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**Concentrated Market Power
and Agricultural Trade**

by Sophia Murphy

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Preamble

This paper is written as a discussion paper within the framework of the project “EcoFair Trade Dialogue. New Directions for Agricultural Trade Rules” (www.ecofair-trade.org).

The EcoFair Trade Dialogue is an international project carried out by the Heinrich Böll Foundation in cooperation with MISEREOR and moderated by the Wuppertal Institute. The overall aim of this project is to enrich the debate on the reform of the current regime of global agricultural trade through the development and advancement of forward looking guidelines and instruments, taking the concepts of ‘food sovereignty’ and ‘sustainable agriculture’ as reference points. Since the beginning of 2005 the EcoFair Trade Dialogue has brought together a group of 11 ‘experts’ on agriculture and trade issues from around the world, the so-called Expert Panel, to exchange views, work intensively together and make innovative and feasible proposals for a profound reform of the international agricultural trade regime. During 2006 a series of stakeholder dialogues in different regions of the world are being conducted to bring additional expertise to the process, and ground the group’s proposals in local and regional experiences. A concrete and coherent reform proposal that responds to the 21st century’s social and ecological challenges for global agriculture is envisaged as the outcome of the project at the end of 2006.

The Eco-Fair Trade Expert Panel has identified market power as one of the obstacles preventing the emergence of fairer, more ecologically sound trade rules for agriculture. The paper focuses on the role of trade, investment and competition rules and their role in the problem of concentrated markets. It concludes with some recommendations for policy change and organizing to confront the imbalances of power.

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Content

Executive Summary	5
<i>1 What Is Market Power and Who Has It?</i>	9
<i>2 Dimensions of Market Power</i>	12
2.1 Measures of Concentration	13
2.2 Standards	14
2.3 Horizontal and Vertical Concentration	14
2.4 Contract Agriculture and Global Commodity Chains	15
2.5 Brands, Information and the Culture of Transnational Food	17
2.6 The Politics of Market Power	18
<i>3 Market Power and the Public Interest: Farmers, Farm Workers and Consumers</i>	19
3.1 Farmers	22
3.2 Farm Workers	24
3.3 Consumers	25
<i>4 Trade, Competition and Investment: the links to market power</i>	27
4.1 Trade	27
4.2 Competition	31
4.3 Global Competition Rules?	33
4.4 Investment	34
<i>5 Conclusion</i>	35
References	40

Executive Summary

This paper is written to provide information and analysis on concentrated market power in agricultural markets, from input providers through producers, to processors and retailers. The EcoFair Trade Dialogue has identified concentrated market power as one of the obstacles preventing the emergence of fairer, more ecologically sound trade rules for agricultural commodities and food.

Market power is the ability to affect price (setting buyer prices above and/or supplier prices below open market levels), to reduce competition (for example, by keeping out new entrants) and to set standards for a sector of economic activity. Market power in agriculture is not new: in grain trading, for example, four of the top five firms today dominated the market 100 years ago, too (Cargill, Continental, Bunge and Louis Dreyfus). It was farmers organizing in the face of concentration in the grain trade that led to many of the features of agriculture that are typical in industrial countries today, including: farmer-owned co-operatives that engage in trading commodities and sometimes processing them; publicly mandated state-trading enterprises with a monopoly on aspects of agriculture including food and commodity purchases, distribution and exports (e.g., the Canadian Wheat Board or Indonesia's BULOG); and, domestic support programs that set a price-floor for commodities to counter the power of commodity buyers to drive prices below the cost of production.

Farmers are inherently disadvantaged in the market: they are numerous, while processors are few (one mill can grind the wheat of many farmers); individual farmers' production decisions have no effect on price (they are too small individually to make prices rise by reducing acreage or head of livestock); they must find capital up-front for an uncertain harvest several months hence (in the case of fruit trees or livestock, even several years); and, it is expensive to store harvested production, leaving most producers trying to sell their crops at the same time. The larger the market, the more difficult these circumstances become. A bigger market means more growers competing with each other. Although there should also be more buyers potentially, the vast majority of farmers lack the storage and capital needed to get their goods to distant markets, so they are left selling locally, to middle-men (and women) who now have more suppliers to choose from.

If market power is not new, it has today important new characteristics, reflecting the wider global economic trends that marked the end of the 20th century. Technological innovations in the areas of transport and communications, for example, have revolutionized food production, processing and distribution. New economic drivers have emerged, causing some of yesterday's dominant firms,

particularly in commodity trading and food processing, to face difficult challenges in trying to stay relevant and profitable. The most significant new drivers are supermarkets—their newly established dominance is particularly strong in Europe, but supermarkets are rapidly consolidating distribution and retail markets on every continent.

A second big driver, also with considerable market power, are the firms that provide agricultural inputs such as seeds, pesticides and agricultural chemicals of all kinds, now reinvented as Life Science companies. These firms, such as Monsanto and Syngenta, are focused on discovering and patenting genes of all kinds to use in developing plants with new attributes (tolerance of herbicides or drought, for example, or increased nutritional content). The commercial seed industry is not yet highly concentrated at the global level because most farmers continue to plant seed saved from previous harvests. However, industrial agriculture depends absolutely on commercial seeds—many of them hybrids that produce sterile seeds—and commercial seeds are increasingly common. Commercial seed markets are also heavily concentrated. For example, Monsanto controls 41 percent of the global market in commercial maize seed and 25 percent of global soybean seed. This process is privatizing what has been part of the commons for millennia: knowledge on what seeds, plants, growing techniques and animal breeds suit particular growing conditions or meet human needs, from drought resistance to nutritional value and medicinal applications.

Market power in agricultural production, processing and distribution both shapes global trade and investment rules and is shaped by those rules. The steady downward pressure on tariffs, for example, has opened up markets in ways that favour companies in a position to do business on a global scale. The strong policy push away from government interference in markets, whether in the form of commodity boards, quantitative restrictions on imports, export taxes, price stabilization policies, production incentives (or restrictions), production subsidies, or capital controls, has changed markets for farmers the world over.

Farm organizations have welcomed some of these changes. For example, a number of commodity boards had no voice for producers and many governments deliberately set prices below market rates to subsidize urban consumers or to increase profits from exports for the state (and, worse, for the private gain of the officials who controlled the board). Yet the abolition rather than reform of these boards has often created new problems. In many poorer countries, the private sector lacks the capital and know-how to provide for the services that commodity boards once offered, services such as low-interest credit, subsidized inputs, a guaranteed buyer at a stable (albeit often low) price, or access to markets that individual producers could not reach on their own. Transnational agribusiness might enter these newly opened markets, but have no interest in serving the needs

of the whole country; areas that are close to airports and ports or big urban centres might see new investment, but much of the country is left out of the change.

Market power is also shaping agriculture independently of trade and investment rules. The emergence of private standards, set by industry without reference to government, such as Europe's Eurepgap (developed by the Euro-Retailer Produce Working Group), has a profound impact on who can sell their produce where. No matter the tariff or public standard, if a product does not make it to a supermarket shelf, or a processor's factory, there are few other marketing options available to the seller. This is the market access that ultimately counts, whether in domestic or export markets. The fewer the companies in control of that access (whether commodity brokers, food processors or supermarkets), the fewer options producers have on where to sell their production.

The challenges presented by today's levels of corporate concentration do not invite easy answers. Those concerned to protect and promote Eco-Fair Trade for agriculture need to pursue a number of avenues. The following paper considers a variety of policy options, in some cases raising more questions than are answered. There is a widely acknowledged need for increased transparency in national and international markets about the scale and diversity of the largest food companies. With the exception of the food retail sector, for which relatively good information is available for many regions, there is little transparency on such questions as, for example, how much of the world wheat trade is handled by Cargill, and how that global figure breaks down by region. Nor do we know how much of world agricultural trade is in fact an intra-firm transfer within a multinational company. Computer models that attempt to predict the likely outcomes of various trade negotiations are severely hampered in their assumption of perfect markets, when most commodity markets are characterized by very imperfect competition.

Governments need urgently to review their national competition strategies to ensure both producer and consumer interests are addressed and that more than just efficiency outcomes are considered. Recent decisions related to competition have focused on consumer interests, which is a vital dimension of the issue. Yet that has focused debate on final price and efficiency rather than on other important concerns, including the impact of market power on equity (how are costs and benefits shared) and on price stability (especially for producers, price stability is an important factor in determining capacity to invest and innovate rather than pursue low-return, risk-averse behaviour). Governments need also to consider the impact of market structures on employment: if maximizing efficiency in an agriculture sector means widespread rural unemployment, then governments have to consider whether alternative employment is available in other economic sectors, or whether they can afford the dislocation and poverty that the loss of agricultural jobs entails.

In thinking through solutions, governments and policy advocates will also need to return to the question of how to manage investment and competition at the global level. Ideas include creating minimum standards of private sector behaviour (to meet environmental requirements, to ensure labour and producers are fairly treated, to protect against price-gouging, and so on). Dilemmas include where to hold such talks—the WTO does not have the mandate, nor the level of trust required by all parties; the UN Conference on Trade and Development arguably has a stronger mandate, but is considered irrelevant by a number of the more powerful developed country governments. Yet the existing extent of global economic integration makes this discussion urgent. The paper also looks at the need to foster farmer organizing in developing countries, albeit cognizant of developed country experiences, where some farmer-based co-operatives have evolved into multinational agribusinesses with little regard for their original stakeholders.

There is no simple answer to the challenges raised by concentrated market power. The paper explores the challenges and the Eco-Fair Trade Panel welcomes debate to further clarify our thinking on this important issue.

The paper is structured as follows. It

1. defines market power and offers some examples of the firms that hold this power in some sectors of the food and agriculture system.
2. considers in more detail some of the elements of market power, including vertical and horizontal concentration, size, branding, access to information and political influence.
3. explains why the dominance of agri-business in agricultural markets is of concern to public policy, looking at farmers, farm workers and consumers.
4. reviews how trade, competition, and investment rules interact with and reinforce market concentration.
5. concludes with some ideas of possible solutions.

