high end of commodity markets—from gourmet coffee to identity-

preserved grains—is also now moving in this ‘de-commodified’ direction, with close cooperative relations between processors and suppliers.

‘Upgrading’ is usually conceived as a *transition from commodity to buyer-driven chains*.³ But it is important to evaluate the risks and benefits of this strategy before promoting risky, capital-intensive moves into possibly rapidly saturated markets. Of interest to this paper is the way in which transition to buyer-driven chains *changes power relations* in food chains.

‘Buyer-driven’ chains (Gereffi, 1994, 1999) are more *regulated*, and characterised by high levels of private sector *governance* and long-term *vertical coordination* between producers, supplier-integrators, processors and retailers. The resulting chains have *barriers to entry*, including ‘voluntary’ standards, codes and benchmarks, which can profoundly affect farmers’ access to (and entry into) markets.

This transition from bulk commodity to buyer-driven chains is driven by the need for *traceability* to demonstrate ‘*due diligence*’ and *manage risk*, especially against contamination of food by pathogens (e.g. BSE, *E. coli*), toxins (e.g. dioxins) and alien genes (e.g. Starlink™). It arises from a need for *consistency of product* especially around *specific processing traits* (eg enhanced feed quality or enhanced starch quality of grains), and *assurance of supply*. The advent of information technology to track the ‘chain of custody’ for differentiated and ‘Identity Preserved’ products has greatly facilitated the transition. Possibilities of widening the set of product attributes to include sustainability of production, processing and handling have opened up. Also the application of management systems for quality (eg ISO 9000) or environment (ISO 14000), or production system (eg organic) can be preserved along chains of custody.

Value chain thinking brings the customer and the production component of an agrifood system into a more direct relationship. It is thus described as representing a shift from producer-driven to consumer-driven governance of agrifood; a ‘reversal of the marketing chain’ from supply chain to ‘*demand chain*’. As one industry commentator put it, ‘*Commodity systems have no ears. Supply chains do*’.⁴ The UK government has been encouraged by the Curry Commission⁵ to apply value chain thinking to the way UK agriculture is managed, to drive greater levels of communication and cooperation ‘*so sorely needed by the entire food chain*’. But it should be noted that the degree of buyer governance varies tremendously within ‘buyer-driven’ chains, from weak traceability and risk management to intense scrutiny, including retailer visits to production sites around the world to ensure compliance with their codes and standards.

Buyer-driven chains bring about market segmentation,⁶ which means that producers are *contracting* more actively with their customers—the processors and retailers—in order to deliver differentiated products. Contracts cover such parameters as quality, quantity and price premium. Alliances and direct contracting between input suppliers (e.g. of feed, seed), industrial-scale processor-suppliers and retailers are shortening chains across the entire agrifood sector.

Production contracts and supply chain management can improve coordination and efficiency, allowing a company to influence production, reduce procurement costs and price risks and maintain flexibility while avoiding the risks and capital associated with farming. Farmers have, in the perennial do-or-die drive to become lowest cost producers of agricultural commodities, been prepared to pay themselves and their workers less than industry wage rates. So outsourcing primary production rather than ownership of production makes economic sense for agribusiness. In fact, major processors have been engaged in vertical *disintegration*, outsourcing primary production and its associated costs and risks. The exception is industrial livestock

production where *vertical integration* and ownership of agrifood chains from ‘farm to fork’ is quite common.

The ‘reversal of the marketing chain’ can also benefit consumers; it is no coincidence that in the UK, where supermarket power is most ascendant, consumers’ aversion to GM technology was translated into retailer-driven programmes to purge own-brand supply chains of GM ingredients.

Contract farming can also bring significant benefits to producers. A farmer is assured of a buyer, price risk is reduced, favourable credit terms may be available, and marketing costs are lower. In fact, it has been observed that producers with these agreements often get more favourable terms than neighbouring farmers growing a product of the same quality but without a contract. In their worst form, however, such as some poultry production contracts, contract farming deserves its reputation of ‘turning farmers into wage labourers on their own land’.

In the medium to long term, ‘relationship marketing’ and vertical coordination can lead to serious market dysfunctions. For all practical purposes, producers and supplier/integrators wind up with a single buyer even if there are several buyers who could theoretically compete to buy from them; buyers in effect create *captive suppliers* without having to increase its investment in the sectors. The ‘co-option of cooperatives’ by agribusiness in this way is widespread,⁷ as is outright ownership as seen in the Brazilian dairy sector following deregulation. Dedicated/preferred suppliers and producer organisations, set up with the aims of enhancing traceability, quality assurance and developing closer links from the farmer through to the consumer are faced with both the ‘chain-insider’ benefits (such as being supported through hard times by a processor customer) and ‘one buyer’ risks of producer-processor partnerships.

Farmers working outside these closed chains, such as those who do not have sufficient scale of production to be able to sell directly (the classic position of Rural World 2), can become relegated to the position of residual or top-up suppliers or suppliers to the shrinking wholesale market.

Buyer-driven chains require technology, capital, critical mass and organisation to deal with transaction costs and those ‘new economies of scale’. The high requirements for entering buyer-driven chains mean that the higher land and labour efficiency of smallholder production is no longer a comparative advantage; the connection between agriculture and poverty alleviation is thereby weakened.

With a large proportion of supply traded through non-cash methods of trade, including contracts and marketing agreements, traditional cash markets (with price determined at the time of trade) are disappearing and there is no opportunity for ‘*price discovery*.’ As price competition declines in importance and market volume declines, cash and wholesale price data become increasingly suspect and represent the price of residual production surplus to supermarket quantity and quality requirements. Pricing becomes subject to manipulation, and its role in regulating the economy, by establishing equilibrium between supply and demand, is weakened. In other words vertical coordination can bring about *market closure* and becomes a barrier to pricing efficiency. ‘Perfect competition’ depends on a free flow of information among market participants, which does not correspond to the reality of buyer-driven chains. Online auctions are an extreme example of such chains, in which buyers conduct a blind auction with competing suppliers trying to offer the best price without knowing what rivals are bidding. The potential *anti-competitive outcomes of supply chain management* have only recently begun to be explored (Hildred and Pinto, 2002);

It should be noted that very close buyer-supplier linkages can also undermine efficiency (Sturgeon, 2000). Mutual dependence makes it more costly and difficult to switch suppliers or customers. When supermarkets, for instance, reduce their milk, beef or fresh produce supply base down to a few key suppliers, or even devolve management of an entire food category to a leading supplier as '*category captain*', they are creating large intermediaries with countervailing power that cannot easily be pushed around. For this reason, companies are also looking for greater flexibility through what Sturgeon calls virtual *production networks*, whereby buyers maintain a small but interchangeable pool of suppliers, switching competitively between them depending on price. The shift to electronic auctions takes this trend a step further.

Despite the rhetoric about 'relationship' marketing and cooperative capitalism, supply chain networks are characterised by a '*struggle for the appropriation and accumulation of value*' (Cox et al., 2002) in which the primary producer is often the loser.

One more element of buyer-driven chains is important to note, in relation to sustainable agriculture. The presence of a few powerful gatekeepers is seen as opportunity by civil society to work with the actors that exercise chain governance to drive improvements in the social and environmental performance of chains.

Corporate concentration and its impacts

Globally, concern is emerging that concentration of economic power by industries along the chains between primary producers and consumers—the traders, processors, and retailers—is also affecting the profitability and livelihoods of primary producers and workers. This was underscored by a milestone statement on industrial concentration in the agrifood sector issued by the International Federation of Agricultural Producers (IFAP) in May 2002,⁸ which starts:

Much attention has rightly been drawn to the distortions caused by certain types of government policies. However, relatively little attention has been paid to the market distortions caused by the high level of concentration in the input and distribution side of the agri-food system. Yet it is clear that the domination of a few large firms both upstream and downstream of the farming sector can significantly affect market conditions.

Such concern is echoed in the report of the FAO Panel of Eminent Experts on Ethics in Food and Agriculture (2000) which noted that '*there are serious power imbalances arising from the concentration of economic power in the hands of a few.*'

Corporate concentration as a driver of crisis in primary production is a resurgent and emotive issue. The work of Heffernan and Hendrickson at the University of Missouri has pointed to huge disparities in power between farmers and networks of downstream traders, processors and retailers. Farmer protests specifically directed at supermarkets have taken place in recent years in the UK, France, Germany, Ireland, Netherlands, Switzerland and Spain, in a marked departure from typical action aimed at the seats of *public* political power. A widening gap between farmgate price and prices on the supermarket shelves has often been the spark.

Then there is the example of coffee in the developing world. Retail prices for coffee have remained relatively stable, despite producer prices dropping to less than one-third of their 1960 level. This has fuelled accusations of flagrant profiteering from the impoverishment of millions of smallholders. According to a recent UNCTAD round table, annual export earnings of coffee-producing countries in the early 1990s were US\$10–12 billion and global retail sales about \$30 billion. Now, retail sales exceed \$70 billion, but coffee-producing countries receive only \$5.5 billion.

A World Bank report (Morisset, 1997) estimated that divergence between producer and consumer prices may have cost commodity-exporting countries more than \$100 billion a year, and suggests that imperfect competition at the intermediary level—the international trading companies—is a key factor. UNCTAD also points to a widening gap between world prices for agricultural goods and retail prices, which has accelerated since the 1980s. The margin is greater in countries with greater degrees of corporate concentration, and the higher retail price cannot be attributed to downstream business costs (Östensson, 2002).

