



The Global Status, Prospects, and Challenges of a Changing Organic Market

Rural Advancement Foundation International–USA

Who Owns Organic?
The Global Status, Prospects, and Challenges
of a Changing Organic Market

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RAFI-USA

Rural Advancement Foundation International – USA

The Rural Advancement Foundation International – USA is a nonprofit, non-governmental organization which promotes sustainability, equity, and diversity in agriculture through policy changes, practical assistance, market opportunities, and access to resources. We trace our roots back to the 1930s, and we continue to address issues of agriculture from the local to the global levels. RAFI-USA plays a leadership role in responding to major agricultural trends and creating a movement of farm, environmental, and consumer groups to:

- Promote sustainable agriculture,
- Strengthen family farms and rural communities,
- Protect the diversity of plants, animals, and people in agriculture, and
- Ensure responsible use of new technologies.

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Organic agriculture is the most dynamic and rapidly-growing sector of the global food industry. Its growth from a small-scale niche market to a \$23 billion enterprise has made “organic” an international phenomenon.

This report describes the global status of organic agriculture, discusses the structural changes that are occurring, and suggests ways to evaluate the impact of these changes on fundamental issues such as farmers’ access and sustainability. It also proposes a baseline of indicators to be monitored in the future. Our goal is to begin an answer to the following question: Can growth and expansion be balanced with the broadest principles of organic agriculture?

Who Owns Organic?

The Global Status, Prospects, and Challenges of a Changing Organic Market

Introduction: What is Organic?

Organic agriculture is often described briefly as a way of producing food and other products without synthetic fertilizers and pesticides. The Codex Alimentarius Commission, the international food standards body established by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO), describes it in greater detail: “Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally-adapted systems. This is accomplished by using, where possible, agronomic, biological and mechanical methods, as opposed to using synthetic materials, to fulfill any specific function within the system.”

According to the International Federation of Organic Agriculture Movements (IFOAM) definition, “Organic agriculture is an agricultural system that promotes environmentally, socially, and economically sound production of food, fiber, timber, etc. In this system, soil fertility is seen as the key to successful production. Working with the natural properties of plants, animals, and the landscape, organic farmers aim to optimize quality in all aspects of agriculture and the environment.”

For products to be labeled as organic, they must currently be certified by a third-party organization as having been produced according to specific standards. Certification standards have been shaped over time and around the world by hundreds of certifying organizations, farmer groups, trade companies, non-governmental organizations and, more recently, by national governments. The situation is complex, but efforts are well underway to harmonize regulations as a way to enhance the current growth of the organic market and streamline trade. The challenge is to enhance harmonization while respecting legitimate regional variations and reducing the multiple accreditation and certification costs and requirements that may block market access.

The dramatic rise of the organic food market is often considered a trend limited to the developed world, where organic food consumption has outpaced production. Yet today organic production has become a truly global practice, found to some degree in almost every country in the world. There are now millions of hectares in organic production and a growing percentage of farms and agricultural lands producing organic goods. According to IFOAM, “The worldwide organic movement has now progressed beyond being a niche production and market situation. Therefore, further growth and extension of networking and partnerships are essential.”

Growth has been made possible by the value associated with the term “organic.” The perception that organic food has a special integrity is now shared by a large and diverse community, from smallholder farmers in Africa and Latin America to the executives of the largest food companies in the world. The question debated

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—IFOAM

Measures of growth, such as estimated sales, cultivated acreage, and growth rates, are relatively straightforward and accessible.



now is how to both protect and expand the value of organic food. It is especially important to consider whether the value rests solely in a narrow agricultural framework or could be based in a broad “ideological framework as being good for the earth, the water, the air, the animals, the workers, the farmers, the consumers, and their communities” (RAFI-USA 2002).

The goal of this report is to describe the current status of the organic market and inspire dialogue about its future. We first examine the most widely used indicators – acreage and sales – to see where growth is occurring and how the relationships between production and sales are evolving. Second, we propose additional qualitative measures to discover how the organic industry is changing as it expands. Finally, we list the challenges facing the global organic community.

I. Developing a Baseline of the Organic Market

A broad description of the current organic market is needed as a baseline from which future changes can be evaluated. Measures of growth, such as estimated sales, cultivated acreage, and growth rates, are relatively straightforward and accessible. Additional measures are needed, however, to assess changes in the character of organic agriculture. These include the evolution of organic standards and certification processes, the status of the price premium, and how the organic food dollar is divided between farmers, farmworkers, processors, and retailers.

Analysis of the evolving terms of farmer/buyer contracts, farmers’ access to markets, and the relationships between organic agriculture and local food production, fair trade, and farmworkers’ rights would also be enlightening. These are among the criteria that can be used to evaluate the impact of changes in ownership and decision-making in organic agriculture on economic and environmental sustainability. Such measures go beyond a simple question of ownership to why and how ownership makes a difference. We hope that discussion of these will encourage more systematic analysis and monitoring of the organic food industry.

It is important for the reader to understand, however, that any attempt to establish a baseline of the organic market and indicators of change is hampered by gaps in the information that now exists. Much of the data available lumps organic and natural products; other data combines certified, transition, and uncertified organic farm production; some data double-counts organic farmers who are certified by more than one certifier; and some data is more speculation than fact. Data is improving, however, so future analyses will be able to be more precise. For example, recent data from the US Department of Agriculture (USDA) about organic agriculture in the United States is impressive in its depth, breadth, and accuracy (USDA 2002).

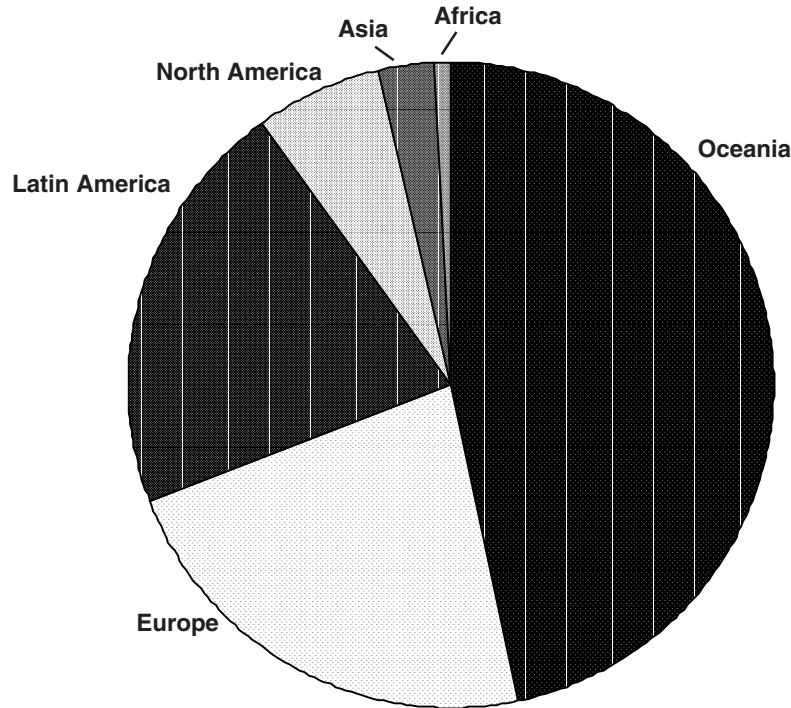
ACREAGE

The total amount of land under organic production is an obvious and important measure of the size of organic agriculture. The Soel-Survey 2003 estimates that there are about 23 million hectares in organic production globally (Yussefi and Willer 2003). Most people assume, “the more, the better,” and how would one argue with that? Yet using total acreage alone can be misleading. Perhaps as much as half of the organic acreage worldwide is used for grazing, and this is quite different from land that is farmed intensively. The value per acre of each crop varies, so the best analysis links acreage with types of crops being produced. It is also important to know whether figures include lands in conversion to organic, as is the case for the data used below.

Other measures addressing land use include: the percentage of agricultural land in organic production; the percentage of all farms which are organic; and the total

number of organic farms. Farm size and farmer age also give valuable insights. Together these measures create a view of the “organic share” of agriculture country by country.

Figure 1, below, estimates how organic production is distributed by region worldwide. Table 1, on the next page, shows this distribution in selected countries for each region. The regional summaries that follow are drawn primarily from reports developed by Yussefi and Willer, editors of the Soel-Survey (2003), the International Trade Centre (2001), and FAO, which are available on the websites of these organizations. (See Bibliography for links.)



There are about 23 million hectares in organic production globally.

Continent	Area in Millions of Hectares	% of Global Total
Oceania	10.6	46.3%
Europe	5.1	22.6%
Latin America	4.7	20.8%
North America	1.5	6.7%
Asia	0.6	2.6%
Africa	0.2	1.0%
Total	22.7	100.0%

Figure 1. Land in Organic Production Worldwide, 2003

Sources: Soel-Survey 2003 (Yussefi and Willer, eds., *The World of Organic Agriculture 2003: Statistics and Future Prospects*)

Note: Most of the measurements in this report are given in the metric system as hectares (ha). A hectare is 10,000 square meters or about 2.5 acres.

European countries have about 23% of the global organic acreage and the highest percentages of agricultural land allocated to organic production.

Table 1. Estimated Organic Acreage in Selected Countries, 2003

Region	Country	Organic Hectares	% Ag land	# Organic farms	% farms
Africa	Egypt	15,000	0.19%	460	0.02%
Africa	Morocco	11,956	0.14%	555	0.01%
Africa	South Africa	45,000	0.05%	250	
Africa	Tunisia	18,255	0.36%	409	0.08%
Africa	Uganda	122,000	1.39%	28,200	
Asia	China	301,295	0.06%	2,910	
Asia	India	41,000	0.03%	5,661	
Asia	Indonesia	40,000	0.09%	45,000	
Asia	Japan	5,083	0.09%		
Asia	Korea	902	0.04%	1,247	
Asia	Sri Lanka	15,215	0.65%	3,301	
Asia	Ukraine	164,449	0.40%	31	
Europe	Austria	285,500	11.30%	18,292	9.30%
Europe	Czech Republic	218,114	5.09%	654	2.37%
Europe	Denmark	174,600	6.51%	3,525	5.58%
Europe	Finland	147,943	6.60%	4,983	6.40%
Europe	France	419,750	1.40%	10,364	1.55%
Europe	Germany	632,165	3.70%	14,703	3.28%
Europe	Italy	1,230,000	7.94%	56,440	2.44%
Europe	Liechtenstein	690	17.00%	35	28.00%
Europe	Spain	485,079	1.66%	15,607	1.29%
Europe	Sweden	193,611	6.30%	3,589	4.01%
Europe	Switzerland	102,999	9.70%	6,169	10.20%
Europe	Turkey	57,001	0.14%	18,385	0.09%
Europe	UK	679,631	3.96%	3,981	1.71%
Latin America	Argentina	3,192,000	1.89%	1,900	
Latin America	Brazil	275,576	0.08%	14,866	0.30%
Latin America	Chile	273,000	1.50%	300	0.09%
Latin America	Costa Rica	8,974	2.00%	3,569	
Latin America	Dominican Republic	14,963	0.40%	12,000	
Latin America	Ecuador	60,000	0.74%	2,500	
Latin America	Paraguay	61,566	0.26%	2,542	
Latin America	Peru	84,908	0.27%	19,685	
Latin America	Uruguay	678,481	4.00%	334	
N America	Canada	430,000	0.58%	3,236	1.30%
N America	Mexico	143,154	0.13%	34,862	
N America	United States	950,000	0.23%	6,949	
Oceania	Australia	10,500,000	2.31%	1,380	1.40%
Oceania	New Zealand	63,438	0.38%	983	

Source: Soel-Survey 2003 (Yussefi and Willer, eds., *The World of Organic Agriculture 2003: Statistics and Future Prospects*)

Oceania

Australia has over ten million hectares in organic production. Most of this vast acreage is in pasture for beef cattle; beef and other products are then exported to North America, Europe, and Japan. New Zealand's share of the regional total is just over 60,000 hectares. Its main organic crops are fruits and vegetables plus wine and beer.

