MICHIGAN STATE UNIVERSITY

PRODUCT CENTER

BUSINESS INNOVATION IN AGRICULTURE, FOOD AND NATURAL RESOURCES

THE STRATEGIC MARKETING INSTITUTE WORKING PAPER

The Organic Food Market

William A. Knudson

01-0407, April 07

80 AGRICULTURE HALL, MICHIGAN STATE UNIVERSITY, EAST LANSING, MI 48824

MICHIGAN AGRICULTURAL EXPERIMENT STATION

The Organic Food Market

Introduction

The market for organic foods continues to grow. There is a great deal of consumer interest in organic foods. This interest is being driven by a number of factors. The establishment of a USDA organic food standard has enhanced consumer acceptance of organic foods. The interest in healthy foods has also increased the demand for organic foods. To meet this increased demand many large food growers, processors, manufacturers and retailers have increased their offerings of organic food.

The organic food industry is evolving into two markets. The first and largest market is the health market. Consumers who by organic food primarily because it is perceived to be healthier than conventionally produced food are also somewhat price conscious. These consumers tend to shop a supermarkets and mass merchandisers such as Costco and Wal-Mart. Organic foods that enter this market channel have essentially become commodities, low cost production practices and economies of scale are important in this market. As a result it is increasingly difficult for a single firm or entrepreneur to enter this market.

The second market is what has traditionally been the organic market. Consumers in this market are interested in the social aspects of organic production. A clean environment, supporting small scale agriculture, locally produced food, etc. are important market drivers. This market which is much smaller than the health-organic market is still open for small scale firms and individual entrepreneurs. However, organic in and of itself will not necessarily satisfy these consumers, additional product attributes beyond organic need to be present.

This paper analyzes several aspects of the organic market. Overall trends will be discussed, as well as the markets for organic fruits and vegetables, organic prepared foods, organic snacks, organic dairy products, organic meats, organic grain products and other organic foods. Some of the barriers to expanding the organic market will also be discussed. There are some barriers especially for dairy and meat products that are retarding the growth of the organic markets. This is despite the fact that organic dairy and meat products have a great deal of potential for growth.

Funding for this paper was provided by the Michigan Agricultural Experiment Station.

Overall Trends

The market for organic foods is growing dramatically. It is estimated that organic sales of food products through supermarkets, mass merchandisers and natural supermarkets was $3.6 billion in 2006 in the U.S., double the figure in 2000. The Organic Trade Association estimates that the total organic food and beverage sales were $13.8 billion in 2006 (Mintel Organic Foods, p.1). From 2004 through 2006, sales of organic food through supermarkets, drug stores and mass merchandisers (such as Wal-Mart) increased by 38.4 percent (Mintel Organic Foods, p.31). Furthermore, it is estimated that sales of organic foods will increase by 71 percent from 2006 through 2011. Clearly, organic food has become mainstream. For example, out of 125 research and development professionals in the food and beverage industries 61.4 percent desired increased natural or organic ingredient innovations (Mintel, FPSA, p.33).

The primary demand driver for the increased consumption of organic food is health concerns. Consumers are increasingly interested in foods that are free of pesticides, and other health risks (Mintel Organic Foods, p.1). A second demand driver is the USDA Organic Food standards which appears to have increased consumer awareness of organic foods and provides assurance to consumers that the products are what they claim to be.

To meet the organic standard foods must be produced without chemical pesticides, synthetic fertilizers, or sewage sludge. Additionally, genetically engineered crops and milk and meat products that were produced from animals treated with growth hormones are not considered organic. Food that has been irradiated is also not considered to be organic (Mintel Organic Foods, p.1). Farms and processors are inspected to insure that they meet the organic standard (Mintel Organic Foods, p.1). Foods that meet the organic standard are allowed to use the USDA organic seal.

The increased demand for organic foods and a single standard have allowed large scale farm and processors to enter the organic market (Mintel Organic Foods, p.2). As a result, the cost of producing organic foods has declined, and with it so have prices. For many organic products the price premium has declined. In many markets organic foods have become commodities, only the low cost producers and processors will be able to stay in business. In the future, much of organic production will look like traditional agriculture.

Accelerating this trend are the mergers and acquisitions that have become standard in the organic food industry. Silk, a major soy milk producer has been purchased by Dean Foods, and Cascadian Farms has been purchased by General Mills. Also, many supermarket chains such as Kroger and Safeway, are offering private label organic products (Mintel, Organic Foods, p.9). Food manufacturers are also increasingly using organic foods as product extensions of their own lines of branded food products (Mintel, Organic Foods, p.32). It expected that these trends will continue in the future (Mintel, FPSA, p.114).