1 What Is Market Power and Who Has It?

“We are the flour in your bread, the wheat in your noodles, the salt on your fries. We are the corn in your tortillas, the chocolate in your dessert, the sweetener in your soft drink. We are the oil in your salad dressing and the beef, pork or chicken you eat for dinner. We are the cotton in your clothing, the backing on your carpet and the fertilizer in your field” (Cargill corporate brochure 2001).

Market power is the ability to affect price, to reduce competition and to set standards for a sector of economic activity. Market power is the ability to set customer prices above competitive levels (seller power) and/or the ability to set supplier prices below competitive levels (buyer power). Market power undermines competition. A firm with market power can increase its profits at the expense of its suppliers or customers or both. Market power is not the same as monopoly power. A monopoly exists when only one firm sells a particular good or service in a market. Monopolies (and monopsonies, when only one firm buys the good or service on offer) are easily identified; market power is more complex and not always so obvious.

The quote from Cargill above describes a company with significant market power. Cargill, privately owned and operated since 1865, has the largest terminal capacity of any company in the U.S. Along with its operations in the United States, Cargill can handle 23.9 million bushels of grain exports in Canada and 24.6 million bushels in Argentina and Brazil. Cargill alone exports 42 percent of the corn that leaves U.S. shores (and the U.S. supplies some two thirds of the world market). Cargill is among the top three beef producers in the United States, and plays an important role in poultry production. It owns and operates a worldwide transportation business, with ships, trucks, barges and railcars, as well as grain elevators for storage. Cargill owns NatureWorks, a company that produces plastics from plant based sugars that competes with oil-based polymers used in plastic wrap, disposable cups and cutlery, and as filler in pillows and mattresses. Sales and other revenues (gross income) has grown steadily and remarkably over the past five years and now exceed US\$ 70 billion:

Cargill Sales and Other Revenue in Millions of US \$

2001	48,631
2002	50,398
2003	54,390
2004	62,907
2005	71,066

Cargill's website offers a second list of activities that expands still further the scope of the company's market power, "With ... a long history of trading in global financial and commodity markets, Cargill is a proprietary investor, alternative asset manager, broker-dealer and provider of risk management products and services." (www.cargill.com 2005). In other words, Cargill is not just about selling and processing commodities—goods—but is also all about services: banking, loans, investment, currency deals, risk insurance, shipping and more. Market power is not the same as just size; there are big firms that do not have much market power. In Cargill's case, however, its scale and range of activities is an indicator of the kind of advantages Cargill has over many smaller and less diverse rival firms. Cargill illustrates one important dimension of market power in the agricultural sector: it offers a one-stop-shop for the farmer (or buyer) that makes it easy to do business with.

Cargill is one of several enormous firms in the commodity trading and processing sectors, alongside other giants such as Archer Daniels Midland (ADM), Bunge and Louis Dreyfus. Other sectors of the food and agriculture system show similar patterns of concentrated market power. The Action Group on Erosion, Technology and Concentration—the ETC Group—monitors concentration in the seed industry. Their data shows that the top 10 multinational seed firms control half of the world's commercial seed sales (ETC Group, *Communiqué* No. 82 2003). Although the commercial seed market is still relatively small (most farmers, especially those in developing countries, continue to save seed from previous harvests), commercial seeds are nonetheless very significant in the world's total food output, because most industrial agricultural production relies on them.

The ETC Group found that one dominant seed firm, Monsanto, now controls 41 percent of the global market in commercial maize seed and 25 percent of the global soybean seed market. Monsanto also sold the seed for 88 percent of the total area planted in genetically engineered crops worldwide in 2004. The growing importance of gene technology in the development of new seeds makes market power in this sector particularly troubling. It is a sector, like pesticides, fertilizers and farm equipment, where farmers were historically self-reliant (for example, saving seed or using crop rotation and manure from their farm animals to maintain the health of the soil) but if they have adopted industrial farming techniques, they are now entirely dependent on buying inputs from the market. In 2002, 10 companies controlled 80 percent of the US\$ 27.8 billion global pesticide market (ETC Group, *Communiqué* No. 83 2003). Bioengineered seed usually comes with what the seed companies call a "technology package," which dictates how seeds are to be planted and crops cared for—this package, like the seed, is patented and farmers must both pay a royalty to use the technology and know-how in the package, and commit not to use the techniques without first buying the company's seeds.

The top ten seed firms worldwide (by value of sales) are shown in the chart below. Seminis, Monsanto's latest acquisition, is a leading fruit and vegetable seed firm based in California, with sales in 150 countries.

World's Top 10 Seed Companies (ETC Group Communiqué No.82 2003)

[Based on 2004 seed sales and measured in US\$ millions]

1. Monsanto (US) + Seminis (US) (bought by Monsanto 3/05) pro forma =	\$2,803
2. Dupont/Pioneer (US)	\$2,600
3. Syngenta (Switzerland)	\$1,239
4. Groupe Limagrain (France)	\$1,044
5. KWS AG (Germany)	\$622
6. Land O' Lakes (US)	\$538
7. Sakata (Japan)	\$416
8. Bayer Crop Science (Germany)	\$387
9. Taikii (Japan)	\$366
10. DLF-Trifolium (Denmark)	\$320
11. Delta & Pine Land (US)	\$315

Perhaps the most dramatic development in market power in the food system, however, has been the emergence of food retailers as dominant players, reaching back downstream to contract with farmers and shaking up many of the businesses that used to play the intermediary role as processors or procurers. Grain traders such as Cargill have been powerful players in agricultural commodity markets for well over a century. Four of the top five grain traders today were dominant at the turn of the 20th century (Cargill, Continental, Bunge, and Louis Dreyfus). Retail power is a much newer phenomenon. In the ten years since Wal-Mart first started to sell food, it has emerged as the world's largest grocery store, with 45 percent of its phenomenal sales coming from groceries. Wal-Mart is five times bigger than Cargill in both sales and profits, with total sales in 2005 worth US\$ 321,547 (45 percent of this was in groceries).

In 1992, the five largest U.S. supermarket chains controlled 19 percent of grocery sales. By 2005, conservative estimates put that number at 28.7 percent (Planet Retail 2006, p. 4) Wal-Mart came from nowhere in the mid-1990s, when it started to sell food, to its position today as the largest global food retailer. In 2004, Wal-Mart was estimated to have 6.1 percent of the global grocery market; almost three times as much as the nearest rival, the French-owned Carrefour, which had 2.3 percent (M + M Planet Retail, cited in Vander Stichele et al. 2005, p. 53). In the U.S., where the food retail market is nothing like as concentrated as it is in Europe, Wal-Mart had 15.7 percent of U.S. grocery sales in 2004, some four times more than its nearer competitor, Kroger, at 3.8 percent.

Companies that sell their products through supermarkets are now dealing with companies as or more powerful than they are. Planet Retail (a group that monitors developments in the retail sector worldwide) cites U.S. Securities Exchange Commission filings that show the following percentages of firms' sales to Wal-Mart: Dial Corp. (28 percent), Clorox (25 percent), Revlon (21 percent), Procter & Gamble (17 percent), Energizer (17 percent), General Mills (14 percent), Gillette (13 percent), Kellogg (13 percent), Kraft (12 percent) and Sara Lee (12 percent) (Planet Retail 2006, p. 4). The emergence of food retailers is rapidly changing power relations in the food system and is creating its own set of challenges and shifts in market power.

The level of concentration in grocery distribution varies across continents. Researchers Vander Stichele et al say in 2003 the top 30 retailers had 19 percent of the market in Asia and Oceania, 29 percent of the market in Latin America and 69 percent of the market in Europe (Vander Stichele et al. 2005). The trend lines are similar across all continents, including those parts of Africa where the research has been done—supermarket chains, usually but not exclusively headquartered in Europe or the U.S. (in Africa they are based in South Africa), are replacing local food shops in all continents, bringing the capital and know-how to deliver a variety of food to consumers in one place.

2 Dimensions of Market Power

In agriculture, market power is often concentrated at the point a firm turns a commodity into a comestible good. Millers have more market power than wheat growers; coffee roasters command greater profits than coffee farmers; and, so on. Market power in agriculture looks like an hourglass: a large number of farmers at the base sell to a small number of processors and distributors and supermarkets in the middle, who sell to a very large number of consumers at the top. In this pattern, agri-business firms often have dependent suppliers (suppliers with nowhere else to sell their production) and dependent buyers (if you need corn, soybeans or wheat, four firms sell the overwhelming majority of production globally). That hourglass creates a series of challenges for policy-makers in agriculture; it has to be worked with and understood (not ignored, as it is in so much free market rhetoric) for policy outcomes to be successful.

2.1 Measures of Concentration

Economics has several ways of measuring market power. One common measure is the concentration ratio (CR), which measures the share of the market controlled by the largest firms (typically the top 3, 4 or 5). A CR4 (meaning the share of the top four firms) of 40 percent or less is generally considered to be a competitive market. The weakness of the CR as a measure is that it does not indicate if there is any movement among the top firms measured (number one might slip to fourth place, but the CR could be unchanged). Nor does the CR say whether the top firms are among 100s in total, or just two other firms. The partial snapshot can be misleading. Still, the CR does provide a useful, if rough, measure.

By way of illustration of market power in agriculture using a CR measure, consider the following: in 2005, CR3 for Australian supermarkets was 89 percent; the CR3 for soy oil refining in Brazil was 86 percent; the CR4 for fungicides and insecticides in Brazil was over 90 percent; and CR4 for most agricultural commodity processing in the U.S. ranges from 50 percent to 83 percent (Heffernan/Hendrickson 2005).

Another measure of concentration is the Herfindahl-Hirschman (HH) index, which is the sum of the squares of the market share of each firm in the industry. A sector composed of 100 equal-sized firms will generate an index of 100. If there are only four equal-sized firms, the HH index will be 2,500. With only one firm in the market, a straightforward monopoly, the HH index is 10,000. The higher the index, the more concentrated is market power in the sector. The slaughter of steers and heifers in the U.S. has reached an HH index of 1800, high enough for the Department of Justice to consider the sector “highly concentrated” (O’Brien 2005, p. 8).