Supermarkets and the governance of global food chains

The major force in the ‘private re-regulation’ of agriculture and the transition to buyer-driven chains is now viewed as the retailers, especially global supermarket chains (Table 2), which are seen as a ‘bottleneck’ between producers and consumers.

What are the characteristics of supermarkets?

At its simplest, the supermarket model is distinguished by self-service shopping with separate departments for produce, meat, bread and other grocery items under one roof, discount pricing, large-volume procurement and a centralised distribution system. Different supermarket companies have targeted specific market segments and concentrated on a preferred format, from the convenience segments to full range one-stop formats. Some of these distinctions are eroding, as companies track the trend to convenience, or diversify out of saturated or heavily regulated areas. Furthermore, the distinctions between grocery, other retailing and food service are eroding as the large supermarkets move aggressively into non-food such as electronic items and clothing, and into home meal replacements and meals on the go—a trend known as ‘channel blurring’.

Table 2. Top global supermarkets 2003—food sales

Rank	Company	Food Retail Banner Sales ⁹ 2003 (US\$m)	Total Retail Banner Sales 2003 (US\$m)	Food percentage (%)
1	Wal-Mart	121,566	278,081	44
2	Carrefour	77,330	99,872	77
3	Ahold	72,414	86,205	84
4	Tesco	40,907	54,807	75
5	Kroger	39,320	56,024	70
6	Rewe	36,483	48,246	76
7	Aldi	36,189	43,277	84
8	Ito-Yokado	35,812	56,160	64
9	Metro Group	34,700	68,692	51
10	ITM (Intermarché)	33,487	43,414	77

Source: M+M PlanetRetail

Market share is the traditional measure of success in the marketplace. Larger market share allows economies of scale and the extraction of better terms from their suppliers. Increased market share and sales density deliver lower unit costs and higher net margins potentially leading to a ‘*spiral of supermarket growth*’ (Burt and Spark, 2003). Features of this spiral are (a) that absolute costs and barriers to entry for competitors are raised, and (b) growth becomes dominated by 1-2 organisations. The success of Wal-Mart shows that investing the revenues of the ‘growth spiral’ in lower consumer prices in order to further grow market share has been a successful strategy.

Another feature of the modern supermarket model is buyer-driven chains, ie vertical coordination of agrifood chains with associative (rather than arms-length) supply relationships using preferred suppliers. Supply Chain Management (ie achieving the right mix of products for maximum profit and minimum wastage) is being outsourced to produce suppliers. While the retailer sets the 'rules of the game' for participating in the chains, a key supplier may take responsibility for developing a product category's profile to give maximum returns, such as by devising new packaging strategies, or taking more responsibility for unsold produce.

Supply chain management is also linked to another key feature of the modern supermarket model, that is marketing strategies built around trust and the defence of quality, through traceability systems, especially in support of supermarkets' private labels ('own label'). Thus supermarkets can pick up custom with every food scare and animal health crisis, as seen in China with the SARS outbreak.

Much has been made of '*global sourcing*' and the ability of large retail players to procure supplies from wherever they are cheapest/legislation weakest etc. So far, it is estimated that although the global players have increasingly global relationships with major food manufacturers, local subsidiaries usually purchase over 80% of their merchandise from local suppliers (Deloitte Research, 2004).

Own-label has been "one of the competitive forces which shifted strongly in favour of retailers" (Wrigley and Lowe, 2002). Own brands return the highest contribution margin or gross profit. The market share of own-brand in the UK, at around 40%, is the highest in Europe. Retailers' brands now compete head on with manufacturers' brands through shelf placement and packaging. Own label is not only a huge revenue generator, but also key in enhancing corporate image and customer loyalty. .

Retailers are closer to end consumers and many have developed sophisticated information systems which can facilitate supply chain management. Information on consumers from point-of-sale scanners (EPOS data) is a source of competitive advantage to retailers and the chain 'insiders'—the category managers—with whom it is shared.

In summary, the modern supermarket model is accelerating towards a highly concentrated structure, in which most power and leverage resides at the retail end of supply chains, and in which benefits are passed to customers and shareholders. 'Insiders' in these chains may be able to prosper through investing in 'relationship' marketing, product quality, and brand reputation. But from a macro perspective, there is *little residual value to be shared with other actors in the chain*.

Supermarkets in mid- and low-income countries

Market restructuring into closed 'buyer-driven' chains was considered of interest only to industrialised world farmers and exporters to the industrialised world. But supermarket dominance of agrifood is no longer an industrialised world phenomenon. Ground-breaking work in Latin America has shown that penetration of transnational retail firms is proceeding at a rapid pace even in rural areas of the developing world, and this is having a marked impact on market structure (Reardon and Berdegué, 2002). Just about all population growth over the next 25 years is predicted to take place in urban centres in low-mid income countries, and global retailers are structuring their organisations to follow this location of demand.

More than 50% of growth in global food retail markets is expected to come from emerging markets. China and India are among the five most attractive countries for expansion of 'modern' food systems (Table 3). The growth of supermarkets is considered to be '*an entry point to economic development*' as it '*improves market*

efficiency and thereby frees up wealth for spending on non-food items (Hagen, 2003). But it also means that primary *producers and processors face domestic markets that start to take on the characteristics of export markets*. What is especially important to understand is that supermarket companies have long since moved out of the strategy of serving only the middle classes and expatriate populations. Carrefour, for instance, the most successful hypermarket operator in China, has a stable consumer base in China among people of low to medium income levels. Different formats, such as Carrefour's Dia discount format, are used to develop the lower income market segments.

Retailers assess the attractiveness of new markets based on factors such as consumer expenditure, economic and political risk, infrastructure, competition, and market saturation (Table 3). First-mover retailers such as the Metro Group will assess risks and benefits in a different way than more cautious players such as Wal-Mart. Local and regional players such as the Ramayana and Matahari chains in Indonesia and Shop-Rite in southern Africa may also have more skills in working in risky environments with low-income consumer segments. But what is clear from global indices of market attractiveness is that so far, sub-Saharan Africa barely registers.

Table 3 Global market attractiveness for modern food retail

Country	Kearney GRDI, 2003		IGD Market Index 2002	
	Rank	% Score	Rank	% Score
Russia	1	72	1	70
Slovak Republic	2	71	1	70
China	2	71	1	70
Hungary	4	67	4	66
India	5	65	4	66
Turkey	6	64		
Morocco	7	63		
Egypt	7	63		
Vietnam	9	59		
Tunisia	8	59		

Kearney Global Retail Development Index: Top of 30 markets. Score based on risk, current market saturation, time pressure.

IGD: Top of 75 markets. Score based on: Current market size, Consumer spend per capita, Economic/political rating, infrastructure rating, degree of competition, number of global retailers present, imperative rating, long term growth prospects, strategic importance

Latin America

Supermarkets now control 50-60% of the food retail sector in Latin America—a phenomenal increase from 10-20% in only 10 years. This trend is also visible in the small economies of Central America; in Guatemala, a leading supermarket chain has concluded that only 17% of the population is out of supermarket reach because of low income or geographic isolation. Supermarkets are looking for a limited number of suppliers that can provide necessary volume and quality. The expansion of new retailers with highly integrated operations and new rules of participation is pulling the market out from under thousands of small and medium rural enterprises which have played a fundamental role in job creation and rural income diversification. In Brazil, the new private rules of the supermarkets in the red meat sector have pushed dozens of small slaughterhouses, traders and truckers out of business.

East Asia

Supermarkets in any form were almost unknown in *China* prior to 1990. With a population of 1.25 billion, mainland China has more consumers than Europe and the US

combined. The middle class in urban areas of China is now estimated to total 350 million people, and could reach 575 million by 2005. In the coming ten years, China will be the largest market and scene of the hottest international business competition. By the end of December 2004 China will have fully opened its retail market to all foreign competition.

Two-thirds of the country's population is rural, and the majority of retail business still comprises small, individually owned stores and large state-owned stores. But the decade since 1992, when FDI in China has been permitted, has seen a migration of consumers—especially younger shoppers—from traditional *wet market* shopping into supermarkets for fresh foods. These consumers are attracted by lower prices, larger assortments, more hygienic conditions, and ease of shopping (PWC, 2002). The modern food chain comprises around one-quarter of the country's US\$383 food retail sales. Carrefour is now the leading hypermarket operator in China, and is fifth place overall in food retail (Table 4); the company plans to operate 70 hypermarkets in the country by the end of 2004. It also operates 100 of its Dia discount format, and has started a supermarket format under the Champion brand. In response to increasing competition from foreign retailers, the parent companies of the country's two largest retailers—*Lianhua* and *Hualian*—plan to merge under the Lianhua brand, with assets reorganised into hypermarket, supermarket, convenience store, and department store units. Most of the major players are located in eastern China.