In some respects retailing has also become more concentrated, especially the natural foods sector. While major supermarket chains and Wal-Mart are increasing their offerings of organic food, Whole Foods the largest natural food chain recently announced that it will buy 110 stores from Wild Oats another natural food chain (Burros, p.1). The purchase will increase the number of Whole Foods stores to more than 300 nationwide.

Compounding this trend is the fact that in 2006, Wal-Mart announced that it will significantly increase its offering of organic foods (Mintel, Organic Foods, p.2). As part of this strategy Wal-Mart will attempt to price its organic products no more than 10 percent more than it's conventionally produced products (Mintel Organic Foods, p.27).

Traditional supermarkets and mass merchandisers now account for 58 percent of organic sales (Mintel, Organic Foods, p.9). These trends will speed up the supply chain adjustments in the organic foods industry, further reinforcing the convergence of the organic and conventionally produced food markets.

This trend has carried over to the restaurant industry. The number of organic claims in restaurant menus is increasing and apparently shows no signs of slowing down (Mintel, Organic Foods, p.18).

Farmers have also increased the amount of organic food available; from 2000 to 2003, the amount of organic poultry increased by 177 percent and the amount of organic cropland increased by more than 33 percent (Mintel, Organic Foods, p.7). The number of certified organic farms (not including subcontracted farm operations) increased from 6,592 to 8,035 from 2000 to 2003; this represents an increase of 21.9 percent (Mintel Organic Foods, p.16).

Despite the increased domestic production of organic foods, the U.S. is a large importer of organic foods. In 2002, the U.S. imported between $1.0 and $1.5 billion of organic food and only exported between $125 and $250 million (Mintel, Organic Foods, p.9). Stonyfield Farms CEO Gary Hirshberg believes that global sourcing is necessary to obtain sufficient amounts of raw product (Brady, p.51). The level of imports also indicates that the potential exists to expand acreage devoted to organics in the U.S.

The fact that organic production and processing is beginning to mirror conventional food production, may upset some consumers of organic products. Some organic consumers are still interested in the social aspects of organic food production. The interest in buying organic food from small producers or buying food that is produced locally appears to be growing (Burros, p.1). Organic food sold at farm markets is another outlet for this market. While this is a smaller market, it still presents opportunities for an individual firm or farmer. While not increasing as fast as supermarket and mass merchandisers, sales at natural food stores are also increasing (Mintel Organic Foods, p.9).

The Consumer

Fully 25 percent of the consumers surveyed by Mintel have purchased organic foods (Mintel Organic Foods, p.10). Most consumers are aware and concerned about food from genetically modified organisms (GMOs); women consumers are particularly concerned about GMOs (Mintel Organic Foods, p.10). Most consumers also believe that organic foods are healthier and better for the environment than conventionally produced food products (Mintel Organic Foods, p.10).

Consumers are concerned about the safety of the food they eat. According to the Mintel survey only 22 percent of consumers have a low level of concern about the food they eat and most have a medium level of concern. Fully 30 percent of consumers have a high level of concern (Mintel, Organic Foods, p.68). Food products that address this concern have a definite potential to be successful. Furthermore, 55 percent of all respondents and

61 percent of women are concerned about genetically modified food. Also, blacks, Hispanics and Asians are more concerned about genetically modified foods than whites (Mintel, Organic Food, p.69).

Another way to increase the market for organic foods is to make it more a more common experience. Most of those consumers surveyed who buy organic food only do so occasionally (Mintel, Organic Foods, p.66). Also, 47 percent of those surveyed wish there were more organic foods available where they shopped (Mintel, Organic Foods, p.72). Most consumers of organic foods have not made it the determining factor in their food purchases. Other factors besides whether or not a food item is organic play a role in food purchases.

A drawback to the increased purchase of organic foods remains the price. Approximately 62 percent of the consumers surveyed by Mintel would by more organic food if it were less expensive, and almost half desired a greater selection of organic foods (Mintel Organic Foods, p.10). Consumers also buy organic foods at more than one outlet, of those consumers who buy organic food 65 percent buy at supermarkets, 45 percent at health food stores and 24 percent at Wal-Mart (Mintel Organic Foods, p.10).

One interesting aspect of consumer behavior is the fact that most consumers of organic food buy what is available. Of those consumers surveyed 64 percent normally bought whatever was available, 26 percent normally purchased a name brand and 9 percent normally purchased a store brand (Mintel, Organic Foods, p.81). This may be evidence of the immaturity of the organic market, as more and more organic foods become available and more and more store brands and food manufacturer brands enter the market, consumers may become more sophisticated. It may also indicate the depth of desire for organic foods; a dedicated group of consumers interested in organics will take whatever is available.