The HH index is seemingly simple but relies on some difficult judgment calls, including the need to define the parameters of the industry. For example, should the soy industry be considered as a whole (seeds, trade in soybeans, soy processing, sales of soy cake and oil) or should one product—soy oil—be considered in relation to other vegetable oils, with which it competes? Even when the scope of the market is clear, a high index is not always proof of market power because the few firms in the market can face competition from outside: they have the market today, but it is possible that if they over-charge or make a bad investment, other firms will be in a position to move in and challenge the firm’s market dominance. If the barriers to market entry are low, a competitive market can be maintained with relatively few firms. Despite the complications, it is important to be able to measure concentration to measure trends and change in the sector, and to give the problem a tangible form.

2.2 Standards

Market power gives the transnational agribusinesses the ability to determine who has access to markets and, increasingly, to determine standards on a private basis, without the aegis of governments. For instance, Nestlé and Parmalat between them forced at least 50,000 dairy farmers out of business in Brazil when they bought out milk cooperatives in the 1990s and changed the standards for handling and storing milk prior to purchase (Development Policy Review cited in AAI 2005). Hygiene standards are essential, of course, because consumers must be protected from spoiled merchandise. However, once Parmalat established its market dominance through acquisition of local firms and cooperatives, the firm insisted that farmers wishing to sell them milk install their own refrigeration units on farm, a prohibitive capital cost for many farmers, and a cost that was not justified by their output as small-scale producers.

Few market dominant firms show much interest in setting standards together with farmers. Farmers will often need government support, perhaps in the form of legislation, to ensure there are fairly dealt with. Including among the standards some requirements such as local content is one way to address farmers' concerns. The Pick 'N Pay supermarket chain in South Africa has been more deliberate than many retailers to look for local suppliers—for instance, the supermarket has a contract with growers in the Eastern Cape where Pick 'N Pay tells the farmers what seed varieties to plant and how to grow the squash in return for providing a well paid and guaranteed market for three years (Fritschel 2003). FAO and others are working on different versions of GAP (good agricultural practices)-based standards, to explore their potential to improve sustainable and equitable practices that would empower farmers. For now, most of the standards are set by retailers or processors, and are made with an eye to consumers and food safety concerns, rather than to farmers' preoccupations or sustainable resource use.

2.3 Horizontal and Vertical Concentration

Agricultural markets today are characterized by both horizontal and vertical concentration. Both are elements of market power. Horizontal concentration means that only a few firms dominate a given point in a production chain: the commercial seed market, heavy farm machinery, and most commodity processing are examples of horizontally concentrated markets. The CR numbers cited earlier reflect horizontal concentration—other examples are Cargill and ADM, who between them export 40 percent of all U.S. grains, or the top five U.S. cattle slaughter houses, which share 88.7 percent of the market.

Vertical concentration means that the same firm or few firms dominate more than point on a production chain. For example, Cargill has joint ventures with

Monsanto to provide genetically engineered seeds, is one of a handful of globally dominant grain traders, and is among the top three or four producers of U.S. beef and poultry, businesses that buy large amounts of processed grain to feed to the animals. Cargill has power at many stages of the food production chain, which magnifies its power at every point along that chain. Poultry in the United States has long been produced in so-called captive supply chains. Ninety percent of U.S. chicken is produced in a vertically integrated chain, where a firm contracts with a poultry grower and provides everything—chicks, feed, veterinary services, vaccines—and buys the chickens (those that make the grade, at least) at the end. This model is spreading across South-East Asia, particularly under the auspices of the CP Group, a Thai-based multinational.

Concentration at a given point in the food system can fuel concentration up and downstream from that point. Many factors come together to create profound structural change when a new market power, such as a well-capitalized multinational like Nestlé, enters a market. The new entrant is likely to buy up small local firms and farmer-owned cooperatives if they exist, which can increase efficiency but at the expense of competition. A more centralized, consolidated supplier or processor will generally prefer to deal with more centralized retailers—supermarkets—than the varied marketing outlets of a traditional market. Similarly, as buyers, a larger firm is unlikely to want to deal with hundreds of suppliers, so the channels available to producers to sell their products generally constrict. While economic efficiency goals are met in this process, other important economic objectives—such as job creation, wealth distribution and balanced regional growth—all suffer.

2.4 Contract Agriculture and Global Commodity Chains

Two other emerging phenomena in agricultural production have important implications for the market power of transnational agribusiness: contract farming and global commodity chains. Contracts have a mixed record. On the one hand, contracts tend to reflect producers' lack of market power in relation to buyers. The terms of the contract can leave the producer liable for losses, can lock in a lower than fair price for production, and can make the overall market much less transparent, by turning exchanges on an open market into proprietary commercial information. Price discovery, an essential element of a functioning free market, disappears with contracts, particularly if they cover more than one stage of production and processing.

In principle, farmers are quite open to contracts because their biggest risk is an uncertain price, so locking in a price and a market in advance is a huge asset, even if it means forgoing the chance of a windfall should prices be high at harvest or

slaughter time. Yet contract agriculture in the United States (and in many countries, developing countries, too) has a poor record. Hog and chicken production in the U.S. is dominated by contracts that do not serve producers (nor the wider public) well: the farmers raising the animals barely earn enough to make ends meet, animals are kept in appalling conditions, and concentrated production leads to human and environmental health problems, as well as problems for the animals themselves. Often contracts are written such that farmers continue to bear the risk of low prices, with options for the buyers to pay less if market prices are down when it comes time to sell. Farmers typically also run all the risk of poor quality produce or insufficient production, whether due to neglect or weather or other causes.

Contracts offer a tool with important potential, but that cannot work without mediation to ensure that the stronger party does not abuse the weaker one (in this case, the agribusiness firm exploiting the producer or agricultural worker). Contracts offer the chance for government to play a role in structuring the relationship between producer and the buyer, a chance that can be used to counter market power imbalances and to promote desired public policy goals, such as incentives for better environmental stewardship or penalties for poor environmental practice. Contracts could offer a number of important protections to farmers: they can include clauses that share risks between the producer and the buyer, they can lock in a price which protects the producer from a volatile spot price on the open market, and they can improve transparency in the often opaque world of commodity transactions.

Global commodity chains are increasingly common in all aspects of economic life. Agriculture is no exception. Much as clothing might be made from U.S. cotton, sewed into garments in China or Central America and then sold anywhere in the world, so food has become increasingly globalized as well. Supermarkets for well-to-do consumers increasingly offer out of season foods, for example, by sourcing from around the globe. Traditional commodities, too, are going global. For example, soy grown in Brazil might be milled into cake in the E.U. and then re-exported to a country in Asia as animal feed, while the soy oil is sold to a European food processor.

Analysts generally describe global commodity chains as buyer-driven and supplier-driven. Buyer-driven chains are one of the forces behind the push to liberalize markets through bilateral, regional and multilateral trade deals. The focus is on trade: the buyer looks where in the world it can source the products it needs, at the right price, of the right quality and close enough to the processing facility or final market to make financial sense. The buyer sources products wherever the price and quality are right and ships them to where there is a market to buy the final good. A supplier-driven chain is one where the market power lies with the producer or, for a retailer, perhaps with a commodity broker or food

processor; these are less common in agriculture. Supermarkets are an important and growing force as the drivers in buyer-driven chains, particularly in horticulture, but for other foods as well.

2.5 Brands, Information and the Culture of Transnational Food

Market power can be exercised through brands – a dominant firm such as Nestlé or Kellogg can rely on consumer demand to ensure their products are available in retailers globally. Most supermarkets in the U.S. receive relatively slim margins of profit on their food sales. Instead, the supermarkets rely on sales volume and charge food processors to display their products. Smaller, lesser-known brands tend to be lost on the bottom shelf, while larger firms display their goods prominently. However, with a household brand such as Nestlé instant coffee or Pepsi Cola, supermarkets are obliged to carry stock simply to meet customer demand—this is one reason firms invest in advertising and brand recognition.

Market power also results from access to or control of information. This could be the power to withhold information or simply knowing more than the competition. For example, Cargill is a privately-owned firm with limited obligations to disclose its finances and operations, yet it is one of the world's largest agribusinesses with control over a considerable share of the world's food. More generally, researchers consistently remark on how little information on corporate size and behaviour is readily available to those attempting to document global food and agriculture trends. On the other hand, with operations in more than 160 countries, Cargill and the other dominant commodity traders are privy to a great deal of information about prevailing market needs and trends that the competition finds hard to match. Holding a dominant position on information is a powerful way to keep new firms from entering the market.

Recent court cases, films and books on the food system have also highlighted the question of agribusiness' role in determining diets and nutrition choices.¹ Some activists have made the analogy with the tobacco industry, claiming that the widespread use of hydrogenated fat in fast food and processed food, with the associated presence of trans-fatty acids, makes food companies responsible in part for the explosion in obesity rates in developed and, increasingly, developing country societies, too. Agribusiness' use of aggressive marketing techniques aimed at children, their sponsorship of fast food and vending machines in schools, and their use of gimmicks such as selling 50 percent more soft drink for only 10 extra cents (it costs them a fraction of that to add more sugar water) or a second hamburger for less than half the price of the first (again, at a considerable profit)

¹ For example, the film *Super Size Me* (www.supersizeme.com) and the book *Fast Food Nation* by Eric Schlosser.

have all contributed to a culture that ignores most of what we know about healthy eating. Tim Lang and Michael Heasman make a few larger health-related points in their book, *Food Wars*, including the loss of exercise due to driving to a supermarket once a week rather than walking to a local row of shops every day or two (Lang/Heasman 2004). It has now become commonplace for fast food restaurants to give away toys related to the latest hit children's film or for breakfast cereals to promote their range with cut-outs of movie characters on their boxes or gifts to send away for. These are all techniques to link certain foods (rarely healthy foods) with culturally popular icons.