Table 4 Top food retailers in China, 2004

Company	No. of Stores	Sales Area (sq.m)	Retail Banner Sales 2003 (US\$ mn)	Market Share (%)
Lianhua	2,528	1,609,100	3,191	3.2
Beijing Hualian	80	1,288,000	2,511	2.5
Hualian Supermarket	1,402	892,900	2,388	2.4
China Resources Enterprise	2,328	1,821,142	2,228	2.2
Carrefour	226	415,560	1,662	1.6
Wal-Mart	33	509,272	1,633	1.6
Sub Total	6,371	6,120,414	11,951	13.5
Other			88,291	86.5
Total			100,242	100.0

South Asia

In *India*, liberalisation and changes in the structure of domestic food retail sector have been slower than in China. There has been ban on FDI in retail, and 'modern' food outlets are restricted to urban centres and account for only around 2% of the \$180bn annually spent on food. It is, however, expected to grow by 30% per year to meet the expectations of consumer muscle of India's strong middle class. The retail sector with 12 million 'kirana' shops is dispersed (about two-thirds in rural areas) and labour intensive, and 96% less than 500 sq ft. There is a very large gap between farmgate and retail price. India has achieved a 5.5% rate of annual growth, leading to a huge expansion in urban purchasing power and associated expectations in food hygiene and packaging. Producer organisations are emerging in India which are linking into new marketing systems, around issues of technology, quality, scale of production, contract farming, collective negotiation of price, and compliance with export market requirements for due diligence. According to reports in the German press, citing senior officials at Metro's Indian subsidiary, the retailer is expecting revenues of US\$1 billion from its fledgling Indian operation within five years.

Central and Eastern Europe

Agriculture in *Central and Eastern Europe*, characterised by very small family run units, can also be marginalised by the sourcing strategies of foreign retailers. The retail sector in Poland has been privatised faster than any other sector of the Polish economy. The top 10 retailers in Poland are all foreign-owned, and include such chains as *Geant Casino*, *Auchan*, *Carrefour* and *Tesco*. By 2005, large retail chains are expected to account for 45-50% of Poland's total food sales. There is talk of hypermarket saturation in Poland, with the number standing at 418, up from 266 two years ago. Supermarket companies are having a strong influence on the production and distribution structures within CEE countries especially through their 'own brand' policies, setting up close relationships with local agricultural producers and closely monitoring suppliers to keep a check on a variety of aspects, including hygiene and safety. For further information, see Dries et al. (2004).

Africa

Even in Sub-Saharan Africa there are reports of incursion of franchised convenience store chains anywhere with reasonable road connections, for example in rural Zambia. The South African company *Shoprite* reports that 'greatest opportunities for expansion lie outside our borders', and the company is now doing business in ten African countries. The 'South African invasion' has advanced to the extent that concerns about local sourcing have been raised in Zambia and Malawi. Supermarkets have a 50-60% market share in South Africa, with Woolworths, PicknPay, Shoprite-Checkers the dominant companies, using different formats for at different segments of the population. For more information on retail in Africa, see Weatherspoon and Reardon (2003).

Traditional markets do not stand still

The inevitability of supermarket dominance of agrifood chains can be exaggerated and the eventual dominance of retail by 'modern' supermarket formats is not a foregone conclusion. It is clear that the traditional agrifood actors do not stand still, but learn from and respond to these changes, leading to forms of co-existence. Farina (2004) has described how in *Brazil*, traditional retailing is flourishing in the face of multiple supermarket market power. The number of small traditional retailers and independent supermarkets *increased* by 33% and 7% respectively between 1994 and 2002, while the number of chain retailer stores declined by 21%. The large chains *lost* market share to independent supermarkets, which increased their share by 10%. Farina explains these trends by describing the market as "an oligopoly with a competitive fringe"—in other words the independent sector ensures that supermarket dominance does not lead to increasing market power. Evidence is found in the declining real food price index since 1994. Consumers have been the beneficiaries, and agriculture has not lost out. Processors are determined to keep the independent retailers alive, to avoid the European situation of retail oligopsony. The wholesale market in Sao Paulo is still very strong—only Carrefour and the Brazilian retailer CBD (*Pão de Açúcar*, *Extra* and *CompreBem Barateiro* formats) have direct supplier relationships.

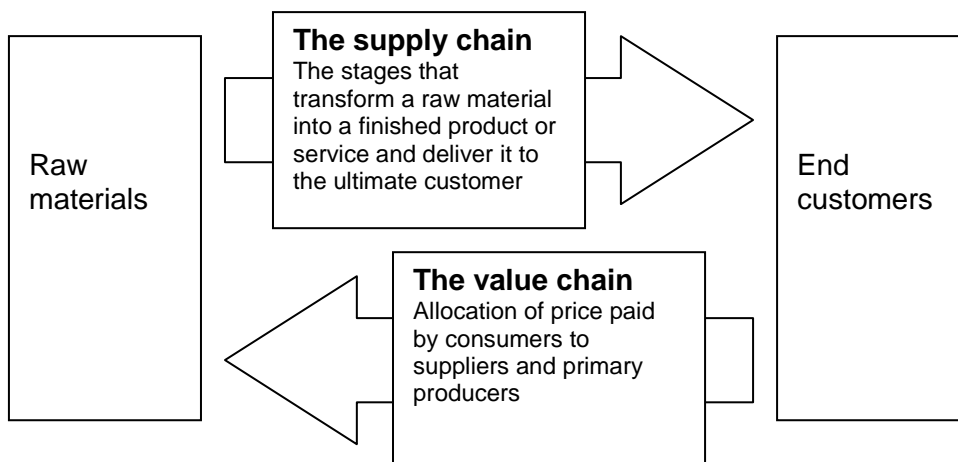
Also in *China*, the proportion of total retail sales accounted by modern grocery distribution sector has made little headway over the past five years. According to M+M PlanetRetail, "this suggests that traditional retail channels such as the independents and wet markets are also booming in the climate of buoyant retail sales."

Distribution of costs and benefits in buyer-driven chains

The concept of the value chain was used by Michael Porter to describe the flow of value, to help identify functions that add value or subtract value within a firm. In their analysis of supply chains and market power, Andrew Cox and colleagues at the Birmingham Business School, however, use the concept to describe the 'distribution of revenues from the ultimate consumer at each of the functional stages of the chain' (Figure 3.) and the 'nature of

competition for the revenues at each stage of the chain.’ This definition is helpful in analysing the interplay between power and profit along agrifood chains.

Figure 3. Supply chains and value chains (Adapted from Cox et al., 2002)



Imperfect markets may defy standard economic analysis and provide a big challenge to competition policy. Under conditions of a *complex monopoly* of powerful buyers, industry concentration does not always result in higher prices or greater profits¹⁰. Profit alone, however measured, is an *incomplete measure of power*. Economies of scale may be passed on to consumers in order to capture *larger market share*.

And power can be more of a reflection of *size* rather than monopoly. Size confers market power through acquisition, leading to *logistical control*, *economies of scale*, *barriers to entry* of competitors, and/or the ability to *remould the social and political environment* to its own benefit. Size also confers ‘*absolute cost advantage*’—the ability to outbid smaller companies for resources and ideas, invest more heavily in research and development, set predatory prices, manipulate futures markets, raise external capital, or mount lavish promotional campaigns.

Evidence that large buyers can extract more favourable terms from suppliers—through bulk buying economies, through playing off suppliers against each other, or through threats of de-listing)—is not hard to find. The UK Competition Commission’s 2000 report on supermarkets, clearly shows that the largest supermarket, in this case Tesco, can consistently obtain discounts from their suppliers 4% below the industry average, while the smaller players pay above the odds. With retail margins often quite small, these differences in supplier prices have a profound impact on supermarket profitability, and are a frank demonstration of the link between size and buyer power.

Andrew Cox and colleagues define a ‘sustainable business’ (ie a business which can prosper long-term) as one that can *close the market* to competitors, and thereby *achieve leverage over customers and suppliers*. Only then can rents be *appropriated from dependent suppliers and/or dependent customers*. This is what it means to have market and supply chain power.

An ideal situation for a firm buying from suppliers is, according to Cox et al, “a monopsonist (ie monopoly buyer) who is able to source from suppliers located in highly contested markets in which there are low switching costs and low barriers to market entry.” This is remarkably analogous to the relationship between suppliers of unprocessed agricultural produce (a highly competitive sector with very low barriers to entry) and supermarkets (concentrated buyers), within closed buyer-driven chains. Intermediaries such as the dairy processors or fresh produce integrators have grown

and consolidated in line with supermarkets' tendency to abdicate responsibility for category management. In doing so, these intermediaries have managed to claw back some market power from the retailers. Primary production, however, is the part of the chain where the exercise of market power and accumulation of value is most curtailed.

One more important piece of information on buyer power is the observation that *firms can have buyer power with a substantially lower market share than is usual in seller power cases*. Professor Peter Carstensen of the University of Wisconsin's Law School points to recent challenges to buyer power upheld in court which emphasised that the *abuse of such power is of equal concern to competition policy as the more traditional seller power problems*.¹¹

An expression of market power is the imposition of the costs of traceability being borne by producers and suppliers, as a quality improvement extracted by chain governors. So as well as price makers and takers, there are the *standards 'makers'*—those who can extract improvements in quality (including standards for 'sustainability') from others (*'standards takers'*) in the chains. Standards imposed by the chain drivers may be regressive instruments with relative higher costs and complexity falling on the smallest operation. At issue is the share of costs and benefits between the standard makers and standard 'takers'.