If organics are not available consumers look for other product attributes as well as organic. Sixty percent of those surveyed are also interested in products with no artificial ingredients, 55 percent are interested in no preservatives, and 11 percent are interested in buying products from firms that give a percentage of their profits to charity (Mintel, Organic Foods, p.84). In the livestock industries, how animals are treated is an important consideration for some consumers. There are other ways to appeal to health and socially conscious consumers besides going organic. This could be especially important for dairy and livestock producers and processors who are having difficulty obtaining organic feed.

Women are somewhat more likely to purchase organic foods as are people aged between 18 and 24. The level of income and region of the country where the consumer lives appears to have less impact in determining organic purchases. It appears that Hispanics and Asians are more likely to buy organic compared to whites and blacks (Mintel, Organic Foods, p.67). These results are interesting insofar as people with incomes less than $25,000 a year and blacks have the highest level of concern about the safety of food (Mintel, Organic Foods, p.68). Organic products aimed at low income consumers and blacks might find a ready market, however, profit margins are likely to be small.

Consumers buy their organic foods from a wide variety of locations. The most common location of organic food purchases is supermarkets. Of those consumers who bought organic foods 68 percent purchased them from supermarkets; followed by natural or health food stores at 45 percent, Wal-Mart at 24 percent, farmers markets at 17 percent and club stores at 11 percent (Mintel, Organic Foods, p.75). Clearly consumers of organic foods buy them from more than one outlet. The relatively high response rate for farmers markets shows a potential to sell organic foods for individual farmers who are interested in direct sales to consumers.

Fruits and Vegetables

Organic fruits and vegetables remain the largest sector of the organic market. They are also the most popular commodities purchased by consumers; 70 percent of those surveyed who purchased organic food purchased fresh vegetables and 67 percent purchased fresh fruit (Mintel, Organic Foods, p.78). Sales of organic fruits and vegetables increased from $688 million in 2004 to $921 million in 2006. This represents an increase of 33.9 percent. Despite this growth, the market share of organic fruits and vegetables of total organic sales declined from 25.7 percent in 2004, to 24.9 percent in 2006 (Mintel Organic Foods, p.30). This decline is due to the growth in other organic foods and does not represent a decline in the interest in organic fruits and vegetables.

Traditional food outlets such as supermarkets are the dominant outlet for organic fruits and vegetables. In 2006, traditional food outlets accounted for $665 million or 72.2 percent of all sales. Natural food stores accounted for $256 million or 27.8 percent of sales of organic fruits and vegetables (Mintel, Organic Foods, p.42). However, sales from both sources are increasing at approximately the same rate. While organic fruits and vegetables is the most established market segment, there still appears to be room for growth. One difference between supermarkets and natural food stores is the fact that branded products are much less common at natural food stores (Mintel, Organic Foods, p.43).

The demand for organic fruits and vegetables is expected to remain strong. It is estimated that by 2011 sales of organic fruits and vegetables will reach $1.69 billion, an increase of 83 percent from 2006 (Mintel, Organic Foods, p.89).

Contracting with organic producers is one way to meet the needs of this market. For example, Driscoll Strawberry Associates contracts with producers around the world to grow patented and non patented berry varieties. Product offerings include strawberries, blackberries, raspberries, and blueberries. A worldwide producer network allows the firm to provide fresh produce throughout the year (Mintel, Organic Foods, p.55).

While fresh fruits and vegetables remain an important part of this market segment, organic processed fruits and vegetables are also growing in importance. Among professionals in the processed fruit and vegetable market, 41 percent believe that organic ingredients are important in new product development (Mintel, FPSA, p.5).

Prepared and Packaged Foods

Organic prepared and packaged food sales increased from $469 million in 2004 to $653 million in 2006. This represents an increase of 39.2 percent. The market share of prepared and packaged foods as a percentage of total organic sales stayed constant, rising from 17.5 percent in 2004 to 17.7 percent in 2006 (Mintel Organic Foods, p.30).

Consumers buy a wide range of prepared and packaged organic foods. Of those consumers surveyed who buy organic foods, 22 percent buy organic spaghetti sauce, 22 percent buy organic salad dressing, 18 percent buy organic frozen entrees and 15 percent buy organic prepared desserts (Mintel, Organic Foods, p.78). There are a wide range of prepared and packaged food products that might appeal to consumers. Clearly, there is a market for organic products that also appeal to convenience.