Europe

European countries have about 23% of the global organic acreage and the highest percentages of agricultural land allocated to organic production. In Europe in 2001, over 2% of farm holdings and 3% of agricultural land were under organic production (Dobbs 2001). The majority of this production is consumed within the European Union (EU), which is the world's largest organic market.

Italy has the largest organic acreage in the EU, with more than 1.2 million hectares, and over 56,000 organic farms. The UK and Germany have the second and third largest totals, the UK with about 679,000 and Germany with about 632,000 hectares. While Italy and Spain export significant portions of their production to other European countries, most of British and German production is for domestic markets. Several European countries have more than 5% of their agricultural lands in organic production. Liechtenstein is highest with 17%; Austria has 11%; and Switzerland has almost 10%. The number of organic farms in several European countries account for 2% or more of total farms. In Germany, the number of organic farms is increasing while the number of conventional farms is decreasing, suggesting that organic agriculture is considered more economically viable.

European governments have been aggressive in providing incentives for farmers to make the transition from conventional to organic agriculture. This strategy has allowed EU farmers to take advantage of the rapidly-growing European market for organics and to meet the strong customer preference for products grown in the region. This preference is most striking in the case of land-locked Switzerland, where the domestic organic label Bio Suisse prohibits plane transport for anything to be labeled organic.

The Czech Republic leads Eastern European countries in the dramatic growth of organic agriculture. It is one of seven countries accorded "third country" trade status (or third country equivalence) with the EU, based on compatibility in systems of regulation, inspection and certification of agriculture, which gives it greater access to the EU market. Turkey's industry is also growing, though its production – chiefly dried fruits (90%), nuts, herbs, and medicinal plants – is exported to the EU.

North America

Organic production is increasing across North America. The United States has the most organic acreage in the region and fourth largest in the world. U.S. production serves both domestic and export markets for a wide variety of products. According to the USDA, certified organic acreage in the United States doubled between 1992 and 1997 to over 1.3 million acres (Dimitri and Greene 2002). Production increased to 2.3 million acres by 2001, representing 0.3% of cropland and 0.2% of pasture. The USDA regularly issues reports on organic production by crop, state, and year, and this data is available at its website.

Differences between Europe and the US can be partially attributed to the EU's much more aggressive policy incentives for farmers to convert to and remain organic. In the US, interest in organic research and marketing is increasing at the state and national levels, but the USDA organic research budget is still miniscule compared to its conventional research budget. There are no systemic incentives for farmers to convert; in fact, there are significant disincentives for farmers seeking to make a change in production systems. For example, farm support and crop insurance programs are pegged to past production and yields (Kortbech-Olesen 2002b).

Canadian organic production is also increasing, especially organic grain production. Fruits and vegetables are the other primary organic crops. Most products are exported, primarily to the United States, so interpretation of Canadian standards vis-à-vis US standards will have an important impact on the Canadian industry.



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The Canadian government, like the US government, has also lagged behind Europe in policy incentives or programs to encourage transition to organic agriculture.

In Mexico, organic agriculture has increased very rapidly. There are now almost 35,000 small organic farms in Mexico growing coffee, bananas, citrus, grains, peanuts, strawberries, and other crops. Many of these farms grow organic produce on contract to US-based firms.

Organic grain and oil seed growers in Canada, the United States, and Mexico have a significant problem in the growth of genetically-modified (GM) grain crops. This issue is discussed below as one of the challenges facing organic agriculture globally.

Cuba has been an innovative global leader in the development of low-input sustainable agriculture, yet it has only a small certified organic sector. Since 1997, however, Swiss-based FiBL (the Research Institute of Organic Agriculture) has been collaborating on an organic citrus project. It is working to convert citrus plantations, study production techniques, and support the marketing of organic citrus juices in Europe. For the first time, the juices are labeled as a product of Cuba, and Cuban farmers receive more than double the price paid for conventional fruit (FiBL 2002). Through such projects, Cuban farmers are becoming better positioned to benefit from the growing international trade in organic agricultural products.

Latin America

Organic production is increasing across this region. Most crops are grown for export, since there are relatively few national markets for organic foods. The majority of products are exported for processing in the importing countries. Organic grain farmers in the south of the continent, like those in North America, are seeing an increasing problem with GM plants (such as soy and corn) threatening to contaminate their fields and seed supply.

Argentina is the organic production leader in Latin America. Argentina's organic industry began in the 1980s with a handful of small farms. By the early 1990s, however, organic leaders understood the industry's promise. Argentina wrote national organic rules in 1992 based on IFOAM and European standards and was a pioneer in developing rules for organic animal production. This began a tremendous expansion of organic production. In 1992, there were 5,000 hectares in organic production; in 1998, there were 231,000; in 1999, there were 1,020,000; and in 2003 there were over 3,000,000 in organic production.

Argentina's location in the Southern Hemisphere enables it to produce crops off-season for Northern Hemisphere countries. The country's long history of low-input agriculture eased the transition to organic methods, especially on the grasslands used for livestock. It is a global leader in apple and pear production and in several other crops, including wheat, sugar, onions, and vegetables. Argentina has third country equivalence in the EU, which allows for preferred and expedited access to this large market. Over 80% of its exports go to Europe and most of the remainder to the United States. The domestic market in Argentina is also growing, and it now absorbs 15% of production annually, valued at about US \$3 million (ITC 2001).

Chile presents the picture of a smaller and younger organic food industry which has lacked governmental support. Still, there are an estimated 273,000 ha in production. Asparagus is the major crop, and kiwi, apples, grapes, and berries are also important. Exports are made primarily to the US (70%) and the EU (23%) (ITC 2001).

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Asia

China, India, and Japan are the largest organic producers in Asia. Japan is the region's largest market and buys the majority of Asian production; other domestic markets are tiny.

China has the most land in organic production in Asia, raising soybeans, buckwheat, sesame, sunflower and pumpkin seeds, rice, walnuts, tea, honey, peanuts, bamboo shoots, millet, milk, and other crops. Data on production levels is sketchy, however, and the certification process is complex. There are two levels of "Green Food" production; "A" for local consumption and "AA" for export. Foods must be additionally certified to be labeled as organic, and this is done by third-party organizations. Total export value is approximately US \$150 million (SOEL 2002).

Large private-farm operators in China are beginning to produce a significant share of the country's export crops, including organic crops. One of these companies, Chaoda Modern Agriculture, has a 16,000-acre string of farms from arid Zi'an in the north to tropical Hainan in the south. The company is focusing on cash crops for sale to city markets and for export to Japan. Its size, diversification, and research abilities are ingredients in its success, though some observers question whether it is really able to produce organically at such a large scale (Chang 2002).

India produces a wide variety of organic crops for export, including soy, tea, coffee, honey, spices, cereals, fruits and vegetables. Production of organic, non-genetically modified soybeans is expanding. Growth of the domestic market and of the processing sector are needed to capture excess raw production of Indian crops (SOEL 2002).

Japan's organic production is based on only 5,000 hectares, but its many small, intensive farms produce a variety of crops (vegetables, taro, pumpkin, olive oil, and wine) and generate US \$2.5 billion in sales. Most of the country's organic products are imported, yet demand still outpaces supply. To complicate matters, the new Japanese Agricultural Standards (JAS) for organic foods, while positive in providing uniform standards, are now marginalizing the small-scale organic producers who are not yet certified. It is estimated that only a fraction of the organic fresh produce grown in Japan is produced in accordance with JAS standards, which favor large Australian, European, and American producers (M2 Presswire 2002; or see the original report done by Research and Markets LTD, www.researchandmarkets.com/reports/65).

Thailand has a small but growing organic agriculture sector. The predominant crops are rice and vegetables, though an organic shrimp project was recently certified. An estimated 2,330 hectares of land are now under organic management, representing around 0.011% of Thailand's total farmland. Non-governmental organizations have been pioneers in organic farming, especially the Alternative Agriculture Network (AAN), supporting organic conversion by small-scale producers since 1984. The Organic Agriculture Certification Thailand (ACT), established by AAN, consumer organizations, and environmental groups in 1995, helps to facilitate market access and export. The ACT received IFOAM accreditation in 2001, which further advances the Thai organic movement. There are now foreign private certifiers serving Thai organic producers as well (Panyakul 2003).

Thailand also has three fair-trade certified projects, one for coffee and two for rice, one of which is also organic. The organic fair-trade rice farming project was organized by the Green Net Cooperative (a fair-trade organization working to increase domestic and local markets) and by the Earth Net Foundation. It is the only project in Thailand certified both organic and fair-trade (Panyakul 2003).

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The percentage of organic sales compared to total food sales gives another estimate of the “organic share.”

Africa

The percentage of land in certified organic production is very low compared to other continents, but the situation is changing. Charles Walaga of the IFOAM Development Forum writes that organic agriculture has been expanding through the leadership of international organizations developing projects in partnership with national organizations and the private sector. Three project-based strategies have been effective: (1) Rural development organizations have used organic practices that increase yields and productivity as a way to revive small farms. Organic agriculture also makes farmers less dependent on external inputs, which are continually rising in price. (2) Promotion of trade in organic produce – led by bilateral donor agencies, foundations, farm organizations and unions – has increased the incomes of farmers by exploiting the organic price premium. Examples include the Sekem project in Egypt and the EPOPA project in Tanzania and Uganda. (3) Trading companies (including big British and European supermarket companies) have sought more organic produce from their suppliers in Africa, encouraging small-holder farmers to join grower groups for larger projects and larger farmers to convert to organic production. This has been especially true in Kenya, South Africa, and Zimbabwe. Through these strategies, the organic movement is working around the resistance from some national governments who still favor the “monolithic industrial approach” (Walaga n.d.)