Private standards, market entry and market access

Informal¹² standards have emerged as a key tool to manage quality, food safety and various intangible attributes relating to production practices within the supply chains of multiple food retailers and branded manufacturers and processors. Supermarkets endow themselves and their brands with private certification schemes in the name of trust. This 'private re-regulation' of agriculture fills an institutional gap left by public regulation, ensuring quality, consistency and assurance to consumers. Standards can bring producers considerable benefits, such as reduced agrochemical use and higher self-esteem. But also pushes costs and risks back up chain. There are now many accusations of private standards as new barriers to trade. Voluntary standards and associated codes and certification schemes are emblematic of globalisation, linked as they are to the growth of international supply chains, a reduced role for state organisations and recasting of regulatory systems and voluntary self-regulation.

A prime example is the EUREPGAP protocols, designed by a group of European food retailers primarily with food safety in mind but with some reference to social and environmental issues (Box 2). Many individual companies have also developed their own sets of standards. Although often labelled as 'voluntary' standards, in that they are not imposed by regulatory authorities, such requirements often act as 'entry tickets' into the market – producers must comply with the standards, and be able to demonstrate that they have done so, or their products will not reach the supermarket shelves.

An ability to meet the standards, and to go through the procedure of demonstrating that standards have been met, is often related to the size of the producer. By applying a 'one-size-fits-all' model, the standards may include inappropriate expectations for small and poorly resourced companies. But often it is the process of demonstrating adherence to the standards that is the barrier. Where producers are required to pay for inspections or certification, the cost is the same however large the company, so large producers can spread the cost of certification across their entire operations. This is a clear economy of scale which can exclude small producers if it is not taken into account in the design and implementation of the standards and certification procedures. Such transaction costs related to inspections, audits etc. drives the rationalisation of supply chains, with a few large suppliers preferred to many smaller suppliers.

Furthermore, as markets mature, meeting standards is no guarantee of a market premium; they become an 'unfunded mandate' and demonstrate a disproportional allocation of costs of and benefits between standards 'makers' and standards 'takers'.

The quasi-governmental role of food processors and retailers may be temporary; this is demonstrated by European food safety legislation catching up with private standards, but with the same high transaction costs for producers on the ground.

Box 2. EUREP-GAP standards

EUREP-GAP began in 1997 as an initiative of the Euro-Retailer Produce Working Group (EUREP, which now has 23 in 10 countries, including the major supermarkets and McDonald's Europe) with the laudable goal of harmonising supply chain standards worldwide for good agricultural practice (GAP). In 2003 there were 445,000 ha certified in 41 different countries, with 13,040 growers registered, 11,000 of which are in Europe.

The main focus of the EUREP-GAP Protocol 2000 is standards for food safety and traceability designed to meet consumer concerns about pesticides and food hygiene, with environment and worker welfare issues as a secondary concern. Growers receive EUREP-GAP approval through independent verification 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 current standards (1) favour large-scale producers and threatens the livelihoods of 'hundreds of thousands of people' in exporting countries such as Kenya, and (2) becomes in effect a barrier to market entry. EUREP-GAP requires their growers to have an annual farm audit. An audit costs about €450; for a grower in Ghana for example, this will absorb perhaps 70% of his profit. It is interesting to note that EUREP-GAP requirements are more onerous than current organic standards. Supermarkets require banana suppliers to comply with EUREP-GAP, ISO 14001, and the Ethical Trading Initiative's Code of Labour Practice. EUREP is to be incorporated within the *Global Food Safety Initiative* (www.globalfoodsafety.com).

EUREPGAP has moved from its original aims of broad sustainability to narrower focus on safety and hygiene. Several requirements of worker welfare have been deleted in Version 2, and some 'major musts' on environment have been demoted to 'minor musts' or 'recommendations' which require lower levels of compliance. In a study in the Sao Francisco Valley in Brazil, it was found that large and integrated suppliers are best equipped to deal with EUREP; the two classes of producers studied (exporters to European supermarkets, and sellers to local markets) showed unequal market access leading to uneven development, and also leading to reduced opportunities for temporary and part-time work.

Sources: *Fresh Produce Journal* 19 Sept 03; Banana Link; van der Grijp et al. (2004)

Characteristics of selected global food chains

Chains with different positions on the continuum from bulk to buyer-driven commodity are now briefly analysed, with reference to how chain governance is changing, and what this means for (1) the participation of small producers, and (2) the distribution of value between the chain actors.

The example of fresh fruits and vegetables (FFV)

The trade in fresh fruits and vegetables (FFV) provides a fascinating insight to buyer-driven chains. Like poultry and pork production and distribution in modern food chains, FFV is a sector with relatively short chains, very little state interference in production and markets, strong retail governance which has restructured supply chains, a prevalence of contract growing, and imposition of highly exclusive quality standards which have big implications for the growing horticulture export industries in the tropics

and Rural Worlds 2 and 3. When people talk about supermarket power, more often than not, it is with FFV in mind.

Trade liberalisation and advances in post-harvest technology and long-distance cold chains have driven rapid increases in trade in fresh produce from a low base. The market for high quality FFV has grown at a rate above population growth, supported by trends that include greater consumer demand for healthy, fresh and convenient foods, and increased emphasis on fresh produce by supermarkets as a differentiating factor in attracting customers.

In terms of industrial concentration, the fresh produce market is not characterised by narrow bottlenecks in trading or processing. It is the retail end of the chain where governance and standard setting is centred.

This private sector governance has been well documented for export of FFV from developing countries, especially Africa, to the North. The success story of horticulture exports from Kenya is much vaunted, and has recently been presented as a case study at the recent Shanghai conference on Scaling Up Poverty Reduction. Fruit, flower and vegetable exports have increased by 70% since 1995, and are now the country's number two hard currency earner. 95% of fresh produce exports go to Europe. Large-scale agro-industries such as Homegrown Kenya Ltd. employ about 500,000 Kenyans, while there are as many as 2m outgrowers, labourers and brokers in the informal sector. Homegrown has 700 outgrowers, which it grades according to compliance with market standards. The Kenyan, export horticulture has had a positive influence on the domestic market (Box 3). Export horticulture smallholders have been found to be significantly better off than non-horticulture smallholders, even after correcting for household characteristics such as age, family size, education, land ownership etc. (McCulloch and Ota, 2002). The authors suggest that these farmers benefit directly from the higher income, and indirectly from credit and extension services.

Box 3. Local spin-offs from export horticulture in Kenya

In Kenya, export horticulture has flourished, and has led to the development of a strong domestic market – mostly taken up by smallholder farmers, which is cushioning farmers against external price shocks. Five to six years ago you could not walk into a local supermarket and find mange tout, baby corn, snow peas packed and ready for sale in the urban markets. Now, the two biggest local supermarket chains have them. The export horticulture market has potential to provide new technologies, yield improvements etc. for smallholders who can in turn use the same to target the domestic market. You may find if the big supermarkets in UK were to decide not to buy vegetables the persons who would get hurt most would be the four large scale exporters and not the smallholders because they have diversified markets - from domestic, to the traditional wholesale which has not been eroded. There has also been a growth in large scale producers, but it's not at the expense of smallholders.

Source: Ashish Shah (pers. comm.)

There is much debate over the impact of public and private *standards* on both the structure and future prospects for the sector. The chairman of Homegrown was recently quoted as saying:

“Each of the markets to which Kenyan produce is shipped sends both commercial and technical representatives to observe and audit what we do here. Some of them make at least three visits in a year. In addition we have the British Retail Consortium that checks our pack stations to ensure that they meet European standards. There is also the Ethical Trading Initiative that looks into the issue of the awareness of horticulture farmers of the social impact of their activities. I would say that Homegrown spends about Ksh2-3 million [EUR 20-30,000] per month [to meet these market standards].”¹³

The impending EU food safety regulations due to come into force in January 2005 will make it mandatory for all fruit and vegetable products arriving in the EU to be traceable at all stages of production, processing and distribution, and its has been suggested these regulations could cost Kenya some Ksh26 billion (EUR 325m) annually in missed export earnings, and drive further consolidation in the export horticulture sector.

Supermarkets are also changing FFV chains around their new operations in emerging economies. In *China*, a large percentage of fresh products and other food items are purchased locally or regionally to meet the demand of the local customers, compared with the centralised European procurement model (Box 4).

Box 4 The Chinese fresh produce market

The fruit and vegetable market is the largest sector of the Chinese retail food market, but has been one of the last to be affected by the development of new retail formats. Fruit and vegetable sales are still dominated by the *wet markets*, supplied directly by local farmers and with low levels of concentration. Similar observations of a lag in supermarkets' share of fresh produce market share have been made in Latin America, most strikingly in Chile (Reardon and Berdegue, 2002). But some supermarket companies in China are reporting a doubling of year-on-year FFV sales, a process hastened by the SARS outbreak. The ascendance of supermarkets will have large impacts on the way fresh produce is grown. To guarantee fresh food quality and security, Carrefour has implemented the *Qualité Filière* programme developed in France in fruits, vegetables and fish, establishing tight relationships with producers and suppliers and giving the retailer maximum control over the whole production chain.