2.6 The Politics of Market Power

Market power extends well beyond economics. Typically, a firm with market power is not just able to influence price, but also the policies and laws that govern the market in which the firm operates. For example, banks and insurance firms are influential in setting banking law, just as oil and gas firms influence energy policies. In agriculture, the organizations that represent interested groups, including farmers, are also part of the policy-setting process in many countries. It is inherently more difficult, however, for farmers to organize into a single political voice. In most countries, differences in land ownership, access to capital, proximity to markets and other factors make farmers a disparate group. Sometimes the number of farmers makes political organizing difficult; if over 50 percent of the labour force is engaged in agriculture, then no single political organization is likely to be able to reflect all views. In many countries, two or more major farm unions co-exist, and each will often take quite different positions on agricultural policies, including trade.

Transnational agribusiness does not face these handicaps: they are far fewer in number and have clearer (if not entirely consistent) interests. The U.S. Center for Responsive Politics reports that for the 2003-2004 election cycle, 274 Political Action Committees (PACs) made contributions on behalf of agribusiness in the U.S., for a total of USD 17,148,603. Sixty-eight percent of this money went to Republicans (for the most part, whichever party controls the House of Representatives will get the majority of PAC funding in that cycle) (Center for Responsible Politics 2006). Political influence also comes in the shape of what is termed the "revolving door;" government officials in sensitive posts, including the vast majority of recent Secretaries of Agriculture (the highest government post related to agricultural policy) come with a background in agribusiness, and generally return to agribusiness when their term of office is over. This mix of politics and economic interest is then evident both in the laws that are passed, and in the failure of government to implement existing legislation that was passed to protect producer or consumer interests.

Consider the Packers and Stockyards Act, a piece of U.S. legislation passed in 1921 to address the specific antitrust issues related to the livestock industry. The U.S. Department of Agriculture (USDA) is responsible for implementation of the act, through a specially created office called the Grain Inspection, Packers and Stockyards Administration (GIPSA). A March 2006 Government Accountability Office (GAO) report highlights the failure of GIPSA to implement adequately the Packers and Stockyard Act.² The report points out that despite the recommendations of an earlier GAO report, in 2000, GIPSA continued to fail to do an adequate job to ensure fair competition in the USD 90 billion livestock market. The report says, "Overall, it appears that as GIPSA officials responded to the prior OIG [USDA Office of Inspector General] and GAO reports, they did so in a manner that prevented, rather than facilitated the desired actions and results" (GAO 2006). Critics such as agricultural economist Peter Carstensen have testified on these failings to Congress. During Senate committee hearings before the passage of the 2002 farm legislation, Carstensen said, "They [GIPSA] have the authority, but they are simply not using it to create rules," and GIPSA lacks "enforcement capacity and organization" (Schuff 2001).

USDA's failure to respond to the comments and criticisms comes at a time when very rapid change in the livestock industries, particularly hogs and cattle, have precipitated law suits from producers and widespread concern among local and state governments about the economic and ecological effects of vertical integration, contract-based production and the resulting concentrated livestock operations. Working conditions, the lack of transparency in livestock markets, the concentration of profits for the operators of the feedlots at the producers' expense are just a few of the concerns that have been raised by public interest groups and livestock farmers. Yet USDA denies that concentration is an issue and has failed to provide GIPSA—the agency responsible for enforcing the law in this area—with the resources it needs to do its job.

3 Market Power and the Public Interest: Farmers, Farm Workers and Consumers

Most sectors of the world's economies are under transformation due to globalization, whether we live in Mali or Mexico or Monaco. Why should food be any different? Is this pattern of growing economic consolidation and integration really a problem? The members of the Eco-Fair Trade Panel believe there are

² Until recently, the GAO was called the General Accounting Office. GAO is an arm of Congress charged with monitoring federal government programs and spending.

problems associated with these trends, problems that can and should be addressed. Agriculture is distinct from other productive sectors (as most economic sectors are different from one another). Agriculture is different economically; its market failures are not like those that affect manufacturing, not least because land—a major input for production—is not mobile. The textile industry can shift from the U.S. or Italy to China or Bangladesh, because capital is now able to buy and build the necessary factories, and labour is available everywhere. But no amount of trade liberalization will move arable land from the U.S. to China or Bangladesh. While world population growth has stabilized, the world's population is still growing, and some 852 million people are still seriously undernourished.³ We need to husband the planet's arable land and we have to use that land where we find it.

Food and agriculture is distinct in other ways. Food is fundamental to human survival, and is tied into some of people's oldest and most important rituals, religious beliefs, and cultural practices. The developments in bio-technology have highlighted the precious and yet disappearing technologies and know-how associated with agriculture around the world. Plants used for centuries in medicines, to preserve food or to add nutritional elements for instance, are today being patented for their unique genetic properties. Rapid and unpredictable changes to our environment are also highlighting the importance of traditional knowledge around seed varieties. Industrial agriculture is focused on a few specific traits, particularly yield per acre of a specific crop, or varieties with a long shelf-life and relatively uniform appearance. This focus has led to a dramatic reduction in the number of plant and animal varieties that make up the human diet. Yet historically, coping with uncertain weather and varying inputs, farmers kept a variety of seeds available and planted their crops with a view to avoiding undue risk. A new appreciation for this approach, together with new measures of productivity that focus on total yield of all foods from a given acre rather than just the yield of a particular plant variety, are changing our assessments of production agriculture. This new thinking also challenges some of the key elements of corporate control, including industrial farmers' high level of dependence on external inputs and globalized markets, which are narrowly focused on a tiny fraction of the foods that are cultivated and available for human consumption.

Economically and ecologically viable agriculture depends on husbanding resources: the world needs the capacity to grow more food than is consumed, to keep some amount of food in storage in case of unexpected shortfalls (the FAO recommends three months of usual consumption), and for prices to be predictable enough that those who live in poverty are sure of adequate access to a nutritious diet. However, large international grain traders and processors, as well as input suppliers, seek to promote systematic over-production of raw materials. Input

³ FAO estimates that in 2000-2002, 815 million undernourished people lived in developing countries, 28 million in countries in transition and 9 million in industrialized countries.

suppliers want to sell as much of their products as possible, while processors want the surplus not for storage but for sale, to keep prices low and costs down. Agribusiness has campaigned actively against public storage schemes because they tend to reduce price volatility and the scope for profit through trading commodity futures. This is one of the areas where food as a public interest conflicts with food as a commodity and economically profitable area of activity and governments must intervene to balance the different demands that result, and to be sure that effective and efficient markets do not become a substitute policy objective for the far more complicated issue of guaranteeing the human right to food, today and in the future.

Employment and economic growth in industrial countries' agriculture has moved off-farm: today, the money is in developing new varieties and even new species, processing, expanding retail and restaurant outlets, and increasing the variety of foods available. This has not been all bad for the public interest, of course: the need for labour has been cut dramatically by the adoption of industrialized production systems, which has released people for more remunerative employment in industry. Overall, the process has contributed to national economic growth. A greater variety of foods is available at more affordable prices compared with a century ago, while hygiene standards have improved.

For developing countries, however, whose food and agriculture systems are undergoing similar changes much more quickly than those of developed countries, and with far fewer public resources available to manage the changes, there are important policy questions to address. These include the vital issue of employment. Especially when there is no pull from an industrial sector that needs workers for manufacturing or service jobs, governments need to consider if value can be added to agriculture in ways that keep and create jobs and investment in rural areas. Especially when much of the investment is external, governments need to direct and regulate investment to ensure that national development priorities are served, not just the interests of the investors.

There are also many problems in developed country agriculture that give policy-makers pause. One of the most important for farmers is their shrinking share of the food economy, leaving most of them dependent on non-agricultural income sources (government transfers, off-farm jobs, etc.). Yet agricultural commodities still have plenty of value. The world still needs wheat and rice and eggs and milk; indeed, between a world population that continues to grow and the unmet need of some 850 million of the people already here, actual demand is much greater than is expressed by purchasing power in the market (and consequently in world prices). Given the fragility of many existing production systems, as the soil and water they rely on get steadily more scarce and more polluted, the 20th century's relatively plentiful food supply for large parts of the world could prove to be an historical aberration rather than a new norm.

Agricultural markets need specific kinds of intervention to work properly. There are inherent market failures: demand cannot make supply jump without quite a significant time lag—at least one harvest—and the shortfall costs lives in many cases, not just because of the possibility of outright starvation, but also because human health is undermined by an inadequate diet. Historically, supply responses to sudden increases in demand in agriculture over-compensate, so that the trend lines show short-term price spikes followed by many more years of over-production and depressed prices. There are also a number of vital public policy objectives that depend on a reliable and sustainably produced food supply. It is not uncommon for governments to treat an adequate and reliable food supply as a matter of national security (although depressingly few governments consider it important to ensure that every household in the country has access to an adequate and nutritious diet).

3.1 Farmers

The industrialization of the food system, including centralized and concentrated retail power, poses specific challenges for small farmers, especially those living in developing countries. Unless farmers are organized or operating very large farms, they cannot provide the reliable supply and quality required by supermarkets. The arrival of international supermarkets into local food markets in developed and developing countries alike can contribute to the marginalization of producers in the food system. Numerous accounts tell of farmers left dependent on unfair contracts to sell their products (unfair because the producer assumes all the risk, and may not get much of the final sale price), or excluded altogether as too small or too far from the centre of distribution to be included in the system (Brown 2005).

There are opportunities for farmers to exploit with the arrival of supermarkets, especially if they are organized into larger cooperatives. Consumers can be prevailed upon to demand local content and fair prices for farmers. If the government provides an adequate legal framework, contracts also offer the potential for risk sharing between producers and buyers, and remove some of the price uncertainty that can lead to unsustainable debt levels for small growers. Sadly, the dominant pattern to date is of exploitation rather than cooperation.

The drive toward trade liberalization has exacerbated conflicts between groups that at one time saw their policy interests as aligned: farmers, and commodity traders and processors. Farmers want the highest possible price for what they grow. Traders both buy and sell, making money from high volumes and, if they can, cornering a particular market. High commodity prices can interfere with traders' objectives; high prices do not hurt immediate profits, but they can slow

down trading and cut into the profits made on each transaction. As commodity traders and processors become vertically integrated, their interests shift again. High grain prices become a net cost for them if they are adding value to commodities through companies that feed livestock or make processed foods.