Boudewijn Van Elzakker, of Ecoagro Consulting in the Netherlands, comments that the organic sector in Africa “needs many more resources and much greater organization and coordination. Challenges include poor communications, such as the lack of information infrastructure to share news and research, and the high cost of travel, limiting the ability of people to come together. Good initiatives may be begun but may lack the support necessary to continue, and competition between programs is also a problem” (Van Elzakker 2003).

Charles Walaga is optimistic for the long run, however, stating that with adequate support, “These challenges can be overcome ... This is one of the globalization trends that Africa stands to benefit most from if national policy processes can match the pace of developments in the world.”

SALES

Sales of organic foods are another obvious way to measure the size of the organic food market. Sales reflect how much organic food was purchased where, when, and by whom. Sales figures can be used to compare countries and regions with one another and measure year-to-year changes. The percentage of organic sales compared to total food sales gives another estimate of the “organic share.”

Organic Monitor estimated that the global market for organic food was about US \$26 billion in 2001. Europe and North America together accounted for almost 80% of this total, with estimated sales of over US \$20 billion. Europe’s organic market was about US \$12 billion, and it has had the most dramatic annual growth rates. Japan was the third largest market with estimated organic sales of US \$350 million. These three markets – EU, US, and Japan – continue to drive the global demand for organic food (Nutrition Business Journal 2001b). Table 2 shows estimated organic food sales in selected larger-market countries. Regional and country summaries that follow are drawn primarily from the International Trade Centre (2001).

Europe

Europe has a long history of organic production and an even longer tradition of celebrating local foods. Europe has also had several agriculture and food safety scandals, including BSE, dioxin, and hoof-and-mouth disease, which have shaken

Table 2. Estimated Organic Food Sales in Selected Larger-Market Countries, 2000

Country	Sales in US\$	% of total food sales
United States	\$7,800,000,000	1.5%
Germany	\$2,200,000,000	1.7%
U.K.	\$1,200,000,000	2.0%
Italy	\$1,050,000,000	1.1%
France	\$850,000,000	1.0%
Switzerland	\$475,000,000	2.5%
Denmark	\$375,000,000	2.5%-3%
Netherlands	\$300,000,000	1.2%
Japan	\$250,000,000	< 1%
Austria	\$225,000,000	2.0%
Sweden	\$200,000,000	1.1%
Belgium	\$125,000,000	1.0%

Sources: International Trade Centre 2001, Packaged Facts 2000b, Soel 2003, Soil Association 2002

consumer confidence. As a result, Europeans are emphatically choosing foods they feel are safer and have clearly-identified origins. These choices include organic food, especially organic food produced in Europe, giving this region the largest organic market in the world.

Germany is the largest national market for organic foods in Europe (over US \$2.2 billion). It is also one of the largest organic producers. While most of its domestic organic production is consumed in Germany, half of German market demand is filled by imported products.

The UK is the second largest organic food market in Europe. It showed greater increases in organic food sales during the late 1990s than any other country in the world. According to the British-based Soil Association, sales of organic foods increased by an astonishing 55 percent between 1999 and 2000. The rate of growth is slowing somewhat. Peter Morrison of organic retailer Sainsbury comments that, "Before we concentrated on getting as many organic products out as possible; now we are looking at getting ones of the desired quality." He also noted that local sourcing was very important to Sainsbury customers (Chomka 2002). British production is increasing to meet more of the national demand; still, about 65% of British organic foods were imported in 2002 (Soil Association 2002).

Pressure from European customers has affected even the most American of restaurants, McDonalds, which is now switching to organic milk for its carton sales in its UK outlets. The company estimates that it will sell 3.4% of the total organic liquid milk market in the UK (Ananova on-line 2003).

United States

Organic food sales in the United States were recently estimated to be about \$8 billion (Packaged Facts 2000b), with a growth rate of more than 20% per year and an increasing portion of the "health and natural" market. The organic food share accounts for just over 1% of the total food industry, but its rapid growth compared to the rest of the industry has attracted a great deal of attention from mainstream food producers and retailers. Rapid growth also means that the best estimated sales figures are hard to pin down.

Japan

Japan has the largest market for organic food in Asia. The definition of "organic" is a relatively recent addition to this country's food system, and certification dates



The organic food share accounts for just over 1% of the total US food industry, but its rapid growth compared to the rest of the industry has attracted a great deal of attention from mainstream food producers and retailers.

In addition to tracking estimated growth in organic trade, it will be important to watch for concentration in distribution channels and observe the effects of “export-only” organic production in developing countries. Local markets for organic are essential if organic agriculture is meet its real potential in addressing world poverty and hunger.

back only to 2000. There is strong interest in food safety and in locally-grown food but it is generally satisfied by the large “green-labeled” sector (somewhat akin to the “natural” food sector in the United States). This sector, which is estimated to be worth US \$2 billion per year, dwarfs the sales of certified organic food at US \$350 million. The practice of random fumigation of all fresh food imports also has an effect on this organic marketplace, since food which has been fumigated retains its “green” status but can no longer be labeled as organic. Organic food is imported from Australia and New Zealand, China, and the United States.

TRADE

Organic production and organic sales are increasing dramatically, and so is organic trade, the international bridge between them. This is a third measure of the size of the organic market. Exact figures on trade, however, are not possible at this point since organic products are not a separate category under the Standard International Trade Classification and Harmonized Commodity Description and Coding System. Estimates on trade have been made, however, by the International Trade Centre (ITC) of the World Trade Organization. ITC estimates that retail trade in organics was US \$10 billion in 1997; grew to US \$17 billion in 2000, and was over US \$26 billion in 2001.

Sales of organic food in the largest market regions continue to outpace production, creating significant opportunity for trade from the developing world. The most dramatic opportunities exist in: (1) products not grown or not widely grown in the northern hemisphere, such as coffee, cocoa, tea, tropical fruit, spices and herbs, and dried fruit; (2) off-season produce from the southern hemisphere; (3) in-season products with high demand; and (4) novelty and specialty items, such as organic wines from Latin America and South Africa (Kortbech-Olesen 2002a, 2002b).

The Dominican Republic makes an interesting case study. It is one of the leading exporters of organic tropical products, especially bananas, with organic foods representing 40% of its exports and accounting for US \$20.9 million in 2000. This is double the 1999 amount (FAO). The country has several advantages: favorable growing conditions, low disease burden, and a low-input tradition in agriculture, but it also took the initiative to work out key certification issues during the early to mid-1990s and was ready for the market growth of the late 1990s. Its success has been mainly market-driven, based on investments by private companies, and its products are in high demand (ITC 2001).

Can other countries follow this path? There are both significant opportunities and significant barriers for those countries just developing organic production for export. For example, traders must negotiate an increasingly elaborate and complex maze of certification systems, handling regulations, and networks of specialty buyers in the importing countries.

The greatest need is to increase developing countries’ internal capacity to take advantage of organic trade. There is need for locally-based technical assistance, site-appropriate information on crops and management, and increased access to certification. The growing trend of farmer cooperatives being certified “externally” as a group is one such example of a strategy to ease the burden of certification for small-scale and limited resource farmers.

The opportunities presented by trade in organic food have not gone unnoticed at the US Department of Agriculture. As economist Thomas Dobbs writes, “This growing competition for Western Europe’s organic markets makes even more valuable the outlook and market facilitation roles of the USDA’s Foreign Agriculture Service (FAS). It also is likely to bring organic agriculture into a more prominent place in the overall debate about which kinds of farming should be encouraged or

discouraged by US farm policy” (Dobbs 2001).

In addition to tracking estimated growth in organic trade, however, it will also be important to watch concentration in distribution channels and observe the effects of “export-only” organic production in developing countries. Such market pressures may have the effect of limiting the range of production and stifling the development of local markets. Local markets for organic are essential if organic agriculture is to meet its real potential in addressing world poverty and hunger (RAFI-USA 2002).

GOVERNMENTAL AND ORGANIZATIONAL ACTIVITY

National governments vary widely in the investments they have made in organic agriculture. Some governments have invested financially in the form of incentives for farmers to make a transition from conventional to organic farming or to continue and/or expand organic operations. Other governments have invested in research, education, and training to complement the work of farmers and address the obstacles they face. A measure of this activity is informative about the link between such support and the growth of organic production.

The US-based Organic Farming Research Foundation (OFRF) did a study to evaluate the US Department of Agriculture’s support for organic farming in the mid-1990s. OFRF analyzed the Current Research Information System database of projects supported by the USDA and found that only 34 of 4,500, or 0.7%, were strongly focused on organic methods. The report, titled “Searching for the ‘O Word’ ” (Lipson 1997), concluded that one reason for the underdeveloped potential of organic agriculture in the United States was the lack of research and development activity that would be relevant to farmers.

The same thing is true elsewhere. Growth in organic agriculture does not happen in a vacuum but relies upon innovative, often government-funded research. “There are many practical problems associated with transition to organic, including lower yields (especially in the Global South), weed and pest management problems, organic-by-neglect issues, and lack of locally appropriate technical information and expertise” (RAFI-USA 2002). Lack of development in crop and animal varieties is another obstacle for organic farming, since the commercial varieties are often unsuitable for lower-input production.

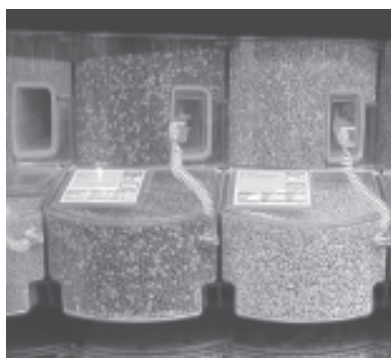
The leading international non-governmental organization devoted to organic is IFOAM, the International Federation of Organic Movements, which now includes 750 member organizations and institutions in 100 countries. One-half of these are from the developing world or central European countries. IFOAM works to encourage the growth of organic production, to implement an international accreditation program through the International Organic Accreditation Service (IOAS), to increase expertise in developing countries, and to harmonize organic standards.

The Food and Agriculture Organization (FAO) of the United Nations has also become a proponent of organic agriculture. FAO now has staff working on organic issues, offers a broad range of information on its web site, and is engaged with issues such as how organic can help address rural revitalization and hunger, as well as the harmonization of certification systems and fair access for those in the Global South.

Growth in organic agriculture does not happen in a vacuum but relies upon innovative research, often government-funded.



As national governments in Europe and North America institutionalize certification and become involved as accrediting organizations, they may become “gatekeepers,” controlling access to these largest markets.



II. Expanding the Baseline: Characteristics of the Organic System

What makes organic agriculture different? How are these characteristics evolving in the high-growth environment? There is a strongly-held world view that growth is enough in the organic industry. We challenge that assumption by broadening the criteria for success in the organic system.

CERTIFICATION AND ACCREDITATION

Products are labeled organic based on certification that they have been grown, handled, and processed in accordance with organic standards. Generally, these certifications are now provided by third parties which are then accredited by an overlying organization, which may be national or international, governmental or non-governmental.