The Chinese domestic market is also attractive to other low cost producers in the region; China currently takes over 30% of Vietnam's total export of fruit and vegetables

Mainville (2004) has looked at the tomato and lettuce chains in *Brazil*. The choice by a producer to sell to the supermarket channel is determined by presence of skilled farm labour, growers' education and age, and technology. The choice of the supermarket channel is also determined by farm size and degree of specialisation. For tomatoes, it was found that 5% goes through the supermarket channel (modern 'classifiers'), 20% via traditional classifiers selling via traditional wholesale markets to the non-supermarket channel, eg open-air markets, and 75% via assemblers who sell to modern and traditional classifiers. For lettuce, which is more perishable, 25% goes direct to supermarkets. The supermarket channel has *higher returns but higher service requirements* (standards) and *higher risks*. Wholesalers are often described negatively, but from a producer perspective they provide more functions such as a commitment to buy the whole crop rather than just the top quality.

The number one Brazilian retailer CBD (*Pão de Açúcar, Extra* and *CompreBem Barateiro* formats) is now in the process of enforcing exacting standards in its supply chains, and a huge drop in supplier registers is foreseen. But conforming to high standards for one retailer opens up new markets for growers; other high-end supermarkets without their own standards will look favourably on suppliers that comply with CBD standards.

The example of bananas

The example of global banana chain is given here as an example of the impact of buyer power on primary producers within an market which since the 1990s has been characterised by oversupply, weak prices, and increased competition between distribution companies.

The global trade in bananas is a classic oligopoly. While a portion of trade is in the hands of independent national growers' companies, traders, importers and ripeners, a small number of vertically integrated transnational corporations dominate international banana marketing and trade, and according to UNCTAD 'are able to exercise their market power at several or all the stages of the banana marketing chain'. Only around 12% of revenues from banana retail sales remain in producing countries, despite the very limited amount of product transformation outside of the farm or plantation.

The dominance of retailers has had an increasing influence over the structure and distribution of value along the banana chain. The shift of profits downstream has been dramatic over last decade, and the transnationals' margins on bananas are now very slim. Although these multinationals are vertically integrated in sourcing, shipping, ripening, packing and distribution, they are moving away from direct ownership of production. As with other commodities, preferred-supplier arrangements are now the norm, with contracts specifying standards for quality, packaging etc (Fajarnes-Garces and Matringe, 2002).

Bananas are Britain's most popular fruit, and are a 'Known Value Item'—that is price awareness among consumers is high. When one leading supermarket drops the price of bananas, the rest are obliged to follow. A price war initiated by Asda-Wal-Mart in mid-2002 led to the reduction in supermarkets' supply bases, and the culling of less competitive suppliers as all major supermarkets demanded deep price cuts at the supplier side, to the extent that it was impossible for a grower in Costa Rica to be paid a legally minimum price for a box of bananas, and in turn, impossible for that grower to pay labour a legal minimum wage. In Costa Rica plantation workers' daily wages have fallen from around \$12-15 in 2000 to around \$7-8 in 2003 (Banana Link, in Vorley, 2003). Further consolidation in the UK supermarket sector is being watched with trepidation by the smaller scale producers in the Caribbean.

There are two pertinent lessons from the banana example for the debate about upgrading. Firstly, the downward pressure on prices in the mainstream sector can undermine the 'quality' (organic, Fairtrade..) niches by lowering the reference price from which consumers make purchasing decisions. Secondly, there is the risk that 'alternative' niches such as Fairtrade—rich in 'success stories' and examples of 'corporate responsibility'—can act as a figleaf over widespread injustices in trading relationships within mainstream supply chains.

The example of coffee

Roughly half of the world's coffee supply comes from small farms with less than 5 ha in coffee production. Low prices over the past 5 years are driving poverty, ill health, unemployment, lack of education and forced migration, and a risk of increasing diversification into proscribed crops such as coca or illegal logging.

The structure of the world coffee market has changed considerably in the past twenty years, most noticeably with the removal of regulations governing international trade. The International Coffee Agreement (ICA) of 1962 was abandoned in 1989 and the terms of the agreement were not renegotiated. The ICA worked most effectively at raising and stabilising coffee prices in the 1965-1975 period. In 1993, the Association of Coffee Producing Countries (ACPC) introduced an export retention scheme in an effort to support prices. This too was abandoned in 1998/99. The International Coffee Organisation (ICO), in an effort to reduce coffee availability and thus push prices higher, called for the removal of low-quality coffee beans. Because there is no well-defined compensation mechanism in place, this plan has also met resistance. Improved roasting methods have made it easier to remove the harsh taste of natural arabicas and

robustas, enabling roasters to produce the same coffee quality with lower quality green beans, thus putting into question ICO's proposal (World Bank, 2004)—cheaper robustas now comprise about 65% of coffee blends. After the breakdown of the ICA, most governments deregulated, leading to a major problem of overproduction. Producer prices are now subject to the vagaries of seasonal constraints and carried over stocks from preceding years, combined with stagnating global demand. Internationally traded coffee shows a bifurcated trend in quality, with increased homogenisation of lower quality coffees, especially Robusta, and increased trade of small quantities of specific high-end quality beans (Mild Arabica) (Ponte, 2001). Retail prices have been little changed, underscoring the transfer of a substantial proportion of total income generated in the coffee chain from farmers to consuming country operators. The big coffee companies are concentrated enough to provide price leadership and will usually increase their margins rather than pass on international price reductions to consumers, or profits to producers.

In the post-liberalisation environment, power has shifted from international traders to roasters, and roasters have out-sourced supply management and obliged traders to become more directly involved in producer countries.

Stefano Ponte's analysis of pre- and post-ICA governance of the coffee chain throws some very interesting light on opportunities to upgrade. He points out that upgrading possibilities during the ICA regime (1962-1989) were limited, as trade was undifferentiated. But producing countries achieved product valorisation through higher international prices provided by the ICA. In the post-ICA period, there are increased upgrading opportunities through marketing of Fair Trade coffees, but Ponte suggests that most *openings in speciality markets are more suitable to estates than smallholders*. This is because institutional frameworks supporting quality maintenance in producing countries have broken down after market liberalisation, and it has become more difficult to separate high quality from lower quality coffee, especially in countries where smallholders are the key producers. Chains of speciality coffee grown on large-scale estates, on the other hand, can be carefully coordinated with traders through pre-financing and marketing arrangements.

The example of cocoa

Africa is the main producer of cocoa, accounting for around 65% of the world production of beans. The EU is the world's leading grinder. About two-thirds of world production of cocoa is exported in the form of beans, with almost one-third being exported in the form of cocoa products (liquor, butter, cake/powder). The developing country contribution to value-added in the cocoa sector has declined from around 60% to around 28% over the past 30 years.

The global supply of cocoa is completely dependent on smallholders, as production soon declines in plantations due to disease, declining soil fertility, weeds etc. Many cocoa farmers are immigrant settlers who work for landowners residing in urban cities. 14 million workers are involved in production, over 10 million in Africa. Cocoa and coffee farmers in Côte d'Ivoire, the world's leader in cocoa production, are among the most poverty-stricken groups in the country.

Buying agents collect the beans from the various smallholders. Alternatively smallholders form cooperatives, so that prospective buyers can be presented with sufficient quantities of cocoa to allow them to assess quality properly.

Cocoa grinding and chocolate manufacture are dominated by a number of international companies--Cargill, ADM, Barry Callebaut, and Hosta have 40% market share of grinding and Mars, Hershey Foods, Kraft Jacobs Suchard, Cadburys, and Ferrero:

comprise around half of chocolate manufacturing. As in coffee, the cocoa chain is not vertically integrated; chocolate manufacturers have outsourced the production of intermediate products, and grinders have sold off their manufacturing arms.

Cocoa chains have only recently been liberalised as a result of structural adjustment programmes. Cocoa used to be traded in a highly organised market, through state regulated marketing institutions and an International Cocoa Agreement. Supply management tools (quotas and buffer stocks) have been completely removed in the latest international agreement. Government-established organisations which insulated farmers from the vagaries of the world market either through marketing boards, stabilisation funds, or cooperative monopolies, have been dismantled as a result of structural adjustment programmes. The exception is Ghana, where there is still a state monopoly to sell cocoa beans on the export market, though it has freed up the domestic buying and allowed private enterprises to compete. Former functions such as provision of extension, inputs and quality control have also disappeared.

One result of liberalisation has been the establishment of new market structures - especially backward integration of the international grinders like ADM, Cargill and Barry Callebaut into the exporting countries, which is expected to increase the dominance of national trade networks by multinationals. Very often this output does not appear on the open market and is; in other words, intra-firm trade. This new governance of cocoa chains is an opportunity for producers to forge direct links with trade networks, and also an opportunity for chain gatekeepers to call for sustainable practices. But there is an associated risk of excessive power driving down farm gate prices.

The question of most relevance to this paper is whether private re-regulation of cocoa markets is taking place, and what will that mean for market access and the share of value at farm level? One indication of private sector governance is the International Protocol signed in 2001 by the major transnational processors and manufacturers to ensure that cocoa is grown 'without abusive child or forced labour' by July 2005, in response to media attention. In 2002 a Joint Foundation was established to promote responsible labour practices in cocoa production, with projects managed under the *Sustainable Tree Crops Programme* (which covers coffee and cashew as well as cocoa), West Africa. But few opportunities have emerged for smallholders to upgrade to higher value 'buyer-driven' cocoa chains.