At the margin low prices may reduce production but on the whole, agricultural markets do not self-adjust easily. The first land to go out of production is the marginal land with the lowest per acre yields. Farmers generally cannot afford to miss a year's crop or to absorb the cost of maintaining idle land (and storing equipment that depreciates annually). The pattern over the past century in developed countries has been a simultaneous dramatic reduction in the number of people living directly from production agriculture and increased overall yields, with the amount of land in production staying relatively unchanged. Individual farmers cannot affect overall supply through their production choices because they do not grow enough to affect total supply in the market, even locally, let alone at the global level. Economic logic thus dictates that farmers maximize their production whether prices are high or low. High prices bring new producers (and, especially, new land) into production, but low prices are slow to push existing producers out, or to reduce production. The opportunity costs of exiting are high because there is no quick way back in and because most agriculture takes years to show a return. Agriculture is not a sector for quick profits.

Concentrated market power is an important reason for the erosion of farm income. Agribusiness is able to pull profits “downstream,” away from the farmer and towards the highly processed foods tailored to facilitate middle-class consumers' lives, and “upstream” towards ever more elaborate technologies to maximize on-farm production, including hybrid and genetically engineered seeds; expensive herbicides, pesticides and fertilizers; global positioning systems to determine how much of which input goes where on the farm; computer chips that control how much feed each cow can get from the trough; and, so much more. Although these technologies often increase output, they also increase farmers' need for capital, and increase their dependence on a wider economic system in which their main source of revenue—the sale of agricultural commodities—is not worth enough to pay for the inputs. From a public policy perspective, the wider implications of this are significant because the result is to drain money out of the wider rural economy, not just to reduce on-farm profitability. Concentrated market power undermines the viability of the local economy.

On the other side, the demands of processing to conform to an increasingly centralized and highly regulated food distribution system (increasingly dominated by a few retail firms in most continents) reduces the number of farmers that can hope to share in the greater profits that accrue to selling a more finished product to a wealthy consumer base. Indeed, the majority of farmers in the world cannot afford even something as simple as on-farm storage for their crops, nor can they

afford to hold back production at harvest time in the hopes of higher prices later in the year.

The mounting costs of more complex input and storage needs are affecting farmers in the South, too: it does not take hundreds of thousands of dollars of investment for a farmer to find his or herself with high input costs relative to final sales price. The growing problem of a cost-price squeeze (increasing costs coupled with diminishing returns) is one of the principal reasons given for the recent spate of farmer suicides in India, and is an important reason for rural to urban migration in many parts of the world. At the household level, farmers are often better off with lower output and lower cost technologies, which create fewer environmental problems for them long-term and which generate higher net income levels for them by eliminating production costs.

3.2 Farm Workers

Farm workers are a vital and ignored part of production agriculture. There are an estimated 450 million waged agricultural workers worldwide (here and the following paragraphs indebted to Hurst/Termine/Karl 2005). With globalization, their numbers are increasing: small and subsistence farmers are losing their land or are working to supplement family income, while farm holdings on average are growing larger, generating more demand for hired help. Some of this transformation translates into migration across borders: many of the workers that in a sense subsidize U.S. agriculture (subsidize because pay and working conditions are poor compared to national averages and many national labour laws do not apply to agriculture) are migrants—legal and illegal—from Mexico and Central America, where they have left their farms in desperation for the promise of paid work in the United States. Other countries and regions experience similar patterns of migration from rural areas to urban centres, but also to rural work in wealthier neighbouring countries.

Agricultural workers are among the poorest in their societies, earning sometimes less than half the wages prevailing in industry. Over 70 percent of the children who work worldwide are employed in agriculture. Increasingly, agricultural workers are women and they are almost always paid less than men for the same work. The newer sectors in agriculture in the South, such as cut flower and horticultural exports, employ large numbers of women.

One of the effects of globalization, concomitant with reducing the number of farmers around the world, has been to increase the numbers of farm workers. As production trends have shifted away from direct corporate ownership of plantations to arrangements with sub-contractors, and sometimes direct contracts

with producers or producer organizations, farm workers find themselves working in increasingly informal conditions where organizing to improve conditions is harder than ever. The pressure on food processors and retailers to keep costs down—the competition they face among themselves—translates into strong downward pressure on wages for workers. Agricultural workers, who are among the least organized, least educated and otherwise least advantaged workers in the world, bear the brunt of this pressure. These differences are only intensified when the diversity of agricultural workers are taken into account—those with some land, but who need to hire out their labour to make ends meet; those who are landless; women workers, who often face discriminatory legal and social conventions that make their working situation more precarious, whether as farmers or labourers; and, children (more children work in agriculture than any other sector worldwide).

3.3 Consumers

A large part of the political appeal of liberalized agricultural trade lies in its promise of securing access to a large choice of cheap food for consumers. Access to a world market should offer better protection against bad weather or other disasters that can disrupt local production and protect consumers from sudden price spikes. However, the concentration of market power in global commodity and food retail trade in developed—and increasingly in developing—countries undermines the promise benefit of cheaper food. Before governments finalized the WTO Agreement on Agriculture, economists predicted that prices of agricultural products on the world market would increase slightly after the implementation of the agreement. Instead, many world prices for agricultural commodities fell precipitously after implementation, following a brief but severe price spike for wheat and some other staples in 1996. Overall, the post-AoA price environment for commodities is more volatile than the decades that preceded it. According to the FAO, the underlying downward trend for agricultural prices, a trend that persisted for decades, has stabilized since the mid-1980s, to be replaced with more volatility but no clear trend line (FAO 2004).

Declines in commodity prices, however, are not readily translated into lower consumer food prices. In Europe, the competition among supermarkets has prompted a degree of food price deflation (at the expense of producers). In developing countries, however, a number of factors have prevented liberalization policies delivering cheaper food. Many developing countries have seen their dependence on imported food increase—food they must pay for with scarce foreign exchange, with currencies that have depreciated considerably under the monetary policies of structural adjustment. Some countries had programs to

provide staple foods at subsidized prices that have now been dismantled, leaving poor consumers paying more than they did in the open market.

Mexico provides a dramatic example of higher consumer prices coupled with economic deregulation and liberalization. Maize prices for local farmers declined from about 1300 pesos per ton in 1982 to just under 600 pesos per ton in 1998. Yet the retail price of a tortilla increased by almost 500 percent between 1994 and 1999. While a large part of this was due to inflation that followed the peso crisis of 1998 and the elimination of government subsidies for consumers, prices still increased by 279 percent in real terms (that is, factoring in the overall economic inflation rate of 173 percent that prevailed at the time). This almost three-fold increase in prices occurred as the price farmers received for their corn went down by almost half (Nadal 2000, pp. 34-36). Global coffee markets offer another example of collapsed commodity prices, this time at the global level, accompanied by increasing prices for the consumers who buy lattes in upscale coffee shops and fresh roasted beans in their local supermarket.

In the United States, commodity prices are such a small share of final food prices that their respective prices change almost independently of each other. As the economist Robert Taylor testified to the U.S. Senate Agriculture Committee in 1999, "Since 1984, the real price of a market basket of food has increased by 2.8 percent, while the farm value of that food has fallen by 35.7 percent." Food prices reflect prevailing inflation levels, while commodity markets are tied to supply, input costs, and changes in demand. The failure of consumer prices to reflect drops in commodity prices is in part due to the lack of competition within the food processing and retail sectors. When commodity prices fall, dominant companies can use their market power to increase profits rather than to lower prices for consumers.

Local markets in developing countries are not usually as concentrated as they are in developed countries. Yet even there, attempting to deliver cheap food through deregulated markets often fails. Many of the world's poorest consumers are also food producers, either farmers or farm labourers. Their ability to buy the food they and their families need depends on the price they can get for their crops, or the wage they earn from farm work. Cheap food imports compete directly with local producers, if not in the same crops, then in close substitutes (rice for millet, or yellow corn for white maize, for example.)

Consumers suffer from some of the same disadvantages as farmers in the food system. They are numerous and disparate, only powerful when united behind a boycott, or what has been called a girlcott, where consumers are encouraged to

buy a product that meets higher standards than the norm.⁴ In a sense, the fair trade movement works on this principle, making consumers part of their campaign by calling on them to pay more, and to demand more of retailers and processors, to ensure that producers and workers get a fair share of the profits for their work.

While retail, processing and trading are increasingly global activities consumers remain tied to local markets. When the U.S. dollar was strong in the late 1990s, consumers in countries dependent on food imports from the U.S. paid more for their food. International trade increases the choice of products available to consumers but it does not necessarily deliver those products at low cost, especially when translated into local purchasing power. Globalization also means that consumer competition in the market increases. If a growing middle class in South East Asia, say, wants to consume more meat, they will pay enough to divert land into producing animal feed over staple foods for people; without public intervention, the logic of the market will leave people in need of wheat and rice hungry while corn and soy is grown to feed livestock.

4 Trade, Competition and Investment: the links to market power

4.1 Trade

The expansion of global trade, the deregulation of capital markets, and the technology that facilitates global communications and transportation have all driven changes to international trade and investment rules. Changes to these rules have in turn created and supported the expansion of new global commodity chains, such as fresh flower and horticultural production in developing countries to furnish developed country supermarkets. Older chains, such as coffee and cocoa beans imported from developing countries for processing in developed countries are evolving and changing with the new pressures of globalization, but the changes have served to consolidate rather than shake-up traditional market power imbalances (Vorley 2003).

New rules for agricultural trade are now under negotiation at the WTO, under the auspices of the Doha Agenda, which was signed by member governments in 2001.

⁴ The word 'girlcott' has also been coined for boycotts with a feminist approach: Billie Jean King, for example, suggested a girlcott of Wimbledon for the gross disparity between the prize money awarded to the male and female champions.