Certification systems and standards were initially developed by farmers and farmer organizations, and they have been shaped by local conditions and markets. Thus the roots of certification contained both diversity and local control, even while the resulting standards and practices were quite similar. As organic agriculture has expanded, however, more specialized certifying organizations have been created, many of these becoming larger in size and scope. There are now several interna-

Standardizing Standards?

IFOAM's web site describes the state of things this way: "The growth of organic agriculture and markets during the last decade has been accompanied by a rapid growth in the number and complexity of private sector standards followed by the burgeoning of government organic regulations. Though the purpose of certification was to foster confidence of buyers and enhance trade, the plethora of certification requirements and regulations is now considered to be an obstacle for the continuous and rapid development of the organic sector."

Diane Bowen, writing for an international workshop on international harmonization of organic standards, says, "In 2002, there were 56 countries at some stage of regulating the organic sector; 33 of these have fully implemented regulations; eight are implementing regulations; and fifteen have drafted regulations. Other countries have implemented accreditation systems... There are only a small number of agreements in place for the acceptance of organic products from other countries, and virtually no mutual equivalence agreements exist between countries. Even as the United States implemented organic standards in October 2002, there were only a few foreign certifiers accredited and there were no mutual agreements in place for trade of organic products ... Adding complexity to this is the fact that US and EU organic businesses locate and import many of their products and ingredients from developing countries" which may require separate certification (Bowen 2002).

Efforts to establish equivalence, or harmony, among the many regulatory systems have been led by IFOAM together with FAO, the International Trade Centre of the United Nations Conference on Trade and Development, the European Union, and many other organizations. Important progress has been made. There is consensus about standards on major issues — such as the clear exclusion of genetically-modified organisms — though debate continues on others, such as the use of food additives and processing aids. A comparison of IFOAM, Codex Alimentarius, and EU standards is available in Sol's Organic Agriculture Worldwide (SOEL 2002; chapter 8).

tional certifiers which play an increasingly powerful role in organic trade as they negotiate the myriad of standards now in place.

Farmers are faced with market demands for multiple certifications, and certifiers are facing an increasing number of multiple accreditation demands to enter specific countries or markets. Harmonization is an obvious improvement, though there are still questions to be asked: Who will do the certification and the accreditation? How many choices within these processes will farmers and processors have? Who will make the decisions about standards and certification processes? How will costs be distributed?

As the national governments in Europe and North America institutionalize certification and also become involved as accrediting organizations, they may become “gatekeepers,” controlling access to these largest markets. In the United States, for example, while the development of government-based organic standards has given organic products a higher profile and a simpler labeling system, it has also increased the cost and complexity of certification to the point that small-scale farmers may be excluded.

Non-governmental international systems of certification and accreditation, developed by IFOAM and others, are also thriving, but the relationships between and among them, as well as with NGO-led efforts in the developing world, must be negotiated.

THE PRICE PREMIUM – AND WHERE IT GOES

Organic food usually costs more. The price differential between organic and conventional foods is commonly called the “price premium.” For example, organic dairy products in the United States have a 50% or higher price premium, much of which goes to the producer (Dryer 2002). Customers are obviously willing to pay a higher price for the environmental and health benefits of the organic system, and this additional return for the farmer is one clear distinction between organic and conventional production.

The price premium varies enormously according to crop, time of year, locality, country, and especially the type of retail outlet. As a result, developing a meaningful aggregate is difficult. For example, the International Trade Centre reports organic price premiums of 20–30% in Austria; 10–50% in Germany; 10–100% in the UK; and minimal price differentials in Denmark. The greatest differences are determined by the crop, with exotic and off-season crops bringing the highest prices. Products in the largest supply, such as organic milk in parts of the EU, generate the smallest price premium, if one remains at all.

The organic price premium is seen as a marketing obstacle, however, by conventional food marketers used to making money by increasing sales. US industry sources, for example, view prices this way: “High premiums have prevented organic products from achieving wide acceptance in the past” (Packaged Facts 2000b). In the US, the price differentials between organic and non-organic can be anywhere from 0% to close to 100%, though prices are coming down, especially in the categories, such as cereal, which have attracted attention from big retail players. One factor that may affect price in the future is the evolution of a “two-tiered” price as large retailers begin to offer lower-priced private label organic products to lure new customers (Burtley 2002).

The price premium results primarily from the higher costs of organic production, specifically higher labor costs, which are greater than the money saved in reduced off-farm inputs such as pesticides and chemical fertilizers. Limited supply, transportation, and distribution costs are also a factor in the higher cost of processed organic foods (Mahoney 1998). Yet the price premium – which gives farmers a



Customers are obviously willing to pay a higher price for the environmental and health benefits of the organic system, and this additional return for the farmer is one clear distinction between organic and conventional production.

If prices fall to conventional levels, the small farmers who were organic pioneers will likely be excluded. Linking a price premium to the costs incurred as well as to other social sustainability factors to the standards would be one way to avoid this result.



higher return for their investment and compensates them for stewardship of the environment and the food supply – is integral to the future of organic agriculture.

At the same time, an understanding of pricing changes and trends is elusive, and more research is needed. Of particular interest is work on distribution of the organic food dollar throughout the food chain. Fortunately, organizations and individual researchers are beginning to generate data on prices. For example, the Rodale Institute is developing an Organic Price Index (OPX) to track prices of selected produce, grains, dairy, and meat in the United States. The price data, to be updated weekly, will be drawn from public and private sources (Business Wire 2003). Thomas Dobbs of South Dakota State University and his students are comparing the prices of organic and conventionally produced grain crops in the US (Bertramsen and Dobbs 2002). Ed Estes of North Carolina State University is studying the comparative costs of various organic production systems in the US and how these are linked to prices (Estes n.d.).

Since a price premium for organic goods is not institutionalized as part of organic standards, prices are market-driven and vulnerable to the downward pressures of market consolidation, supply and demand, and other forces. If prices fall to conventional levels, production systems will have changed to exclude the small farmers who were organic pioneers. Linking a price premium to the costs incurred as well as to other social sustainability factors to the standards would be one way to avoid this result. A voluntary first step would be to increase the transparency of profit-taking across the organic food chain.

OPEN STRUCTURE

Organic agriculture was developed in a small-scale, niche market with an open structure. Markets were local or regional, and farmers had access to a variety of wholesale and retail buyers who were willing to pay a fair price for their products.

Today's organic marketplace is a large industry sector that is rapidly growing, full of opportunity, and quite volatile. Adams, Harkiness and Hill, a US-based financial firm specializing in the food industry, reports that the American organic market is highly fragmented, given that there are “few large and strong brands”... and a “heavily regionalized manufacturing base and regional demand.” Similarly, the distribution and retail sectors are also relatively fragmented...” (Adams et al. 2002).

The open, fragmented structure of organic agriculture is like a Rorschach test, producing a different picture depending on one's perspective. The traditional organic perspective appreciates the openness of such a system because it allows new and small companies to have access to the best markets. It also encourages experimentation and rewards those who meet the consumers' interests. The industrial perspective also sees opportunity, though as investment in a rapidly-growing niche market where there is little competition from entrenched brands, giving their brands the opportunity to become dominant.

Yet the open structure is becoming more concentrated. Analyzing these changes can be done by studying several factors, including:

- the market share of top brands and companies by sector;
- the ownership of top brands and companies;
- the growth rate by sector; and
- changes in distribution and retail pathways, with attention to bottlenecks that may affect access to the market.

Mergers and acquisitions involving top organic brands and companies make the business news, and the trend towards concentration of production, processing, and distribution sectors is as obvious in the organic market as it is in other parts of the

Certification and Concentration

Desmond Jolly, of the UC-Davis Small Farm Center, sees a link between the increasing costs of certification and the trend towards concentration. “The paradox in the growth and penetration of organics into America’s consumption mainstream is that small-scale producers were among its most articulate advocates and supported a national organic standard. But the costs of certification, along with the transaction costs that marketers seek to minimize, means that these small-scale producers will not be meaningful players in the organic industry as such” (Jolly 2000).

Bob Scowcroft of the US-based Organic Farming Research Foundation takes a different perspective on concentration, stating that “I don’t want to discount concerns; they are very real for farmers in some regions... [but] we’re only 2% of the economy, so we can’t start cannibalizing each other on size and economies of scale. We should be in solidarity with all products entering the stream of commerce that are certified organic. When we get to 40 or 50% of the economy, then we’ll be ready to work on issues of food security and distance of travel. Not that we shouldn’t be thinking about that now, but it should not cause conflict between us” (Coffield 2002). Gene Kahn, founder of Cascadian Farm and now Vice-President of General Mills, echoes this view in saying that “Consolidation in the industry means that we’ll lose some small-scale farmers.” To minimize these losses he suggests giving these farmers a break on the costs of certification (Harris 2001). Many others share this belief that “mainstreaming” organic is the only priority for now.

economy. Yet there has been relatively little research done to assess the specific impact of concentration on farmer income, farm production, access to markets, and small-farm viability. Such work is urgently needed and could include baseline concentration in accreditation and certification organizations, distribution and trade firms, ownership of food companies, and retail pathways.

An example is the analysis done at UC-Davis on the growth of organic production in California. Karen Klonsky’s *Statistical Picture of California’s Organic Agriculture 1995–1998* describes the crops grown, the acreage and geographic regions where they are grown, the sizes of farms, farm income, and how this is changing over time. She documents how organic food production in California has become concentrated: 2% of organic growers, about 27 growers, bring in over \$1 million a year, representing over 50% of the organic sales in the state (Klonsky 2002).

III. Proposed Indicators for the Organic Marketplace

This report calls for a systematic and ongoing analysis of the global organic marketplace. We propose the following broad baseline indicators as a way to get beyond documenting growth and thus consider the impact of growth and other changes on organic agriculture and food production. From this perspective, we can address the broadest possible measure of success: whether the benefits of growth in organic agriculture can be used to strengthen local food security and global sustainability.

1. Acreage

- Numbers of hectares in organic production
- Numbers of farms in organic production
- Size of organic farms
- Percentage of land which is in organic production



Research to assess the specific impact of concentration on farmer income, farm production, access to markets, and small-farm viability is urgently needed.



- Percentage of farms which are organic
- Crops produced for export versus for domestic markets

2. Sales

- Global, regional, and national totals
- Ratio of domestically-produced and imported products
- Percentage of sales that are organic

3. Trade

- Estimated global totals
- Structure of trade networks
- Impacts of organic exports on local food security

4. Organizational and governmental activity

- Initiatives to expand organic farming
- Research on locally-appropriate organic practices
- Research on local/regional market initiatives
- Information infrastructure to spread knowledge and experience

5. Standards and certification practices

- Integrity of the standards
- Harmonization of certification and accreditation processes
- Openness and local participation in certification process
- Allocation of regulatory and monitoring costs, decision making, and responsibilities
- Growth of fair-trade, social justice, humane, and other legitimate eco-label standards

6. Price and social sustainability factors

- Status of the price premium by country, region, and crop
- Fairness and transparency of organic contracts and market relationships
- Distribution of the organic “food dollar” across industry segments
- Treatment of farm workers and indigenous peoples

7. Structure of the organic industry

- Access of farmers and small businesses to local, national, and global markets
- Concentration in production, processing, distribution, and retail pathways
- Anti-trust considerations to protect the open structure and fair pricing

Use of these seven indicators will create a more complete portrait of the current organic industry and monitor its changes in the future. Debate is already underway on questions such as:

- What losses are acceptable to sustain growth of the organic industry?
- Who will decide this?
- How can the real potential of organic agriculture be developed?