The example of palmoil

About one-third of the palm oil entering the world market comes from smallholders. Palm oil is typically transported, mixed, bulked, traded, refined and processed several times before it is used to make a final product. This means that there are difficulties in tracing palm produced from a particular plantation. A key aspect of the edible oils market is substitutability. For many of the bulk end-uses it is both technically feasible and affordable to switch to an alternative if the preferred oil becomes too expensive. The price of soy oil tends to set the price standard for its competitors, including palm oil. Maintaining low production costs is therefore key to the continued profitability of palm oil producers.

SE Asia is by far the main palm oil producing region, accounting for more than 85% of world production; the largest producer is Malaysia with 49% of global production, followed by Indonesia with 36%. In Asia, large plantations are the dominant model, but smallholders still represent a significant proportion of production, accounting for 30-40% of total area in Malaysia and Indonesia and 20-30% of the output.

Global consumption of major oils and fats has been increasing over the last few years, driven by growing consumer demand, particularly in the developing world, and

increased usage of vegetable edible oils which are replacing animal fats in foods, feeds and other non food applications. Palm oil is the fastest growing segment of the world edible oil production base, growing from less than 6 million MT in 1983/1984 to more than 27 million MT in 2002/2003. Authoritative projections suggest that world consumption will exceed 40 million tonnes by 2020. The great majority of this increased production is likely to stem from increased area of plantation, with half that expansion in Indonesia.

Because of the associated risk to remaining rainforest from this expansion of production, there will be growing calls for traceability and proof of sustainable production techniques, thus creating opportunities to upgrade through implementing best management practices, especially related to forest conversion. But as a bulk and blended commodity, investing in alternative supply chain structures or ensuring full chain of custody is considered impractical by the large processors and manufacturers. Methods have to be found to source from sustainable holdings within the existing market structure. One suggestion is an *area-wide approach*, where production areas are targeted for the adoption of best management practices and so the entire production of the area can be mixed and bulked. This allows most of the benefits associated with the commodity markets to be maintained.

Area-wide procurement provides a very interesting new perspective on 'upgrading'. In the case of oil palm, it is the ability of a *region* of even a country to *coordinate* improvements in sustainability of production, rather than the ability of individual smallholders or plantations, that would allow product differentiation and a price premium. A similar approach could be taken with cocoa production.

Policy implications - options for action

The process of liberalisation and deregulation has catalysed shifts in power in agrifood, particularly through the removal of State Trading Enterprises and international commodity agreements. The removal of STEs (often part of structural adjustment agreements) may not create an open market, but can replace cartels with similarly one-sided markets, dominated by global agribusiness. Relocation of risk from the state to the individual means that farmers now bear the opportunities and risks of direct exposure to volatile and unpredictable markets.

Liberalised agrifood markets are not just institutions where farmers with very different endowments of fertile land, mechanisation and state support are brought into intense competition with each other. The winners of that competition, whether producers of soybeans or salads, must deal directly with the buyer power of concentrated commodity traders, processors and retailers. In the case of retail-driven chains, the costs of participation, in the form of private standards, codes, volume requirements and fees, can be very high, undermining the comparative advantage of small farmers grounded in their higher labour and land productivity. The polarisation of agribusiness and family-scale farming cultures of agriculture receives much attention. But what many analyses around 'smallholder' agriculture and farm labour miss is the exclusion of global Rural World 2—the economic engine of many rural communities—from the mainstream, and its relegation to a status of residual supplier. Domestic markets even in the South are not necessarily a refuge for smaller farmers, as restructuring spreads in the wake of global processors and retailers' expansion into mid-income countries such as China, SE Asia and most of Latin America. Nor are 'organic' or other 'sustainable' niches insulated from restructuring, despite their popularity with donors. As Spoor (1997) notes, the 'high profit, low volume' markets which have emerged after liberalisation are far smaller than promised by the designers of structural adjustment.

Price is affected by exchange rates, commodity prices and marketing. Because marketing is the only one of the three that farmers can influence, there is a lot of policy advice to farmers about 'adding value' and creating relationships with their customers, despite the distribution of 'value added' being much more skewed to downstream processors and retailers in buyer-driven chains. How dealing with buyer-drivers is supposed to work for marginalized farmers in a country that itself is very marginalized (and subject to huge inflows of cheap products from neighbouring countries), such as the dairy farmers of the Bolivian *altiplano*, is almost impossible to visualise (see Box 5).

Some smallholders will succeed in upgrading from the vagaries of bulk commodity production to higher value chains such as Fairtrade, with the right combination of organisation, entrepreneurship and technical support. Case studies by companies, donors and NGOs can show success stories and 'best practice'. Consumers can feel vindicated by their purchases of a few fairly traded goods. But we must ensure that we are not deluding ourselves that we can niche-market our way out of a commodity crisis.

Box 5. 'La Gloria' in Bolivia

The evolution of the milk market in Bolivia dramatically illustrates the impact of economic globalisation on small farmer organisations since the privatisation and subsequent capture by transnational capital of the state milk enterprise. Three public milk companies (PILs) were set up by the Bolivian state to supply milk to the major Bolivian cities in the 1960s and 1980s as social and economic enterprises. The PILs received millions of dollars of investments from the state and from international aid agencies. The three plants account for the vast majority of the country's industrialised dairy production.

The Association of Milk Producers in the Province of Aroma (ASPROLPA) was established in 1992 to co-ordinate the supply of milk from Aroma province on the high *altiplano* to the PIL near La Paz, providing social control of quality and supply. It was also to represent members organised in 'modules' in negotiations with the government on issues of price, credit, and technical assistance for livestock development. At its peak, ASPROLPA produced 10,000 litres/day, equivalent to 30% of milk production in the province, from areas of severe natural resource constraints and deep rural poverty.

The Peruvian food and construction conglomerate La Gloria bought a controlling stake in PIL's Cochabamba and La Paz operations for US \$8m when they were privatised in 1996, and followed with purchase of the Santa Cruz company in 1999 for US \$10.5m. Conditions were attached to the 1996 privatisation sale, in which Gloria paid Bolivian milk producers a premium over prices paid to lower cost producers in Argentina. The contract also required Gloria to buy all of the milk produced by the modules until the end of 2001.

The market then began to take on classic buyer-driven characteristics. In September 2000, PIL closed the La Paz processing plant and converted it to a distribution centre for milk arriving from the more efficient plant in Cochabamba. Milk produced on the *altiplano* now travels 600km to Gloria's processing plant in Tacna, Peru. Gloria asked all modules to install cooling tanks (at a cost of US \$6,000 each) so that collected milk would meet their new quality-related standard of 4°C. Only two modules had these tanks already installed, and the other communities clearly could not afford the investment. As an alternative means to reduce collection temperature, Gloria then asked for collection during the middle of the night, at 2am, when milk temperature was low. When farmers complained, Gloria threatened to abandon milk collection, and pass responsibility of milk delivery to the farmers.

The situation improved somewhat in late 2000 when the local ice-cream manufacturer Delicia entered the market. But as Tony Bebbington notes, the capture of the state enterprises' milk collection and processing infrastructure by private capital, and the lack of ownership in the newly privatised industry by ASPROLPA members, leaves the organisation with very little leverage over the development of the milk market. Membership of MERCOSUR may open a floodgate of cheap milk from Uruguay and Argentina, and ASPROLPA is looking to its local market on the *altiplano* as a potential survival strategy.

At the Santa Cruz plant, milk prices have fallen for both the formal and informal producer sector since the PIL was sold to La Gloria. This price reduction was not passed to the consumer.

Source: Muñoz et al. (2004)

Options for donor agencies: regulation of commodity markets

Following the path of upscaling to buyer-driven chains could risk (a) distracting attention away from looking at what can be done to make mainstream commodity markets more equitable, (b) overstate the size and value potential of buyer-driven chains, and (c) overstate the ability of smaller and family scale producers to gain access *and* entry to buyer-driven chains.

Donor agencies, in their search for ‘sustainable markets’, are looking for the mythical ‘win-win-win’ of environmental protection, poverty alleviation and economic growth. The temptation is then to home in on micro-niches such as smallholder exports of organic Fairtrade produce from the developing world. But to focus on these niches, themselves subject to potential appropriation by big business, is to duck the issue of reform of mainstream markets, be they bulk commodity or buyer-driven chains.

Research gaps: Our first priority is to take stock of opportunities to *re-regulate commodity markets*, using progressive supply management agreements that reduce volatility and avoid surpluses, as well as building in social and environmental objectives. This will be the subject of intensive discussion during UNCTAD XI, and is also the subject of a Working Paper ‘Rethinking Commodities’ as part of DFID’s agriculture strategy review.

Options for governments: better information on market structure

The debate about market restructuring and smallholder access to markets suffers from a poor information base, including the extent of corporate concentration in global food chains. We don’t know how important market restructuring is relative to other policy objectives, especially reducing border protection, tariff escalation, and subsidies in the North—this remains a contested area (eg Ray et al., 2003).

Research gaps: How much of a transition from bulk commodity/staple production to buyer-driven chains is actually underway? How easily saturated are the new quality markets? Are some markets actually headed the other way—being commodified—as seen in the increased use of electronic auctions by supermarkets? Is the growing market share of the deep discounters hastening the commodification process? What are the real impacts of supermarkets in the south relative to other drivers of agrifood restructuring?

Considering how much of agrifood trade, processing and retailing is in the hands of a small number of corporations, the case for monitoring transnationals at the UN level should be pursued as a matter of urgency. The role of the extinct UN Centre for Transnational Corporations (UNCTC) included information collection, research, policy advice and development of standards of behaviour. These functions have only partly been superseded by the UN Global Compact and the OECD guidelines for Multinational Corporations.