Having adopted a framework and some disciplines for agricultural trade rules in the Uruguay Round, WTO members are now trying to make the disciplines more effective. The Doha Agenda in agriculture calls for more of the same: a final deadline for the elimination of export subsidies (with tighter rules on other programs that are used to support exports at public expense), more cuts to most kinds of domestic support programs and more cuts to tariffs.

The Uruguay Round Agreement on Agriculture (AoA) rules were shaped by a handful of then GATT members⁵ who were attempting to solve the problem that over-production in some OECD countries created for other, mostly non-OECD countries. In brief, the U.S. and E.U. failure to control supply was crowding Australia, Brazil and Argentina out of export markets. Just three WTO members spend more than 80 percent of the subsidies targeted by the AoA: the United States, the European Union and Japan. Yet the WTO has 148 members (and more lining up to join) and many of these members depend on agriculture for a significant share of their economic activity. Many of these countries hoped the AoA would create significant new trade opportunities for their agriculture sectors. They were disappointed. It is now ten and a half years since the AoA came into effect, yet global market shares of agricultural trade have hardly changed, although they have edged narrowly away from Europe and towards the members of the Cairns Group, a group of 15 or so countries, developed and developing, with significant agricultural export capacity.

Why the failure? In part, there was a certain amount of bad faith (or smart negotiating) by the developed country lawyers who drafted the rules. The loopholes and exceptions for developed countries in the AoA rules are well documented (Kwa 1998; Murphy 2001). The rules did not require actual cuts to spending on domestic support and little new market access was created by the cuts to tariffs that were made. Worse, by 2001, the United States and EU (and a number of other members, too) stopped even notifying their spending on agriculture to the WTO, so that other WTO members could not tell what actual spending levels were. The outcome of several trade disputes, particularly the complaint brought by Brazil and others against the use of subsidies to support cotton production and processing in the U.S., suggest that U.S. spending, at least, has exceeded permitted levels.

Yet the problem is more complicated than this argument suggests—more complicated than WTO members can hope to fix with the Doha Agenda now under negotiation. There are significant trade distortions and market failures in international agricultural markets that have little to do with public subsidies or

⁵ The General Agreement on Tariffs and Trade (GATT) was signed in 1947. No formal institution was created to oversee its implementation (and elaboration through successive trade rounds) until the Uruguay Round, at which time a treaty establishing the World Trade Organization (WTO) was included as one of the trade agreements.

tariff barriers. Perhaps most seriously, some of the AoA rules actually prohibit or make it more difficult for governments to provide necessary regulation and oversight over their agricultural production. Measures to stimulate or limit production are banned, for instance, although some existing programs are grandfathered in, with strict provisions to limit any extension of their use. Given the market failures inherent in agriculture, and the distortions created by the market power of many multinational agribusiness companies, governments need to intervene in markets to ensure that certain public policy objectives can be met, including an adequate and culturally appropriate food supply, viable livelihoods in the rural economy, adequate provision of support services to remote areas and a balanced distribution of economic goods across the economy as a whole. Many African countries need effective production incentives to reduce their dependence on food imports they can ill afford, while elsewhere, production of a number of crops, from corn to wheat to coffee, would benefit from more deliberate supply management.

Transnational firms want the international movement of goods and capital simplified because an increasing share of their business is carried out across borders. As agriculture becomes more vertically integrated, more agricultural trade becomes intra-firm (rather than between firms) and trade barriers make it more expensive to do business. The rules now in place at the WTO support these objectives, at the expense of producer, consumer and environmental interests, that place a priority of greater price stability, managed production and safe and sustainable production methods

The degree of concentrated market power in global agricultural markets is not factored into the models and assumptions that inform the trade and agriculture debate. This is a significant problem for policy-makers, who operate under false assumptions as a result. For example, underlying the assumption that tariff reductions will increase market access opportunities is an assumption that any firm with a good product at a competitive price will be able to enter the new market. In practice, however, many agricultural markets are governed by contracts that shut out producers or firms without contracts. Tariffs matter but are not the most important determinant of what goods get to be sold where at a given price.

According to the dominant ethos at the WTO, trade liberalization is better than regulation, and more trade is better than less. In practice, however, there is a real risk that liberalizing trade and ignoring competition policy can lead to replacing border protections with cartels. When increased trade encourages anti-competitive behaviour, then much of trade's potential to benefit development is eroded. Private transnational companies can replace publicly monopolies, bringing capital and know-how but reducing the possibility of realizing public policy goals.

Agriculture is not the only area of the Doha Agenda that is likely to affect food and agriculture, and market power within the food system. The GATS (services) negotiations, mentioned earlier, are particularly important. Food distribution, particularly the growing market power of supermarkets, is strongly affected by service laws. Access to credit and financial services, and access to infrastructure, especially water and energy, is of vital concern to producers, and to ensuring an economically viable and ecologically sustainable food system (Reichert 2005).

Transnational agribusiness firms wield considerable power at the WTO. They fund lobby groups active in Geneva. They are part of many national delegations simultaneously because of their extensive presence in so many countries around the world. The firms are also present to lobby in their own right. In a country such as the U.S., there is a lot of interchange between private business and the public sector. For example, it was a former Cargill Vice-President, Dan Amstutz, who drafted the original AoA text, while a member of the U.S. trade representative's office. More recently, after a period back in private agribusiness, Amstutz was appointed by the Bush Administration as their senior advisor on agriculture in post-invasion Iraq.

Rufus Yerxa, U.S. ambassador to the GATT during part of the Uruguay Round (1989 to 1993), served for a time as a lawyer for Monsanto, joining the firm in 1998. He is now a Deputy Director-General at the WTO, responsible (among other things) for overseeing the negotiations within the Trade-Related Intellectual Property Rights Council on whether firms should have to disclose the source of the germ plasm they patent when developing new biotechnologies. This push to enforce disclosure, pushed by India, Brazil and a few other developing countries, together with Norway, is a proposal that the biotechnology industry is resisting strongly (and with them, the governments of the countries where bio-engineered seeds are most widespread, including the U.S., Canada, and Argentina). The current special agriculture negotiator at the Office of the U.S. Trade Representative, Richard Crowder, came to the post from his job as chief executive officer of the American Seed Trade Association (ASTA).

The ease with which agribusiness executives move in and out of government office in many countries is problematic. In part there is the risk they will put the public interest behind promoting the interests of former (and often future) colleagues. More generally, there is a problem that their background and experience is too much of one kind, while the experience of small farmers, or farm worker unions, or consumers concerned about food safety is too rarely represented in the higher echelons of government administrations. Trade policy has far-reaching implications, and the Uruguay Round agreements extended those implications deep into domestic policy-making in most spheres of economic life. Trade policy should never have been the sole domain of exporters and importers, working with trade officials. Today more than ever, those officials must be

accountable to protect the wider concerns of agriculture, especially the public interest in a sustainable, just and safe food system.

4.2 Competition

Open competition is the bedrock of capitalist economics. In an open market, prices provide signals to buyers (and sellers) about what price they should charge (or pay). In a perfect market, open competition among firms ensures that consumers are given as much of and as good a product as it is possible to make at the price they are willing to pay. In return, firms are assured that if they can do the best job on price and quality, they will have customers; they will not be kept out of the market by the vested interests of established firms.

Neo-classical economics recognizes a number of threats to competition. On the supply side, the archetypal threat to competition is monopoly, the condition in which a single supplier of a product sets the price by controlling its supply. Oligopoly, the situation of a few suppliers sharing the market to the exclusion of newcomers, similarly prevents demand and supply from reaching proper equilibrium. Oligopoly power is not as effective as monopoly power at setting prices independently of demand, but it is harder to monitor and can prove more harmful to a well-functioning market than monopoly power. On the demand side, monopsony and oligopsony describe an industry with a single or a few buyers, respectively. These situations, too, result in less than optimal results for others in the market.

There are situations when a monopoly or monopsony can serve the public interest. They sometimes offer a so-called “second-best solution”, where an open market is not possible so a monopoly has to be tolerated. For example, a publicly or privately-owned and operated company is likely to have a monopoly on providing water because the cost of laying water and sewage pipes does not warrant more than one company having the contract. Governments have developed specific laws to regulate these situations to ensure the firm with the monopoly position does not abuse its market power, for example by over-charging. There is no competition in such a case, but some of the benefits of competition can be stimulated through other means.

Where it works, competition protects economic efficiency, optimizes the use of resources, and encourages innovation. Competition also promotes socially desirable goals, by redistributing wealth and stopping the emergence of monopolies. However, it is difficult to determine an ideal level of competition. Fragmented markets are often inefficient, and most goods are more expensive to produce if they are made by a large number of different firms rather than by a

few, because economies of scale favour large-scale production. Competition issues grow more complicated when borders are opened. Most countries, even if they enforce relatively strict competition laws at home, are lax about enforcing competition rules on their companies operating in foreign markets. U.S. firms, already operating in an internal market of close to 300 million people, are likely to dwarf even a monopoly in a small market such as Iceland or Canada.

Consider the Canadian Wheat Board (CWB), with a monopoly on sales of all wheat and barley grown in Canada's Western provinces. The CWB supplies just over 20 percent of the world wheat and barley markets. Yet Cargill, Bunge and ADM all sell more wheat than the CWB. Rather than restricting competition, the CWB monopoly is shoring up some degree of competition at the global level in a very concentrated market. Although its competitors argue the CWB is trade-distorting, the most likely result of abolishing the CWB monopoly on wheat and barley exports from Western Canada would be to reduce by one the already tiny number of firms trading those grains at the global level. Competition would be reduced, and the remaining firms would all be focused on short-term profits with no mandate (or obligation) to consider broader public policy interests.