We strongly encourage the development and monitoring of these indicators to aid us collectively in making the right choices and in responding to the obstacles ahead.

IV. Concentration in the US Organic Industry

It is critical that baseline data and tracking mechanisms are established now to evaluate the status and impact of concentration in the organic industry. This section describes the changes that are underway in the US organic industry, including the development of “organic giant” companies, acquisitions by the global leaders in the food industry, focus on rapidly-growing sectors, and the creation of bottlenecks in the distribution and retail sectors of the market. The issue is not simply one of size, but rather of market power and ownership.

Is concentration a necessary cost of growth of the organic market? Concentration in the conventional food industry has created a handful of giant corporations with such enormous buying power that they are able to set prices, limit farmers’ return, and control market access. It has also had several other negative effects less often discussed: an accelerated loss of genetic diversity, reduced innovation, less responsiveness to consumer and social interests, and fewer decision-makers in the industry. Such trends, if applied to organic agriculture, would surely transform its character and affect its future.

ORGANIC GIANTS

The rapid growth of the organic sector has made small companies into larger ones and larger companies into giants. Companies have grown in two ways: initially by increasing markets for their product lines, especially during the explosive organic growth of the late 1990s; and secondarily by acquisition of other companies and brands. Several of these organic companies have become so profitable that they are buyout targets for even larger firms.

Natural Selection Foods, now a \$200 million California organic produce firm, was started in 1984 as one small organic raspberry farm. Over time, the business diversified, and it became a leader in pre-washed and bagged organic specialty salads. The Earthbound Farm brand was created in 1984 when the company merged with Mission Ranches. Today, there are 13,000 certified acres in production for the Earthbound Farms brand, much of it owned by independent farmers in California, Arizona, and Mexico (Coffield 2002). Such success attracted Tanimura and Antle, the world’s largest independent conventional lettuce producer, to buy one-third of Natural Selection in 1999.

The giant Hain-Celestial Group was begun when Irwin Simon founded Kineret Foods, a kosher frozen-foods company, in 1993. Simon was committed to building a “better for you” food company and began a series of acquisitions with the purchase of Hain Pure Foods in 1994. The strategy has continued with purchases of Estee, Weight Watchers (now owned by Heinz), Boston Better Snacks, Alba, Westbrae, Shansby Group (Arrowhead Mills, Terra Chips, Garden of Eatin’), Nile Spice Group, Natural Nutrition Group (Health Valley, Casbah), Earth’s Best, Celestial Seasonings, Fruit Chips BV, Yves Veggie Cuisine, and Lima NV (Adams et al. 2002).

Hain continues to grow. In December 2002, it purchased Imagine Foods, which has a strong presence in the North American and European markets for non-dairy beverages. In June 2003, it purchased Acirca and gained the historic Walnut Acres brand. Today Hain-Celestial has annual revenues of well over \$400 million and is the largest processor of natural and organic foods in the world (Strugatch 2003). Hain’s partnership with Heinz, which owns 19% of the company, has given the company even more global reach for some of its products, such as Earth’s Best, which has a 71% market share of organic baby food brands in the natural foods retail channel (Adams et al 2002).

Is concentration a necessary cost of growth of the organic market? Concentration in the conventional food industry has created a handful of giant corporations with such enormous buying power that they are able to set prices, limit farmers’ return, and control market access.



Acquisitions of high-profile organic companies have been widely discussed. Organic industry supporters are leery of the changes that will follow and annoyed that the folksy brand images remain the same despite the new ownership.

The Development of Walnut Acres

Acirca is an example of a new food group that was assembled from existing organic companies. Its cornerstone was Walnut Acres, which was founded in 1946 and was one of the oldest direct-mail organic food companies in the world. Walnut Acres was also a pioneer in the Internet-based sale of organic foods. This attracted the attention of former AOL executive David Cole, who bought a majority interest in Walnut Acres in 1999. The company was then rolled into the new firm Acirca by its investors, North Castle Partners, in June 2000. Without warning, in August 2000, the company's Pennsylvania processing plant was closed, its Internet sales site went off-line, employees were laid off, and supplier contracts were dropped as part of a reorganization. The new management viewed Walnut Acres as a brand more than a company – in fact, marketing director Susan Graham described the company's goals as making Walnut Acres “the most valuable name in organic packaged foods and beverages” (Reyes 2002). Between 2000 and 2002, Acirca purchased Shari-Ann's Organics (the second-largest ready-to-eat soup brand), Millena's Finest, and the organic ingredients division (bulk sales of fruits, vegetables, purees, concentrates) from Spectrum Organic Products.

Katherine DiMateo of the Organic Trade Association could have been describing the Walnut Acres story when she said, “These buy-ups could turn out to be a disaster... If an organics division isn't meeting its profit goals, the corporate parent may decide to make up for losses by paying its organic farmers less or cutting contracts... Or if profits are bad, a corporation may decide organics just isn't worth it and then eliminate its organic division entirely” (Harris 2001).

The same forces are at work in Canada. For example, Stake Technologies, with annual sales of almost \$100 million, is the largest organic company in Canada. Stake produces organic corn and soy; it is the main supplier of organic soymilk concentrate to the US and also sources, blends, and supplies feed for organic poultry producers in Canada and the US. It then partners with processors to package chicken or turkey products under private label or the Organic Kitchen brand. Stake is the only major supplier of organic chicken in Canada.

One organic “giant” which has taken a different approach to building market-share is the Coulee Region Organic Produce Pool Cooperative (CROPP), which sells milk, cheese, butter, spreads, creams, eggs, juices, and meat. CROPP has been aggressive in marketing its products with a price premium to give their farmer members a good return. Based in LaFarge, WI, the co-op was started in 1988 with seven farmers; today it is the largest organic farmers' cooperative in the US, with more than 500 farm families and sales over \$125 million in 2002. CROPP's Organic Valley Brand is the only leading organic brand to be solely owned and operated by organic farmers. Farmer groups from around the world travel to Wisconsin to learn from CROPP's experience.

ACQUISITIONS BY “BIG FOOD”

The flashy annual growth rates of organic food sales – currently 15–20% or more compared to 4–5% growth in the food industry overall – have attracted multinational food corporations. They have acquired organic brand leaders, established partnerships with organic companies, and developed their own organic product lines. As Dana Coffield (2002) writes in a story about Coca Cola's acquisition of Odwalla Organics, “What company could resist a market segment that has logged sales increases of at least 9% every year since 1997? Certainly not one of the

world's largest beverage makers, and buying smaller firms is a growing trend for food industry giants.”

Many of the largest food companies in the world have already acquired organic food brands or companies, made partnerships with organic companies, or developed their own organic lines. They include: Archer Daniels Midland, Cadbury Schweppes, Coca Cola, ConAgra, Dean Foods, Dole, General Mills, Groupe Danone, H.J. Heinz, Kellogg, Mars, Parmalat Fianziana, Kraft, Sara Lee, and Tyson Foods. Archer Daniels Midland, which dominates the global market in conventional oil seed crops, has established its first processing plant for organic soybean powder. H.J. Heinz, with more than 50% of the market share of catsup in the United States, launched Heinz Organic Catsup in June 2002 and garnered attention worldwide. The company may develop other organic condiments if the catsup brand is successful. Other multi-national firms are getting into the market, too; for example, pharmaceutical giant Novartis has “Tender Harvest,” a leading organic baby food brand, which is produced by its subsidiary Gerber.

The Novartis connection is an interesting one. Novartis, formed by the merger of Ciba and Sandoz in 1996, later merged with Astrezenca. The combined agricultural and biotech divisions of both companies were then joined to create Syngenta, which is the world's number-one agrochemical company and one of the top four agro-biotech companies in the world.

The US beverage sector is a good example of this investment trend. Odawalla Organics, which sells premium fruit juices, organic fruit juices, waters, and organic soy milk, is now part of Coca Cola's Minute Maid division. Cadbury Schweppes' beverage portfolio includes organic juice makers Hanson Natural and Nantucket All Serve. J.M. Smucker has been involved in the organic sector since the 1980s, owning R.W. Knudsen Family, Santa Cruz Organic, and After the Fall juices.

Acquisitions of high profile organic companies, such as General Mills' purchase of Cascadian Farms and Muir Glen in 2000, have been widely discussed (e.g. Pollan 2001). Organic industry supporters are leery of the changes that will follow and annoyed that the folksy brand images remain the same despite the new ownership. Rich Ganis (2002), refers to this as “stealth ownership,” while Marc Belton of General Mills explains, “To the organic consumer, the heritage of Cascadian Farms has more equity ... than the image of General Mills” (Helliker 2002).

Yet the acquisitions of primary interest occur when conventional sector leaders gain significant holdings in the organic brands in the same sector. For example, French-based Groupe Danone has purchased a 40% share in Stoneyfield, the fourth largest yogurt maker in the United States with \$85 million in sales. Danone will buy up to 75% of the company in 2004 and the remainder in 2016. Danone makes Dannon, a global brand leader in yogurt, and many other products. Founded in 1983, Stoneyfield has been a standard-bearer for the entire US organic industry.

The US dairy industry – whether conventional or organic – is highly concentrated. One company, Horizon Organic Dairy, processes and distributes almost 70% of the organic milk in the US (Brewster 2002). Horizon was founded in 1992 to market organic yogurt, but it soon expanded into a complete line of dairy products. Today it is the largest single US organic brand by sales (\$187 million) and by distribution, even with a 30–50% price premium (Wall Street Transcript). Horizon is credited with being the driving force behind the expansion of the organic dairy market because it has aggressively promoted its products into new venues, such as supermarkets, Starbucks shops, and even school programs. The company has also gained market share through acquisition of many local and regional dairies. Horizon is now buying dairy companies and brands in Britain (Meadow Farms Ltd,

“To the organic consumer, the heritage of Cascadian Farms has more equity than the image of General Mills.”





Organic Matters Ltd, and Rachel's Organic), and it has made a licensing agreement with a Japanese organic milk producer.

Does this matter? "As reported by Maine Public Radio in January 2001, Horizon, which controls 70% of the organic retail market in the US, actually cut contractually-promised premiums to farmers after it bought out The Organic Cow of Vermont. This resulted in decreases in farmers' incomes by as much as \$15,000 per family – even as Horizon reported a 200% increase in profits on net sales of \$160 million that year for the company... (Organic Newswire 2003).