Upgrading and intense price competition in middle-income countries driven by the demands of processors and retailers leads to saturation of markets with high quality, low price and long shelf-life staples. These then flow across borders through formal and informal trade networks into fragile markets, displacing domestic production, and

impacting food security and dietary patterns. Policy makers, donors, NGOs and producer organisations are almost completely unprepared for these ‘*spill over*’ impacts on domestic agrifood economies, and they need to be much better understood.

Options for governments: A new look a competition policy

The exercise of buyer power across national boundaries highlights the major weakness of global *regulation of competition*. Current competition policy allows the kind of uses and abuses of buyer power described in this paper because (a) imperfect markets can defy standard economic analysis and provide a big challenge to regulators, (b) power can be more of a reflection of size than monopoly, and (c) competition policy focuses primarily on consumer rather than producer welfare.

Economic globalisation has made it necessary to improve world governance on questions of monopoly and competition. No international competition standards exist to regulate corporate activity from one continent to another. In the UK, for example, the authorities’ remit is over UK or EU consumers, to protect their welfare against monopoly and seller power. The remit of these domestic competition authorities does not extend to overseas producers. If a UK-based company exerts buyer power to push down producer prices when it (or its suppliers) buy cocoa in Ghana or beans in Kenya, this will be a matter for the Ghanaian or Kenyan competition authorities.

There is heated debate as to whether the WTO is the right forum to address global competition issues. The development of a WTO Competition Law Framework is headed in a very different direction: simplifying regulation across national boundaries to facilitate transnational commerce and market access for industrialised country goods and services.

Research gaps: What justifications are there for viewing supply-side competition problems separately from conventional competition analysis? What is the most efficient form of competition to put a brake on increasing supply side-competition and a weakening of countervailing power among primary producers?

Options for producers-- cooperating to compete

The most obvious advice for small-scale and family farmers responding to the changes in agrifood organisation is to treat the changes as the new commercial reality, and to organise to engage with this reality. Small producers in both developing and industrialised countries are being advised to forge direct relations with the market, as well as with providers of research and advice, with NGOs, and with the state. The opportunity, it is argued, is for small producers to exploit their comparative advantage and emerge as full partners in (and drivers of) economic and political development.

This is the logic of ‘*small farmer economic organisations*’ (SFEOs; Berdegué, 2001) in the developing world and ‘*new generation*’ cooperatives in the industrialised world. Both have similar drivers: producers realising that in a chronically oversupplied market, a marketing mentality—in which organisations perform at higher levels of specification, coordinate technology use and improve scheduling—is necessary to contract into differentiated agri-food chains. A SFEO may be set up by producers around a common interest in generating improved income, through the joint production and/or marketing of a commodity, accessing market information, unifying their production goals and possibly extracting themselves from the grasp of middlemen and farmgate buyers.

Participation in economic organisations can bring significant economic benefits when the organisation operates in buyer-driven chains with high transaction costs, such as

dairy (Berdegué, 2001). They are well placed to deal with the management requirements of regulations and inspections associated with buyer-driven chains. Success depends on group solidarity, collective bargaining techniques and institutions that enforce contracts impartially and secure long-term property rights (Vorley, 2002). To fill the gap left by the abolishment of national stabilisation schemes and state trading enterprises, economic organisations could also transfer part of the risk of price volatility to the market using *hedging* strategies as proposed by World Bank.

However, when transaction costs are low, as they are for undifferentiated commodities like wheat and potatoes, there may be no benefits from collective activities. And in terms of managing price on a large scale, economic organisations of growers cannot hope to be a substitute for governments as organisers of exports. For commodity producers, there is also a strong case for re-examining the accumulation of countervailing power through cooperative action – a return to the cooperative principle of solidarity. The much-vaunted advantages of shortening supply chains and making them more transparent will not benefit poorly organised farmers when more powerful actors appropriate any ensuing savings. The development of cooperatives in the context of globalisation and open borders faces the obvious dilemma: how to reach the required size to exercise countervailing power against transnational agribusiness and retailers that are scouring the globe for their supplies. Another important option for producers is to opt out of extractive and exploitative markets, and to diversify into localised markets and alternative trading structures.

SFEOs are hot development topics because of their perceived link between small producers, the state, donors, and national and international markets. They are seen as in a crucial position to combat poverty within a liberalised economy; and as key to formalising the smallholder economy.

This case from Bolivia (Box 5) showed that, when governance of the chain changed towards a more ‘buyer-driven’ organisation, the response from the favoured institutions of liberalisation—a market-facing organisation of smallholders, a responsive and responsible private sector, and a successfully decentralised state—did not respond according to the grand plan of economic liberalisation. The donor community has probably loaded an overly ambitious set of expectations on SFEOs as direct market actors in a era of deregulation and trade liberalisation (Muñoz et al, 2004).

Options for business—fairness in trading and ‘responsible supply chain management’

The stock market likes buyer power, seeing it as a measure of a ‘sustainable business’ that will generate competitiveness, profits and shareholder value. Thus voluntary self-regulation as a tool for improving agrifood companies’ dealings with their suppliers and ultimately with small and family-scale producers will be limited both by shareholder pressure and company mindset. Public policy leverage over private-sector governance of food chains is weak and poorly defined. Equity and fairness in trading are almost entirely absent from the gamut of benchmarks, codes and standards for corporate social responsibility (CSR). Very few corporations seem to have made any significant moves to bring the CSR agenda onto their buying desks, the sharp end of agribusiness’ trade with their supply chain. They remain resolutely customer-, rather than supplier-focused. Supermarkets, for example, have shown much more interest in reacting quickly to technologies that alienate consumers (such as genetic modification) than in reacting to marketing practices that alienate suppliers. Price wars and pressure on suppliers and farmers are conducted in the name of providing customer value.

Retailers will point to a commitment to *Fairtrade* labelled (FT) goods as sign of commitment to trade justice. But there are a number of reasons why Fairtrade labelling alone is a weak proxy for company commitment to fairness and justice in trading.

Firstly market size; even in the UK, which has a well developed Fairtrade market, sales account for only 0.13% of the £76bn spent on food and drink in the UK in 2003, or 0.07% if catering services are included. Secondly, many retailers have positioned FT as an up-market de-commodified niche rather than a means to transform their mainstream businesses. In effect retailers have made fairness and justice in trading a *consumer choice* rather than a *corporate standard*.

Fairtrade has four key elements: (1) direct purchase, (2) guaranteed minimum price and price premiums, (3) credit allowances, and (4) long term relationships. Incorporating these principles (or at least 2-4) into contracts on a much wider scale can be implemented without being trumpeted as 'fair trade' or branded as a 'fair trade store'; rather, it becomes a corporate standard, whereby customers walking into a store or buying a brand are reassured that their purchases have not contributed to the exploitation of producers and workers. A branded food manufacturer or retailer can take this further, and apply fair trade concepts to all of its trade with the developing world.

Another ingredient of Fairtrade in non-plantation sectors is procurement from smallholders. A corporate commitment to *rethinking supply chain management in favour of smallholders*, including ensuring 'equity in standards', would be another step towards *regoverning markets* in support of poverty reduction. Of course, smallholders are not necessarily the 'sustainable' or 'ethical' options if we consider all standards, such as for labour conditions. There will inevitably be trade-offs between 'ethics' via plantations and 'sustainable livelihoods' via smallholders. Outsourcing to smallholders can be a handy way around other standards; in one mailing to the DFID growth and poverty e-forum, Dick Tinsley noted:

"[T]he major tea companies in Tanzania are looking to smallholders to expand their leaf production rather than expansion of their own holdings. This is mostly to avoid a 220% fringe benefit package they have to provide employees including housing, day care, education and health clinics. They were also noting that smallholders could use child labour with the more nimble fingers for plucking the leaf."

Research gaps: What policies could a retailer put into place in order to mainstream fairness and justice, such as minimum pricing, and equity in standards? What policies (public sector and private sector) are required to encourage links between small farmers and agribusiness?

Options for business—equity in standards

There is now much interest in private 'voluntary' standards, and their role as both potential barrier to trade and driver of better environmental and social performance of agriculture. But there are many unanswered questions.

Research gaps. What is clear not is how to progress towards *equity in standards*, especially through including affected parties in the standard-setting process. IIED is involved in a three-year process with DFID to identify to keys to developing non-exclusionary standards, using EUREPGAP and other retail-driven standards as references. Another research gap is identifying where a buyer pays the premium to the sustainable producer, but without taking physical delivery from that producer—a mechanism analogous to that used in buying 'green' electricity) here is very little data on the *importance of standards relative to other market entry conditions* such as *volume requirements*.