As an example of the potential for abuse, consider the role of Archer Daniels Midland (ADM) in fixing prices for feed and food additives. In May 2006, the European Court of Justice upheld a European Commission Euro 43.9 million fine against ADM for their role in a price-fixing and market-allocating cartel on lysine, an important amino acid added to animal feed. The cartel operated between at least 1990 and 1995, involving ADM, Ajinomoto Co. Inc., Kyowa Hakko Kogyo Co. Ltd., Sewon Corp. and Cheil Jedang Corp. Although none of the firms involved was headquartered in Europe, EU feed buyers had paid the rigged price and the cartel had materially harmed their customers. In 1996, the U.S. Department of Justice fined ADM the highest ever criminal antitrust fine (USD 100 million) for their part in the lysine and a citric acid cartel. The cartel operated globally, with the companies agreeing in advance not to compete with each other in given markets, as well as agreeing on what price to charge. The famous tag-line from the case, attributed to ADM executives, was: "The competitor is our friend and the customer is our enemy."

Much of the discussion of competition policy reflects a preoccupation with protecting consumers against the power of organised production. Indeed, much of the argument in support of deregulation and opening markets is premised on the welfare gains to be had by lowering prices for consumers. Recent U.S. antitrust case law has focused on efficiency outcomes almost to the exclusion of any other antitrust concern (O'Brien 2005, p. 7). However, for agriculture, both in history and with the emerging dominance of retailers as a major power in agricultural markets, the effects of market power upstream, on farmers in particular, should also be of central concern.

It is essential for states to legislate and implement proper competition laws. This means enforcing existing law where it exists, such as the Packers and Stockyards Act in the United States, and developing new law to reflect the changed nature of today's globalized companies. When circumstances seem to justify monopolies or oligopolies, particular attention must be paid to ensuring sound regulation. There is no point hoping that laws based on the assumption of perfect competition will work in oligopolistic markets. It is clear that in the name of efficiency gains from economies of scale, transnational agribusinesses have already grown to an alarming size, enabling them to undermine proper market functioning. One of the complications of liberalizing trade is that it can create stronger conditions for competition in a local market as new entrants arrive, but it can also consolidate market power as some firms become global players (MacLaren/Josling 1999, p. 2).

According to the UN International Fund for Agriculture and Development (IFAD), without government intervention private sector development occurs but is likely to be “unbalanced in geographical terms, inequitable in socio-economic terms, and could even further exacerbate poverty for some rural people” (IFAD 2001). The responsibilities of governments include creating and enforcing the conditions that markets depend upon to work efficiently and fairly, such as providing open and universal access to information and prohibiting collusion among firms.

National competition laws are vital (and often absent, especially in developing countries) but no longer sufficient to manage global competition challenges—some thought has now to be given to protecting competition in global food and agriculture markets.

4.3 Global Competition Rules?

One of the obvious ways to manage market power is to regulate competition. This now needs an international dimension, for competition law to keep up with the rapid spread of trade liberalization and globalized production and markets. Yet the discussion of competition issues at the WTO was effectively shut down by public protest. The reason for the public outcry was that the competition issues raised by EU and U.S. firms were motivated by their wish to bid on contracts in (especially larger) developing countries. Instead of a discussion on how to protect competition in the face of concentrating market power in global markets, the competition agenda promoted by the EU and some other WTO members was about advancing the interests of global firms. A wide-range of civil society organizations made the case against this agenda, and many developing countries blocked the attempt to open negotiations for a WTO deal in this area. For now,

competition is a topic for a working party at the WTO but not a subject for negotiation.

This was a hard-earned victory for civil society organizations. Still, civil society is left with the challenge of how to confront competition issues at the multilateral level. Globalization has made the need to tackle these questions more acute than ever. With fewer barriers to trade, the challenges for competition regulation have only increased, and discussions at UNCTAD that do not result in binding rules will not be adequate to tackle the scale of the issues we now face, although it would be a good place to start exploring issues in a less confrontational atmosphere than the WTO.

4.4 Investment

Among the many factors that account for concentrated market power in agriculture is investment. In a globalizing economy—where transportation, communications, and capital flows are all facilitated by new technologies and laws—investment is a major driver of economic change and a major determinant of economic power relations.

For example, investment by agribusiness firms and supermarkets has a powerful impact on what crops are grown where in what kind of farming systems. The dominant global grain traders—Bunge, Cargill and ADM—have all invested very heavily in Brazil over the past decade, building export terminals (with considerable help from public funding sources), mills and other processing facilities, and generally increasing their capacity to handle production coming from the rapidly expanding acreages of Brazilian soybeans. This investment drives further planting and contributes to the investment that is now relieving one of the biggest barriers to the development of large areas of Brazil's land: the lack of transportation and processing infrastructure to bring commodities to market.

The push by a number of developed (and a few developing) countries to make investment a part of the Doha Agenda of trade negotiations failed. Although the Uruguay Round included the Agreement on Trade-Related Investment Measures (TRIMs), the WTO still has little oversight on investment. The dynamic was not unlike that that surrounded the debate on competition issues, but was much higher profile (and probably much better understood). The reluctance of most developing countries—and a strong contingent of civil society organizations—to discuss investment at the WTO again related to the kind of proposals that were made, which were about giving foreign firms rights in domestic economies without any discussion of related obligations. Under NAFTA's investment provisions, Canada, the U.S. and Mexico have seen foreign firms extracting large payments from

governments when the firms deem legislation passed since NAFTA to undermine their actual or potential profits, even if the laws are passed in the public interest (banning the use of dangerous chemicals, for instance). Such experiences have bred caution.

A number of aspects of the ongoing negotiations on services at the WTO, under the framework of the General Agreement on Trade in Services (GATS), are essentially about investment rights: rights of firms to establish themselves in foreign countries, to acquire local companies, to secure work visas for foreign personnel, and so on. There are even proposals that WTO members should be able to comment on each others domestic legislation dealing with service regulation, to ensure such regulation is “least trade restrictive” and does not curtail a foreign firm’s right to compete in the local market with domestic firms.

While the direction of the investment-related proposals at the WTO has ensured investment has little support as the subject of a new WTO agreement, it is clear that some kind of multilateral framework for investment would be helpful, not least to assert the need to protect the public interest from private greed. All firms, local or foreign, need to be accountable for the impact of their investments. As the role of foreign capital in agriculture grows—for the most part invested by transnational agribusinesses, but in some cases invested by banks, retail companies and other kinds of firms—so the need to hold that capital accountable to groups other than stockholders in the firm grows, too. This is not a matter the WTO is equipped to decide, at least not alone. Any multilateral investment framework will need to be rooted in human and labour rights, multilateral environmental obligations, and other norms that clarify limits and obligations on investors, as well as providing them with a clear and predictable framework within which to conduct their business.

5 Conclusion

Market power worries economists because it interferes with the distribution of benefits from economic exchanges, usually in the interests of a few at the expense of the majority. Market power also has political, legal, social and cultural implications. Such responses as there are, are often partial: competition policy focuses mainly on consumer interests, not producers’; legislation might tackle anti-trust in one sector, but not all the sectors where a vertically integrated company works; rules to break-up domestic cartels through deregulating the economy might open up new competition problems if foreign companies enter

that are too big for small local firms to compete with. All this (and more) makes market power difficult to challenge.

It does, however, open the possibility of a broadly based coalition of public policy interests to advocate for better rules. The concentrated market power of transnational corporations and their dominance of the agricultural policy agenda at both national and international levels has galvanized health workers, trade unions, consumers, farmers, environmentalists, development NGOs, churches, human rights groups, tax reform advocates and still others to take an interest in agricultural policy reform.

The following ideas give a sense of the range of possible responses that are open to governments, farmers and others. Much more work is needed to develop a clear action plan that both counters concentrated market power and, where necessary, develops legislation to work with it (and regulate it) where market power needs to be endured.

1. Current WTO rules insist that governments complete questionnaires about any state trading enterprises (STEs) operating in their country. This approach should be expanded to include any company—private or public—with more than a given percentage of the import or export market. The questionnaire would apply to local companies in joint ventures with transnationals or operating as subsidiaries of a transnational, if the larger entity's size met the threshold requirement. This information could be gathered by the WTO, or, alternatively, under the auspices of the UN Conference on Trade and Development (UNCTAD), which has a long-standing mandate to monitor restrictive business practices. A multilateral institution—perhaps FAO or UNCTAD or a collaboration between the two—could be charged to maintain a databank with comprehensive information on the dominant actors in the global food system. The data should be accessible to the public on-line, and the findings published periodically.

2. Supermarkets offer new opportunities to change public policy in the food chain, even though they are also the source of multiple new challenges to maintaining open and accessible markets for producers. Supermarkets are a point at which consumers have power, opening up some interesting possibilities for advocacy. For example, from the 1980s, European NGOs were able to effect successful campaigns to get supermarkets to give shelf space to fairly traded products. Most of the major supermarkets in Europe now carry fairly traded bananas, coffee, tea, chocolate and a handful of other products. Similarly, the negative public reaction in Europe to genetically modified foods persuaded a number of supermarket chains to offer GMO-free products, and several made their in-store brand GMO-free. A major contract with Carrefour (a global supermarket chain headquartered in France) for GMO-free soybeans was awarded to Brazilian producers. Carrefour was sourcing the soy on behalf of the livestock producers they contract with.

3. Information and transparency are vital tools. Publicly provided support to agriculture should extend to include access to information for producers and consumers. For instance, governments should make available information on prevailing market prices, so farmers know what price to ask for from the middlemen and women who buy their goods at the farmgate. In Bangladesh, simple measures such as providing a telephone in the village has enabled farmers to determine crop prices in the nearest market town and thereby strengthen their position in negotiations with middlemen. Consumers need to know where their food comes from and what it contains. Pesticide levels or the presence of toxic chemicals should be monitored and controlled.

4. It is necessary to increase transparency in the rule-setting process. Some developing countries have made significant changes to their domestic policy process to democratize trade-policy formulation. A number of countries—for example, Uganda, Kenya, the Philippines and India—have created national consultative committees to the WTO. These include business and NGO interests, and sometimes farmers' organizations, and provide a counterweight to the pressure that comes from bilateral and multilateral aid donors, whose view is too often too close to their domestic commercial priorities. Ugandan NGOs report that a U.S. consular official checked in with the Ministry of Trade in Kampala on a daily basis throughout the 3rd WTO Ministerial Conference in Seattle, in November 1999. By the time of the 4th Ministerial (in Doha in November 2001), the national consultative committee had been established and was able to meet every day with the Trade Ministry as well.