Dean Foods is the largest fluid milk producer in the United States and one of the five largest in the world with \$10 billion in annual sales (Prepared Foods 2000). The company has taken a strong interest in the organic market. As Dean Foods CEO Greg Engles explains, "We believe that the trend toward organics is in its infancy and will continue to grow, so it's really a long-term investment on our part" (Forster 2002). In 1999, it bought Alta Dena Dairy, an organic company. It also added a 13% share of Horizon Organic Dairy. Dean ventured into the non-dairy sector with purchase of White Wave in 2002, the leading organic soy beverage company, giving it significant holdings in both the organic dairy and non-dairy beverage sectors.

In 2003, Dean acquired the remaining 87% of Horizon Organic Dairy. The Federal Trade Commission has reviewed the Dean acquisition of Horizon and found "no antitrust issues associated with the acquisition... The merger will make Dean the largest conventional milk processor, with 30% of the market; through its Silk and Sun Soy brands, the largest soymilk processor in the US with 90% of the market; and the largest organic milk producer in the US with 67% of the market" (R. Smith 2003).

Table 3 to right shows some examples of changing ownership of some leading US organic brands.

Organic Meat Matchmaking

The US organic meat industry is still in its infancy (due to a slow development of standards), but the largest brands are already consolidated and show ties with conventional meat producers. For example, US-based Tyson Foods, the largest meat company in the world, is testing an organic chicken brand called "Nature's Farm" and buying up the organic corn pipeline that is necessary to produce it. The company says the line was created to "address the increasing demand for organic meat and to provide greater product choices for consumers" (Labetti 2002). Though a small line, Nature's Farm will likely gain prime supermarket space.

George Gillett's Booth Creek Management Corporation (BCM) has put together a group of organic/natural meat companies. The centerpiece is Coleman Natural Products, the largest and best known producer of "natural" beef in North America. Coleman is shifting to organic production by using the 200,000 acres of certified organic rangeland it owns or leases; this is almost half of the nation's inventory of organic rangeland. Petaluma Poultry, the largest organic poultry producer in the US, is part of this new group, along with Texas-based B3R Beef and Gerhard's Napa Valley Sausage. Gillett and BCM are minority owners of meat giant Swift and Company, which was just reorganized after being purchased from Con Agra. Gillett just sold Corporate Brand Foods America, a collection of processed meat companies, to IBP (now owned by Tyson) in February 2000. A company spokesman says that BCM's natural/organic meats companies will be completely separate from the Swift ownership (*Cattle Buyers Weekly* 2002).

Table 3. Changing Ownership in Leading US Organic Brands

Brand Name / Company	New Owner	Date
Coleman Natural Products	Booth Creek Management Corporation	2002
Petaluma Poultry	Booth Creek Management Corporation	2002
Hanson Natural	Cadbury Schweppes ❖	2002
Nantucket All Serve	Cadbury Schweppes ❖	2002
Odwalla Organics	Coca Cola ❖	2001
Alta Dena	Dean Foods ❖	1999
The Organic Cow of Vermont / Horizon	Dean Foods ❖	2003
Rachel's Organic (in UK) / Horizon	Dean Foods ❖	2003
Horizon Organic Dairy	Dean Foods ❖	2003
Silk / White Wave	Dean Foods ❖	2002
Cascadian Farms / Small Planet Foods	General Mills ❖	2000
Muir Glen / Small Planet Foods	General Mills ❖	2000
Brown Cow / Stoneyfield Farms	Groupe Danone ❖ (40%; 2004-75%; 2016-100%)	2003
Stoneyfield Farms	Groupe Danone ❖ (40%; 2004-75%; 2016-100%)	2001
Mountain Sun / Acirca	Hain-Celestial Group *	2003
Shari Ann's / Acirca	Hain-Celestial Group *	2003
Walnut Acres / David Cole / Acirca	Hain-Celestial Group *	2003
Friti de Bosco / Acirca	Hain-Celestial Group *	2003
Millina's Finest / Acirca	Hain-Celestial Group *	2003
Soy Dream, Rice Dream / Imagine	Hain-Celestial Group *	2002
Celestial Seasonings	Hain-Celestial Group *	2000
Earth's Best	Hain-Celestial Group *	1999
Health Valley / Natural Nutrition Group	Hain-Celestial Group *	1999
Arrowhead Mills / Shansby Group	Hain-Celestial Group *	1998
Terra Chips / Shansby Group	Hain-Celestial Group *	1998
Westbrae / Westbrae	Hain-Celestial Group *	1997
Westsoy / Westbrae	Hain-Celestial Group *	1997
After the Fall	J.M. Smucker	1994
Santa Cruz Organic	J.M. Smucker	1989
RW Knudsen Family	J.M. Smucker	1984
Lightlife	Kellogg ❖	n/a
Kashi	Kellogg ❖	2000
Boca Burger	Kraft ❖	2000
Seeds of Change	Mars ❖	1998
Annie's Homegrown / Homegrown Natural	Solera Capital	2002
Earthbound Farm / Natural Selection	Tanimura and Antle (33%)	1999

❖ One of the 25 largest food companies globally
 * H.J. Heinz ❖ owns 36% of Hain-Celestial Group

Sources: Adams et al. 2002; Packaged Facts 2000b; Prepared Foods 2000; Forster 2002; and several company websites.

RAPIDLY GROWING ORGANIC SECTORS

Fresh fruits and vegetable are still the single largest and most valuable type of organic food, with sales accounting for about 40% of the total and increasing in most countries (Burtley 2002). Yet a few, very rapidly growing organic sectors – and a handful of best-selling brands – are blazing the trail into the mass market (Adams et al. 2002). According to Datamonitor, the biggest increases for 1998-2003 are projected for frozen food, ready meals, baby food, baked goods and



A few very rapidly growing organic sectors – and a handful of best-selling brands – are blazing the trail into the mass market. The biggest increases for 1998-2003 are projected for frozen food, ready meals, baby food, baked goods and cereals, and dairy products.



cereals, and dairy products. All of these are growing at an estimated 36% or more annually compared to the growth rate of about 8.4% in produce (Burtley 2002).

Supermarkets and mass merchandisers, such as Costco, are offering a rather limited array of organic products sectors, such as Earthbound Farm organic greens, Amy's frozen vegetarian entrees, and Spectrum's Garden Valley pasta sauces – a few hot brands from the hottest sectors (Packaged Facts 2000b).

Dairy has been the most rapidly growing sector globally over the past ten years. In the US, for example, sales of organic dairy products were up more than 500% between 1994 and 1999 (Dimitri 2002). According to *Beverage Today*, organic dairy (both beverages and non-beverages) is expected to increase 68 percent annually from 2000 to 2005 (Brewster 2002). Innovations, such as the use of ultra-pasteurized products with longer shelf life, have played a key role in gaining shelf space for organic milk.

Organic baby food is another sector of processed food worth watching, with an estimated 74% now being sold in supermarkets (*Nutrition Business Journal* 2001b). Organic baby food accounted for 4.5% of all baby food sales in 1999, yet food safety concerns should increase this percentage. In the UK, for example, retail giant Sainsbury is launching its own brand of fresh baby food, the first such line by any UK retailer or baby food brand (Charles 2002).

Soy products have also grown extremely rapidly. The market for soy products is estimated at \$2.65 billion in the US alone, driven by the health benefits now claimed for soy, and an estimated 55% of soy product sales occur in supermarkets. Non-dairy (soy and rice) beverages grew 53% between 1999 and 2000, and *organic* non-dairy beverages had a huge share – 62% – of this growth (Packaged Facts 2000c).

Growth in organic meat in North America has lagged behind Europe but is expected to become strong. Its appeal derives from concerns for food safety and accurate source information as well as an interest in greater flavor (Gray 2002). At this point, about 15% of organic meat is sold in supermarkets and 78% in natural foods stores or chains (Dimitri and Greene 2002). This is likely to change with the introduction of organic meats to a broader audience.

There is also growth in unexpected places. For example, Frito-Lay is offering natural or organic versions of its Cheetos, Sun Chips, and Tostitos. Frito-Lay spokesman Lynn Markley said that, "Since Whole Foods is the fastest growing among retailers, we'd love to be in there," though she also recognized that the most loyal organic shoppers are "somewhat leery of established brands" (Helliker 2002). It is even possible, according to William Beene of the University of Minnesota, that someone will attempt to make an organic Twinkie... though such an enterprise would have significant formulation challenges (O'Donnell 1998).

DISTRIBUTION AND RETAIL PATHWAYS

US farmers have four primary options for their organic products: sell direct to consumers, restaurants, or retailers; sell direct to processors; sell through brokers or to distributors for resale to natural foods stores and chains; or sell through brokers or to distributors for resale to conventional supermarkets and club stores. Each organic crop and sector present the farmer with a different set of options, and each type of retail outlet implies a different distribution system. Distribution and marketing pathways are evolving rapidly, however, and forces of concentration and other bottlenecks may affect prices and access to the market in the future.

Direct Sales

For most farmers, direct (retail) sales bring the highest prices. These include sales made at the farm itself, at farmers' markets, through community-supported agri-

culture, and to other local buyers such as restaurants. Processing or adding value in other ways increases the profits farmers can earn.

Farmers also make some direct (wholesale) sales to retailers, especially local stores and co-ops. This is a disappearing option relative to large retailers, however, as the large chains (such as Whole Foods Market) have shifted to regional warehouse hub systems for most of their purchasing. The larger the store, the more likely managers will find it too much trouble to deal with individual farmers at their back doors.

An increasing number of farmers globally are selling directly to processing companies. Processors need specific, uniform crop varieties in predictable amounts on a production schedule. As is the case for retail outlets above, larger companies may also find it to be too much trouble to deal with individual farmers given the scale of produce they need to buy. There are obvious advantages for processors of having crops grown under contract, and speculation in the industry is that not only is production moving towards contract relationships, but that it is also moving to Latin America.

The status of contract relationships should be tracked as a critical baseline for evaluating the changing structure of the organic industry, especially as far as farmers' returns and bargaining rights are concerned. How these contract relationships emerge will be one of the key indicators of whether or not organic businesses adopt values which are distinct from "agribusiness as usual."

A template of proposed social standards that could be applied to organic production on contract is the subject of a forthcoming collaborative RAFI-USA report: "Toward Social Justice and Economic Equity in the Food System: A Call for Social Stewardship Standards in Sustainable and Organic Agriculture." This report outlines social stewardship standards for farmers, buyers, and farmworkers and highlights, as increasing amounts of organic products come from the global South, the need for development of standards to address the unique needs of indigenous peoples.

Distribution

Sales to retail outlets, whether to natural foods markets or to supermarkets, generally require that farmers sell through a distributor. An estimated two-thirds of organic products in the US go through the warehouses of distributors, and these networks are both expanding to meet growth and consolidating to take advantage of economies of scale (Adams et al. 2002). The resulting bottlenecks in the distribution pathway may affect farmers, food processors, and retailers.