References

- Berdegú JA (2001). *Cooperating to Compete: Associative peasant business firms in Chile*. PhD thesis, Wageningen University, the Netherlands.
- Bienabe E, Coronel C, Le Coq J-F and Liagre L (in press). Linking small holder farmers to markets: Lessons learned from literature review and analytical review of selected projects. World Bank/CIRAD/IRAM.
- Burt SL and Sparks L (2003). Power and competition in the UK grocery market. *British Journal of Management*, 14 (3), 237-254.
- Cox A, Ireland P, Lonsdale C, Sanderson J and Watson G (2002). *Supply Chains, Markets and Power: mapping buyer and supplier power regimes*. London: Routledge.
- Deloitte Research (2004). *Assessing retail globalization*. Deloitte & Touche USA.
- Dries L, Reardon T and Swinnen JFM (2004). The rapid rise of supermarkets in Central and Eastern Europe: Implications for the agrifood sector and rural development. *Development Policy Review*,
- Fajarnes-Garces P and Matringe O (2002). Recent developments in international banana marketing structures. UNCTAD <http://r0.unctad.org/infocomm/anglais/banana/sitemap.htm>
- Gabre-Madhin, E (2004). Getting Markets Right: A New Agenda Beyond Reform. World Bank.
- Gereffi G (1994). The organization of buyer-driven global commodity chains: How U.S. retailers shape overseas networks. Pp 95-122 in G Gereffi and M Korzeniewicz (eds) *Commodity chains and global capitalism*. Westport CT: Praeger.
- Gereffi G (1999). A commodity chains framework for analyzing global industries. www.ids.ac.uk/ids/global/Conf/pdfs/gereffi.pdf
- Gereffi G and R Kaplinsky (2001) The Value of Value Chains: spreading the gains of globalisation (eds) *IDS Bulletin* Theme Issue 32(3). www.ids.ac.uk/ids/bookshop/bulletin/bull323.html
- Gilbert CL and ter Wengel J (2001). Commodity production and marketing in a competitive world. In: Common Fund for Commodities. *Commodities and Development at the Turn of the Millennium*. Amsterdam, CFC. http://staff.feweb.vu.nl/cgilbert/UNCTAD_paper.PDF
- Hagen JM (2003). Agrifood innovation in developing countries: the role of retailers. Paper presented at 13th Annual World Food & Agribusiness Forum and Symposium, Cancun, Mexico June 21-24, 2003. www.ifama.org/conferences/2003Conference/default.htm%20on%20Farm%20Income.pdf
- Hildred W and Pinto J (2002) Impacts of supply chain management on competition. Working Paper Series 02-10, College of Business Administration, Northern Arizona University. www.competitivemarkets.com/library/academic_reports
- Mainville D and Reardon T (2004). Modelling relations among supermarkets, intermediaries, and produce farmers in Brazil. Paper presented at EAAE Conference on Retailing and Producer-Retailer relationships in the Food Chain, Paris, 5-6 May 2004.
- McDonald JH (1999). The neoliberal project and governmentality in rural Mexico: emergent farmer organization in the Michoacan Highlands. *Human Organization* 58(3): 274-284.
- McCulloch N and Ota M (2002). Export horticulture and poverty in Kenya. *IDS Working Paper* 174. <http://server.ntd.co.uk/ids/bookshop/details.asp?id=723>

- Morisset J (1997). *Unfair Trade? Empirical evidence in world commodity markets over the past 25 years*. US Foreign Investment Advisory Service.
www.worldbank.org/html/dec/Publications/Workpapers/WPS1800series/wps1815/wps1815.pdf
- Muñoz D, with Cruz B and Canedo M (2004). *Organizaciones económicas y políticas públicas: un estudio comparativo*. La Paz: Ediciones Plural.
- Narayanan S and Gulati A (2002). Globalization and the smallholders: a review of issues, approaches, and implications. MSSD Discussion Paper 50, IFPRI, Washington, D.C.
- Orden D, Torero M and Gulati M (2004). Agricultural Markets and the Rural Poor Draft background paper for workshop of the Poverty Reduction Network (POVNET), March 5, 2004. http://dfid-agriculture-consultation.nri.org/theme4/keypapers/povnet_agricultural_markets_and_the_rural_poor.doc
- Östensson O (2002). *Commodities in International Trade: Current Trends and policy issues implications for Caricom Countries*. UNCTAD.
http://r0.unctad.org/infocomm/comm_docs/essai.asp
- Ponte, S (2001). The 'Latte Revolution'? Winners and Losers in the Re-structuring of the Global Coffee Marketing Chain. *Working Paper 01.3*, Centre for Development Research, Copenhagen.
- PWC (2002) Retail and consumer: from New Delhi to New Zealand. *China Country Report*.
www.pwcglobal.com/gx/eng/about/ind/retail/countries/china_p.pdf
- Porter ME (1990). *The Competitive Advantage of Nations*. New York: Free Press
- Qualman D (2001). *The Farm Crisis and Corporate Power*. National Farmers Union of Canada Report April 2001. www.policyalternatives.ca/publications/farm-crisis.pdf
- Ray DE, De La Torre Ugarte DG and Tiller KJ (2003). *Rethinking US Agricultural Policy: changing course to secure farmer livelihoods worldwide*. Agricultural Policy Analysis Centre, University of Tennessee. <http://apacweb.ag.utk.edu/blueprint.html>
- Reardon T and Berdegue JA (2002). The rapid rise of supermarkets in Latin America: Challenges and opportunities for development. *Development Policy Review* 20 (4), 371-388.
- Spoor M (1997). *The 'Market Panacea': Agrarian Transformation in Developing Countries and Former Socialist Economies*. London: Intermediate Technology Publications
- Sturgeon TJ (2000). How do we define value chains and production networks? MIT IPC Globalization Working Paper 00-010. <http://globalization.mit.edu/workingpapers.html>
- Sustainability Institute (2003). *Commodity systems challenges: moving sustainability into the mainstream of natural resource economics*. Sustainability Institute, Hartland VT, USA.
www.sustainer.org
- Tilzey M (2004). Contested policy discourses in a post-fordist agricultural transition: a comparative analysis of the EU and Australia. National Europe Centre Paper No. 120 delivered at the National Europe Centre at the Australian National University, 6 February, 2004.
www.anu.edu.au/NEC/Tilzey_paper.pdf
- UNCTAD (2003). *Commodities, Markets and Rural Development*. Roundtable meeting organised by UNCTAD in the context of preparations for the High Level Segment of ECOSOC, 30 April 2003, New York www.un.org/esa/coordination/ecosoc/hl2003/RT7%20summary.pdf
- van der Grijp N, Marsden T and Cavalcanti J (2004). Retailers as agents of change towards pesticide use reduction. Paper presented at EAAE Conference on Retailing and Producer-Retailer relationships in the Food Chain, Paris, 5-6 May 2004.
- Vorley B (2002). *Sustaining Agriculture: Policy, Governance, and the Future of Family-based Farming*. IIED, London

Vorley B (2003). *Food, Inc.: corporate concentration from farm to consumer*. London: UK Food Group.

Weatherspoon DD and Reardon T (2003). The rise of supermarkets in Africa: implications for agrifood systems and the rural poor. *Development Policy Review* 21(3), 333

World Bank (2003?). *Global Economic Prospects and the Developing Countries 2004?*

Wrigley N and Lowe MS (2002) *Reading Retail: A Geographical Perspective on Retailing and Consumption Spaces*. New York, Arnold: London and Oxford University Press, 288pp.

Notes

¹ Either through demanding lower merchandise prices, or demanding greater provision of services such as special packaging or third-party food safety certification, or demanding payment of fees.

² What Tilzey (2004) describes as the 'neo-mercantilist' constituency

³ Here we mean markets where buyers are willing to pay a higher price than for traditional farm commodities, rather than adding value through increased farm-side processing

⁴ Beurskens F (2002). Value of supply chain management issues from the customer's perspective. Corn Utilization and Technology Conference 2002 June 3-5 2002.

www.agribiz.com/fbFiles/bio/cutc2002.htm

⁵ *Farming and Food: a sustainable future*. Report of the Policy Commission on the Future of Farming and Food, chaired by Sir Donald Curry. January 2002. www.cabinet-office.gov.uk/farming/index/CommissionReport.htm

⁶ In line with the fragmentation of markets within what has been described as the transition from Fordist to post-Fordist agrifood regimes

⁷ Corporate Agribusiness: Co-opting the Co-ops. *The Agribusiness Examiner* 33, May 12, 1999. www.electrarrow.com/CARP/agbiz/agex-33.html

⁸ Statement by the farmers of the world on industrial concentration in the agrifood sector 35th World Farmers' Congress, Gizah, Cairo, Egypt, 25-31 May 2002

www.ifap.org/Cairo%20Conference/concentration.html.

⁹ Retail banner sales (including VAT and/or sales tax) are the sum of the sales of all stores under a retailer's banner.

¹⁰ For example, see USDA study of the orange juice market. Binkley J, Canning P, Dooley and Eales J Consolidated Markets, Brand Competition, and Orange Juice Prices. USDA-ERS Agriculture Information Bulletin No. 747-06 June 2002.

<http://www.ers.usda.gov/publications/aib747/aib74706.pdf>

¹¹ In the US cheese market, Kraft with about 30% of the cheese market found it profitable and attractive to manipulate cheese prices downward to gain price advantage--this is discussed in *Knevelbaard Dairies v. Kraft*, 232 F3d 979 (9th Cir. 2000)—

www.competitivemarkets.com/library/academic_reports/2002/7-23.htm and

www.competitivemarkets.com/ocm1.html

¹² By informal we mean private standards, as opposed to regulatory or statutory standards.

¹³ *Horticulture Faces Serious Threats*. Interview with Rod Evans, the Chairman of Kenya Flower Council, and the Chairman of Homegrown Kenya Limited by Market Intelligence journal.