This issue is important for the WTO Geneva as well. The WTO has made many changes to its working style since the days of the Uruguay Round. While small group meetings continue, an active effort is now made to at least include representatives of any of the groups or positions that have emerged in the negotiations. Still, nothing happens without the big powers being present, and a number of the smallest members do not even have a mission in Geneva. Transparency has improved markedly with the arrival of a number of civil society organizations in Geneva, and because the significant differences among governments make "leaks" a useful way to canvass support for one or other point of view. There are nonetheless real challenges for WTO members to improve the working of the system, legal and political, to ensure that trade rules are decided as a part of wider multilateral policy, and in as open and inclusive a manner as possible.

5. Collective action can help farmers to regain some of their autonomy around input use and marketing. Work by RAFFA, an NGO working in Thailand, has documented the costs of various production methods for rice farmers. Their research shows the additional yields obtained by industrial agriculture are not adequate to compensate farmers for the cost of buying the inputs that industrial

agriculture depends upon. Industrial methods deliver the highest yields but the highest net income—which is of more interest to the farmer—comes from a production system that relies on traditional seeds and organic inputs. The promotion of traditional seeds grown with traditional organic techniques by MASIPAG in the Philippines met with success, initially because farmers saved the cost of purchasing expensive inputs. As yields recovered to conventional levels, overall profits increased because of the greater diversity possible on the farm. For example, farmers could use rice paddies that were no longer awash in inorganic chemicals to raise fish, supplementing their families' diets (Yap 1998). Practical Farmers of Iowa, a membership group affiliated with Iowa State University, conducted experiments that showed members how to save up to USD 80/hectare through a 50-60 percent reduction in chemical use without reducing yields. Lessening farmers' dependence on inputs is an important avenue for challenging corporate control.

6. Public authorities need to subject mergers, acquisitions and inter-firm contracts in agriculture to tighter review. The first requirement is access to information. There is a dearth of information about the size and scope of large agribusinesses, the market share they control, and the terms of their contracts. Contracts are treated as proprietary information, making it very difficult to determine whether contracts are fair and whether larger companies give each other disproportionately favourable terms.

7. In the process of deregulating and liberalizing developing country economies, the role of state-trading enterprises, once common in agricultural sectors in most parts of the world, has come in for severe criticism. Yet, although imperfect, STEs can potentially play a useful role in counteracting the market power of global agribusiness. While STEs undoubtedly distort markets, they depend on government mandates, and thus are subject to public interest law. This offers countries an important entry point for stronger regulation of the market. A strategy of reform, accountability and good governance is essential, given the history of corruption and government manipulation of STEs in many countries. However, structural adjustment programs and more recently pressure from trade negotiations has led to the dismantling of many STEs, instead of reform.

The advantage of an STE, assuming (and it is a big assumption for some countries) that adequate accountability can be ensured, is that they are more readily used to meet public policy objectives than private agribusiness, particularly if that business is foreign-owned and a dominant world player. For example, STEs were often the only market for producers in remote areas of developing countries; a government can insist that an STE provide this service in exchange for its monopsony rights. A private investor, however, has no reason to carry what might be a loss-making proposition and will be focused on the markets where profits are more reliable. In many poorer developing countries, the lack of

private capital is a significant handicap to establishing a strong local industrial or agricultural sector. An STE can focus scarce capital where it is most needed, and ensure at the same time that remote areas are not excluded.

The most important consideration is not whether a firm is publicly-held, privately owned, or some kind of mix. Instead, the focus should be on the structure of the market and the needs of the producers and consumers involved, to see what solution might best meet public interest goals (including a productive and efficient economic sector). Private and public firms can both distort markets; in some cases, a market distortion may be well worth suffering because another need, greater than efficiency, is thereby served.

8. Rules to regulate agricultural trade cannot hope to end market distortions if they focus on government programs alone. Unless there is a concerted attempt to consider the impact of vertical and horizontal concentration in global commodity markets, the rules will not produce the benefits that more open markets promise. Possible policies could include an international review mechanism for proposed mergers and acquisitions among agribusiness companies that are present in a number of countries simultaneously. The two companies may not be a significant market power where the merger occurs, but their merger might significantly diminish competition in a third country, where the two companies share a dominant market position. The third country should have some recourse to protect itself from such an outcome.

9. In April 2005, the International Institute for Sustainable Development published their *Model International Agreement on Investment for Sustainable Development*. The project is based on several observations, including that existing investment agreements are framed on an outdated and unhelpful model, developed in the 1950s and 1960s, when the focus was almost entirely on investor rights and the protection of foreign capital. IISD also point out the bilateral nature of most existing investment treaties, such that no multilateral “institutional home” was been established, where comparisons among agreements could be made, lessons learned and best practices for future agreements promoted. The WTO is not the right place to consider a framework for multilateral investment rules but there is an urgent need for more systematic consideration of the challenges raised by investment patterns and to better equip developing countries to secure investments that contribute to sound development. The existing ad hoc nature of the treaties signed, particularly with their emphasis on investor rights rather than development obligations on firms, is detrimental to fairer, more ecologically appropriate agricultural trade.

10. Governments need to hold companies accountable for their behaviour. For example, governments may choose to restrict inappropriate advertising or product placement by food companies. The long-standing Nestlé boycott was led by civil

society organizations that objected to Nestlé's strong promotion of its infant formula in countries where access to clean water was limited and breast-feeding was a much safer and healthier alternative to nourish infants. The new shift in public policy in the U.S. to keep vending machines selling candy and soft drinks out of public schools is another example of government intervention against inappropriate corporate practice, again on public health grounds. Some school systems have gone further, and are experimenting with catering services that specialize in local produce, organically produced where possible.

It is not easy to get economic management right. Many governments, in developed and developing countries, have long histories of intervention in agricultural production and distribution. Some of these experiences have been positive but many only served to create entrenched interests that captured the benefits for a small elite. As with any law or regulation, agricultural policies can only be as good as the authorities responsible, and they must be held accountable by the people they govern. Good economic governance depends on strong political institutions.

References

- AAI (Action Aid International) (2005): *Power Hungry: Six Reasons to Regulate Global Food Corporations*. South Africa.
- Brown, Oli (2005): *Supermarket Buying Power, Global Commodity Chains and Smallholder Farmers in the Developing World*. Human Development Report Office Occasional Paper, 2004/5. UNDP. New York.
- Center for Responsible Politics on-line database, accessed July 10, 2006.
www.opensecrets.org/pacs/sector.asp?txt=A01&cycle=2004
- ETC Group (November/December 2003): *Communiqué* No. 82.
<http://www.etcgroup.org/documents/Comm82OligopNovDec03.pdf>
- FAO (Food and Agriculture Organization) (2004): *The State of Agricultural Commodity Markets*. Rome. www.fao.org/sof/soco/index_en.htm
- Fritschel, Heidi (2003): *Will Supermarkets be Super for Small Farmers?* In: IFPRI Forum, Newsletter, Vol. 1. www.ifpri.org
- GAO (Government Accountability Office) (2006): *Packers and Stockyards Programs: Continuing Problems with GIPSA Investigations of Competitive Practices*. USA.
- Heffernan, W/Hendrickson, M. (2005): *The Global Food System: A Research Agenda*. Paper produced for Agribusiness Accountability Initiative.
www.agribusinessaccountability.org
- Hurst, Peter/Termine, Paola/Karl, Marilee (2005): *Agricultural Workers and Their Contribution to Sustainable Agriculture and Rural Development*. FAO/ILO/IUF.
www.ilo.org/public/english/dialogue/actrav/new/061005.pdf

- IFAD (International Fund for Agricultural Development) (2001): Rural Poverty Report 2001: The Challenge of Ending Rural Poverty. Oxford University Press. UK.
- Kwa, Aileen (1998): Guide to the Agreement on Agriculture: Technicalities and Trade Tricks Explained. www.focusweb.org/publications/1998/AOA.pdf
- Lang, Tim/Heasman, Michael (2004): *Food Wars: The Global Battle for Mouths, Minds and Markets*. London.
- MacLaren, Donald/Josling, Tim (1999): Competition Policy and International Agricultural Trade. International Agricultural Trade Research Consortium. Working Paper #99-7. agecon.lib.umn.edu/cgi-bin/pdf_view.pl?paperid=1690&ftype=.pdf
- Murphy, Sophia (2001): Food Security and the WTO. International Cooperation for Development and Solidarity (CIDSE). Belgium.
- Nadal, Alejandro (2000): The Environmental and Social Impacts of Economic Liberalization on Corn Production in Mexico. Oxfam GB/WWF International.
- O'Brien, Doug (2005): Developments in Horizontal Consolidation and Vertical Integration. The National Agricultural Law Center. University of Arkansas School of Law. USA. www.nationalaglawcenter.org
- Planet Retail (2006): Grocery Retailing in USA. Planet Retail Ltd. USA.
- Reichert, Tobias (2005): The Impact of GATS on agriculture. In: Sailing Close to the Wind, IATP Briefing Book for the Hong Kong WTO Ministerial Conference. IATP. USA. www.tradeobservatory.org/library.cfm?refID=77569
- Schuff, Sally (2005): Concentration in the Farm Bill? In: Feedstuffs, Inside Washington Column, May 2005. USA.
- Taylor, Robert (1999) : Economic Concentration in Agribusiness, Testimony to the United States Senate Committee on Agriculture, Nutrition and Forestry. Auburn University. USA.
- Vander Stichele, Myriam/van der Wal, Sanne/Oldenziel, Joris (2005): Who Reaps the Fruit. SOMO. Amsterdam.
- Vorley, William (2003): *Food Inc. Corporate Concentration from Farm to Consumer*. Paper for the UK Food Group, UK
- Yap (1998): Presentation at a conference of the Swiss Coalition of Development NGOs in Bern, Switzerland in 1998. www.masipag.org