The largest distributor in the US is United Natural Foods (UNF), with sales of nearly \$1.2 billion based on 30,000 products to over 7,000 customers, and \$20 million in net income in 2003. UNF links the largest organic food manufacturers – such as its largest single supplier Hain-Celestial – with retail outlets, such as its largest single buyer Whole Foods Market. United's largest percentage of sales, however, still go to independent natural foods stores, so it has influence on all parts of the industry.

UNF has grown substantially through acquisitions – purchasing the last remaining large regional distributors, Blooming Prairie and Northeast Cooperatives, in 2002 – as well as by increasing its markets. Based on its market leadership, the company can now "exert leverage on supply and prices," and has been "proficient in taking share from its competitors" (Adams et al. 2002).

Globally, the largest organic foods distributor is Tree of Life. The company, another organic "pioneer" made good, was founded in the US in 1970 and now has grown to include 100,000 products, 20,000 customers, and \$3,515 million in sales

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United Natural Foods and Tree of Life are the only two national distributors of natural and organic foods in the United States; all other distributors are regional. These two giants handle about 80% of the market.



Conventional supermarkets now sell more than half of the organic food sold in the United States. In some countries they sell far more than that. Supermarkets are also working with growers, processors, and distributors to create their own private-label organic brands. This represents a significant change in structure for the organic food market.

worldwide. It has about \$600–650 million in sales in the US. Both Tree of Life and Distriborg, the top distributor of organic, gourmet, specialty, and ethnic foods in Europe, are owned by Koninklijke Wessanen, a Dutch conglomerate that is itself one of the largest food companies in Europe. Distriborg accounts for about \$245 million in sales annually.

United Natural Foods and Tree of Life are the only two national distributors of natural and organic foods in the United States; all other distributors are regional. These two giants handle about 80% of the market. Produce is the only sector of organic food that is still sold by a large array of regional distributors, and analysts expect United Natural Foods to soon expand into produce distribution (Adams, et al 2002).

The situation in the US contrasts with that in most European countries, where there are more buyers for farmers to sell to. In the UK, however, there are a more limited number of wholesalers and retailers as buyers (ITC 2001). It would be interesting to compare the distribution channels of the large market countries relative to their retail outlets and see what the relationships are between market growth and concentration.

Organic foods distributors serve primarily natural foods chains, independent stores, and co-ops, but they are learning to work with conventional supermarkets. At this point, organic distributors have an advantage over conventional food distributors because they understand the complex and rapidly-changing organic market and can provide expertise as well as products to conventional retailers. In the future, though, large distribution companies will likely begin to compete in distribution of organic foods (Adams et al. 2002).

Retail: Supermarkets

Conventional supermarkets now sell more than half of the organic food sold in the United States. This is also true globally, and in some countries they sell far more than that. Not only are supermarkets selling organic foods, most of them are also working with growers, processors, and distributors to create their own private-label organic brands. The increasingly important role of supermarkets represents a significant change in structure for the organic food market.

Shelf space is a major issue for companies seeking to sell their products in supermarkets. The intense competition for shelf space and high slotting fees favor larger companies (Mahoney 1998). At the same time, prime shelf space for organic within the dairy or frozen food case for example – rather than a separate section of organic products – may be essential for attracting new customers (Wright 2002).

Supermarket sales correlate directly with the organic share of the food market. In Europe, countries with a high percentage of supermarket sales also have a higher organic market share (Soel 2003). Sales are increasing in almost every country in the world. For example, in 1991 only 7% of organic sales were made by US supermarkets; a decade later, supermarkets account for almost 50% of the total. This growth has correlated with the growth of organic dairy; US supermarkets now sell 70% of organic milk, half-and-half, and cream, 55% of cheese and kefir, and 65% of organic eggs (Dimitri and Greene 2002).

Table 4, to right, shows the estimated retail share of organic sales in selected larger-market countries.

The UK makes an interesting comparison because its two leading supermarket chains, Tesco and Sainsbury, have about 30% each of the organic market and have become very powerful through the development of their own procurement and distribution networks. Their reach extends all the way down to the farm, where they are able to influence organic production regardless of where it is located.

Table 4. Estimated Retail Share of Organic Sales, Selected Countries, 2001-2002

Country	Supermarket Share	Natural Foods / Specialty Stores	Direct Sales
Denmark	85%	5%	10%
Argentina	80%	20%	n/a
United Kingdom	80%	13%	n/a
Austria	70%	20%	10%
Belgium	65%	n/a	n/a
United States	49%	48%	3%
Italy	42%	n/a	n/a
France	41%	n/a	n/a
Germany	40%	35%	20%

Sources: ITC 2001; Packaged Facts 2000b, Soel 2003

“The high degree of competition between them has resulted in increasing stringency and rigor in their expectations of the products they handle and their purchasing power has enabled them to direct their supplies towards ... almost industrial methods of producing food” (ITC 2001).

The Dutch supermarket Albert Heijn (part of the Royal Ahold chain) saw an increase of 50% in organic sales in 2001 and now has a 45% national share of organic sales. A wide variety of products sell well in the supermarket, despite the price premium, including its private label organic milk (Dairy Industries International 2001).

Though today it is a peripheral player in organic sales, US-based Wal-Mart may become a wild card in the organic market in some parts of the world. Wal-Mart is the largest retailer in the world and also the largest food retailer in the United States, with estimated food sales perhaps as large as \$70 billion per year. The company is larger than the world’s three largest supermarket chains – Carrefour, R. Ahold, and Kroger – combined (Dixon 2002). In the United States, Wal-Mart may have an impact either by expanding its relatively small line of organic products or by leaving this avenue open for other supermarkets to set themselves apart from its focus on prices.

Monitoring supermarket shares of organic sales and their reach into custom production and distribution pathways will be essential to analysis of the organic industry. These huge corporations have tremendous buying and selling power, and they dwarf the food processing companies in size.

Retail: Core Channel

In the United States, half of retail organic sales go through the “core channel,” natural foods retailers, including natural supermarket chains, independent retailers, and cooperatives, as well as direct sales (Adams et al. 2002). These are the traditional outlets for organic foods, and they continue to offer the most complete and diverse range of organic products, in contrast to supermarket growth, which is based on a narrow range of product types.

Natural foods supermarkets and supermarket chains (the “supernaturals”) are the most rapidly growing part of this category. The largest chain by sales in the US (and in the world) is Whole Foods Market, with 140 stores and \$2.7 billion in natural and organic sales (Blumenthal 2003; Hart 2003). The second largest store in terms of sales is Trader Joe’s, which is owned by German retail giant Albrecht Discounts (ALDI). The Trader Joe’s chain has 200 stores in 17 states, with annual sales of \$1.9 billion (Trader Joe’s 2003). The stores are much smaller than those of

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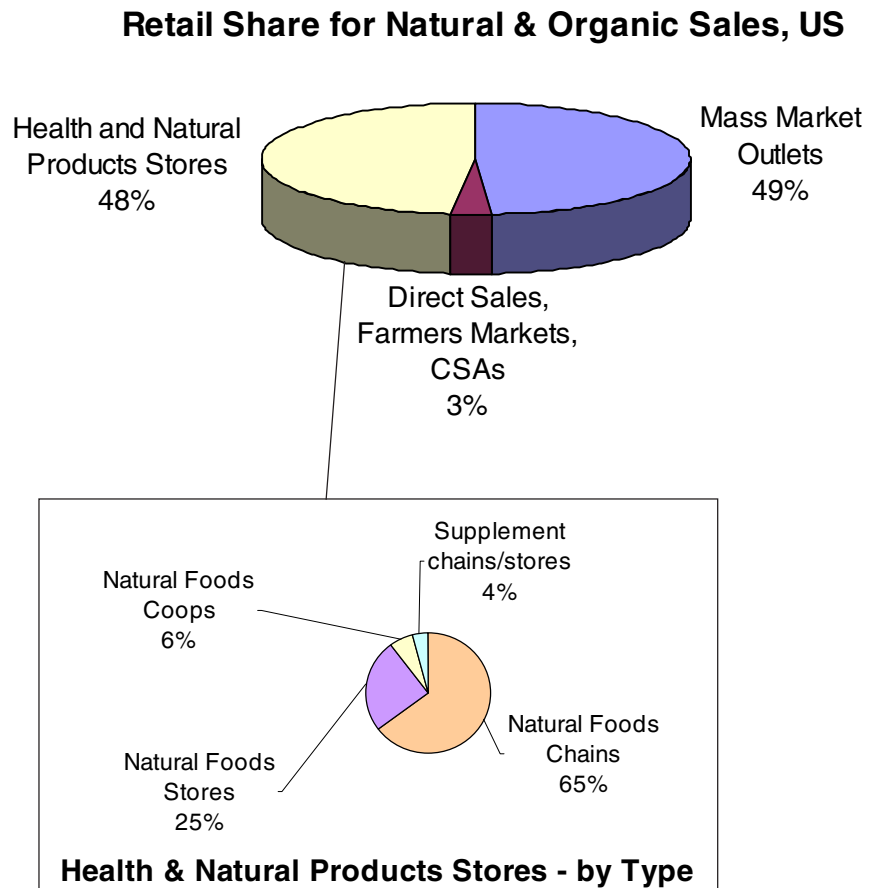
other chains, with an average size of 9,000 square feet versus Whole Foods' average 50,000 square feet. The third-largest chain is Wild Oats, with 102 stores in the US and Canada and an estimated \$946 million in sales in 2002 (Adams et al. 2002).

Whole Foods, Trader Joe's, and Wild Oats together have over 440 stores across the US and sell approximately \$5.5 billion in natural and organic foods each year. This gives the chains a dominant presence in the core retail channel. Not only that, their share is growing, relative to smaller chains and independent stores. "Over the past several years, Whole Foods and Wild Oats have acquired almost all other retail chains of meaningful size in the core channel" (Adams et al 2002).

Farmers markets, community-supported agriculture establishments (CSAs), and food co-ops remain important outlets for organic foods. There are an estimated 2,651 farmers markets, over 1,000 CSAs, and 300 food co-ops selling organic foods (Packaged Facts 2000b; Robyn Van En Center for CSA Resources 2003). Cooperative Development Services, which provides consulting on the food cooperative business, estimates total US co-op sales at \$750 million annually (2003).

Figure 2, below, describes the estimated retail shares for organic and natural foods within the US market.

Figure 2. US Retail Shares of Organic and Natural Food Sales, 2000



Sources: Adams et al. 2002, Packaged Facts 2000b, Packaged Facts 1999

V. Challenges Facing Organic Agriculture

The organic marketplace is, as the industry analysts say, “rapidly-growing, full of opportunity, and quite volatile” (Adams et al 2002). Changes must be monitored and analyzed, but at the same time, organic principles and practices must also be defended in the face of some significant attacks. Organic agriculture is challenged to protect its integrity, maintain access within its structure, enhance its economic sustainability, and broaden its support.

PROTECT INTEGRITY

Defend organic standards and certification

National governments and international trade organizations must stand behind the rigor of organic standards and their implementation in order to maintain consumer confidence. There have already been attempts to weaken the US standards, however. In early 2003, a Republican congressman from Georgia, acting for the benefit of Fieldale Farms, a poultry company in his district, slipped a provision into a spending bill to relax the standard requirement that organic feed be used to produce organic chicken; whenever the price of organic feed was twice as high as conventional feed, then conventional feed could be substituted, and the chickens would still be labeled organic (see Weintraub 2003). This would have created a dilemma of when is an organic chicken really organic? In April, after an outcry from the organic community, including Tyson Foods, the US Congress overturned the loophole and reinstated the 100% organic feed requirement (Fulmer 2003). It will require persistent effort like this to protect the standards.

Certification Control

An even larger concern is the intrusive role that USDA is taking with regard to interpretation of the standards and its step to undercut the work of independent certifying organizations. The specific case occurred in 2002 when Massachusetts Independent Certification Inc. (MICI), a nonprofit certifying organization, denied organic certification to an egg producer in Massachusetts because the chickens had no access to the out-of-doors, as is required by the organic standards. The egg producer filed an appeal to the Administrator of the USDA Agricultural Marketing Service, and the appeal was granted with the effect that the producer could be organic without following the standards.

MICI then filed a complaint, with the assistance of the Farmers Legal Action Group (FLAG), with the USDA’s Administrative Law Judge in February 2003 based on the Administrator’s failure to adequately investigate the case and determine the application of the standards. USDA moved to dismiss the complaint, stating that there is no right to appeal Administrator decisions in the new organic program. MICI responded by stating that the Organic Foods Production Act requires that USDA institute an independent Peer Review Panel to evaluate USDA’s accreditation of certifying agents and to serve as an appeal board for those agents. This is especially important given the dramatic increase of organic certifying agents from 49 to 122 since 2000, which itself raises concerns about USDA’s ability to assess their qualifications and support correct application of the standards and other regulations (Center for Food Safety 2002).

Both parties – and the entire organic community – are now waiting for a ruling from the Administrative Law Judge. Does USDA now call all of the shots as far as what is organic in the United States? Will independent certifying organizations retain their vital role in protecting the integrity of the standards? (RAFI-USA 2003).

Organic agriculture is challenged to protect its integrity, maintain access within its structure, enhance its economic sustainability, and broaden its support.



There is a clear, global consensus that organic standards exclude GM crops. The problem arises because of the inability to keep the GM crops from commingling, interbreeding, and crossing with non-GM crops.

Reject genetically-modified (GM) crops and contamination

GM crops, chiefly soy, corn, cotton, and canola, are grown on 130 million acres (52.6 million hectares) in the world. The United States accounts for 68% of this acreage, Argentina 22%, Canada 6%, and China 3% (James 2003). There is a clear, global consensus that organic standards exclude GM crops. The marketplace also rejects crops which have been accidentally contaminated by GM crops from other farms, such as has occurred with canola and corn in North America. Scientific studies (eg. Rieger et al. 2002) have documented the spread of pollen from GM canola plants to a distance of two miles, and the European Union recently put out a paper showing that GM canola is at “high risk” of cross-pollinating with other canola crops (Carroll 2002).

“Monsanto acknowledges that total separation of the crops in fields, combines, and grain bins is impossible but argues that adequate separation can be achieved” (Gillis 2003). Yet while the company receives the benefits, all of the regulatory costs for testing, segregation, buffers, drift, and contamination – as well as the losses – are borne by producers, brokers, processors and retailers, who are trying to preserve their own marketplace choices. In 2002, organic farmers in Saskatchewan filed a class action law suit against Monsanto and Aventis (now owned by Bayer) charging damages of over \$14 million from crop contamination by GM canola, which they say now prevents them from producing organic canola.

The suit also includes the request for an injunction against the release of GM “Roundup Ready Wheat” in the region, which farmers believe will destroy their ability to produce certified organic wheat for export. Marc Loiselle, an organic farmer from Vonda, Saskatchewan, has stated, “If farmers do not take a stand on limits to patenting and how biotechnology is used to alter seeds such as wheat, then we risk losing our market access, loss of income, and loss of choice” (Kossick 2002; see also www.saskorganic.com). Organic farmers in the United States are also organizing against GM wheat, the first time ever that large numbers of US farmers have taken a stand against biotechnology (Gillis 2003).

Food companies have been skeptical of Roundup Ready Wheat and have refused to support smaller biotech crops such as potatoes and beets, but it is impossible to predict what their position will be unless wheat is approved by US and Canadian regulators (Gillis 2003). European and other international buyers, however, have flatly stated that they do not want GM wheat.

GM corn contamination due to the importation of North American seed has become a serious problem in Mexico, and this goes beyond being an issue for organic producers. In a press release issued by a coalition of agriculture and indigenous peoples’ groups dated October 9, 2003, contamination was found in 138 farming and indigenous communities, including contamination with the Starlink variety, which is prohibited for human consumption the United States. (The press release was issued jointly by the Center for Studies on Rural Change in Mexico, the Center for Indigenous Missions, the Action Group on Erosion, the Technology and Concentration, the Center for Social Analysis, Information and Popular Training, the Union of Organizations of the Sierra Juarez of Oaxaca, and the Jaliscan Association of Support for Indigenous Groups) (Ag-ETC Group 2003).

Will GM crops continue to advance and so trigger a threshold of “acceptable” level of contamination into organic crops? Or, is the organic industry prepared to defend itself against such pressures?

KEEP THE PROCESS OPEN

Develop broadly-based international standards

There are many practical reasons for the harmonization of organic standards, yet there are also legitimate regional variations that should be maintained. Harmonization done by and for the large trading companies and the national governments in the EU and North America is not the answer. Such an option could merely replicate the colonial relationships of conventional agriculture through control of production and certification decisions as well as purchasing and distribution pathways. Instead, harmonization should include increased local and regional participation in the certification process. This would have the results of enhancing local markets, encouraging export production, and developing a more robust and healthy mix of producers.

Harmonizing the multi-accreditation and certification requirements remains a major challenge for organic agriculture, yet the growing costs and regulatory burden placed on small farmers must be expeditiously and equitably resolved at the same time. The fact that neither the US nor the EU has formally recognized the leading non-governmental third-party accreditation system, International Organic Accreditation Service (IOAS), reflects a major hurdle that must be overcome if “market rationalization” is to take place. The goal is that the system be driven by and transparent to as broad a base of stakeholders as possible.

ENHANCE SUSTAINABILITY

Protect fair pricing to farmers and workers and enhance social accountability

The price premium recognizes the fact that the organic production process generally costs more than the conventional production process. It also recognizes that well-proven societal, environmental, and health benefits inherent in organic production are worth paying for. It assumes that farmers and their workers are paid above the cost of production, including a fair return for their investment. Institutionalizing greater pricing transparency and fairness across industry segments, perhaps through incorporation into organic standards, could protect it from downward pressure. This is especially important as more and more organic food is being grown under contract for large corporations. The conventional agricultural contract production system has clearly reduced farmer and worker income and quality of life; preventing this should be a priority for organic industry.

Develop an expanded “systems” approach to transition initiatives

If the organic marketplace is to continue to expand, a much more systematic approach is needed to encourage retention of existing farmers while creating entry of new farmers. European governments have been the global leaders in expanding their domestic organic production, which in turn supplies rapidly growing local and regional demand and increases food security. Governments in other parts of the world should evaluate the lessons learned in Europe as far as the services and initiatives which have been effective so that their own farmers can benefit from this opportunity.

This is especially important in the developing world, where greater support for small farmers is urgently needed. Much more focus and global commitment are needed to develop organic and fair-trade models.

Harmonization done by and for the large trading companies and the national governments in the EU and North America is not the answer.



Educated consumers have enormous buying power and can change the practices of the largest food corporations, yet accuracy and completeness of labeling is essential to this effort.

BROADEN SUPPORT

Educate consumers

Consumers need to know where their food comes from and how it is grown. Educated consumers have enormous buying power and can change the practices of the largest food corporations, but accuracy and completeness of labeling is essential to this effort. Labeling and other point-of-purchase information should include where the food was grown, by whom, and for whom. Increased transparency in the organic system would further differentiate organic food from other foods as well as reduce so-called “stealth ownership” tactics.

By learning about the sources of food, consumers will also learn about the energy use – especially transportation – required for their food. One way this is expressed is through “food miles,” which is how far food travels between the farm and the dinner table, a concept which helps consumers understand the importance of local food production.

There is a link, and sometimes a conflict, between consumer preferences for organic foods and for locally- or regionally-grown foods. The commitment to local foods is strongest in Europe, but it is increasing in other regions of the world as well. Not only do such preferences have a positive effect on organic production, they also have impact on genetic diversity. Local production utilizes a wider array of crop varieties in order to fit local growing conditions and buyer choices. In contrast, large-scale, contract production – even in organic foods – is based on varieties which are optimal for transport, long-keeping, and easy to process. Such production then gravitates towards areas where the desired varieties can be grown most cheaply.

Wake up environmentalists

Environmental organizations and leaders are natural spokespersons about the environmental dangers of “industrial” agriculture, but they rarely speak in favor of specific organic practices that are both environmentally friendly and profitable for farmers. Some have dismissed organic as a mere specialty niche, not worth their support. Instead, environmental leaders must begin to recognize and articulate the unique significance of organic agriculture: protecting soil from herbicide and pesticide contamination; keeping chemicals out of surface water; maintaining productive grasslands; conserving biodiversity in agricultural systems and the surrounding environment; and saving energy.

Link the organic label with other labels

It is time to strengthen the natural links between the organic food label and other production process identifiers, such as fair trade, energy use, and local food claims. As SOEL reports, “Fair trade relationships are a basis and an important link between worldwide food security and the future development of organic agriculture and food culture” (SOL 2002). Does the organic label reflect only agricultural and health claims? Or will it embrace additional elements of environmentally sound, socially just production and the needs for increased local food security?

The organic label represents the first marketplace success of sustainable agriculture and has set the bar for all legitimate eco-labels to come. Organic and other legitimate eco-labels need to work together to expand the green marketplace rather than fight each other over smaller niches. Thus they can strengthen their collective efforts against potential “green-washing” that undermines organic integrity.



INTO THE FUTURE

How these challenges are met – and how the baseline indicators evolve – will determine the future of organic agriculture. Will the organic marketplace remain on the cutting edge and meet its potential? Or will it relinquish this role to the global food system and become little more than a marketing niche or even the shadow of what it set out to replace? This is the right time to ask “Who owns organic?” We all do. Let us hold on to its potential to address the problems of world poverty and hunger and enhance environmental and social sustainability.



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