Compared to fruits and vegetables, natural food stores are a much larger source of prepared and packaged foods compared to traditional food outlets. In 2006, natural foods stores accounted for $264 million or 40.4 percent of all sales of organic packaged and prepared foods while traditional food outlets accounted for $389 million or 59.6 percent of sales (Mintel, Organic Foods, p.44). Supermarkets and mass merchandisers are increasing their market share at the expense of natural food markets although sales are increasing at all outlets.

The market for organic and prepared food is expected to continue to expand although at a slower rate in the future. In 2011, it is estimated that sales of prepared and packaged organic food will be $1.11 billion, an increase of 70 percent from 2006 (Mintel, Organic Foods, p.90).

Snacks

Sales of organic snacks increased from $418 million in 2004 to $556 million in 2006. This represents an increase of 33.0 percent. The market share of organic snacks as a percentage of total organic food sales declined from 15.6 to 15.0 percent from 2004 to 2006 (Mintel Organic Foods, p.30).

Sales of organic snacks are expected to increase in the future. In 2011, it is estimated that the sales of organic snacks will be $847 million, an increase of 52 percent from 2006 (Mintel, Organic Foods, p.91). The snack food market is not expected to grow as fast as other organic market segments.

In 2006, traditional food outlets such as supermarkets accounted for $270 million or 53.4 percent of total organic snack sales, while natural food stores accounted for $235 million or 46.4 percent of total sales (Mintel, Organic Foods, p.46). Organic snack foods are one market segment where natural stores are holding their own compared to traditional food outlets.

Kellogg's has become involved in the organic snack market by producing organic versions of its Keebler crackers (Brady, p.52).

Organic snack foods are expected to increase by professionals in the industry. Almost 77 percent of confectionary professionals see organic food as a major trend in the confectionary market (Mintel, FPSA, p.55). In order to take advantage of this trend more organic sugar and sugar based ingredients need to be made available.

Grain Products

Sales of organic grain products increased from $422 million in 2004 to $551 million in 2006. This represents an increase of 30.6 percent. Organic grain product sales as a percentage of total organic sales declined from 15.8 percent to 14.9 percent (Mintel Organic Foods, p.30). As is the case with fruits and vegetables, this is a result of the fast rate of increase in other food categories as opposed to a lack of interest in organic grain products.

Sales of organic grain products are expected to increase in the future. In 2011, it is estimated that sales of organic grain products will be $859 million, an increase of 56 percent (Mintel, Organic Foods, p.92). As is the case with most other organic market segments, the rate of growth is declining but still rather robust. Access to organic grains, may be holding this market back.

Sales from traditional food outlets accounted for $261 million in 2006, which represented 47.4 percent of the total. Sales from natural foods stores were $290 million or 52.6 percent of the total (Mintel, Organic Foods, p.48).

Kellogg now sells an organic version of Rice Krispies, and has purchased Kashi which has a line of organic cereals. General Mills Cascadian Farm division also produces organic cereals (Brady, p.52).

Organic foods have also generated the interest of the industry, 28 percent of bakery product development specialists identified organic ingredients as critical to their work (Mintel, FPSA, p.3), and 33.3 percent desired organic ingredient innovation in this sector (Mintel, FPSA, p.44). It is likely that the number of organic grain products will increase in the future.

Dairy

From 2000 through 2003, the number of organic dairy cows increased by 94.9 percent and stood at 74,435 (Mintel Organic Foods, p.16). Sales of organic dairy products increased from $268 million in 2004 to $356 million in 2006, an increase of 30.6 percent. Organic dairy sales as a percentage of total organic sales declined slightly from 10.0 percent to 9.6 percent (Mintel Organic Foods, p.30). This is likely due to the difficulty of converting from traditional dairy production to organic dairy production. The demand for organic dairy products remains strong.

After fruits and vegetables dairy products are the most popular organic foods consumed. Of those consumers surveyed who bought organic foods, 45 percent purchased organic milk or yogurt (Mintel, Organic Foods, p.78).

Sales of organic dairy products from traditional outlets were $192 million or 53.2 percent of the total in 2006. Sales from natural food stores were $169 million or 46.8 percent of the total. From 2004 to 2006, the share of organic dairy products sold at natural food stores has declined while the share sold at traditional food outlets has increased (Mintel, Organic Foods, p.50). However, sales from both outlets have been increasing over time. There is still upward potential for this market.

Sales of organic dairy products are expected to be $611 million in 2011, an increase of 72 percent from 2006 (Mintel, Organic Foods, p.93). Lack of access to organic feed may hold the growth of this market segment back. It appears that there remains a great deal of consumer interest in organic dairy products.

Perhaps more than other organic segment, the dairy sector has been the most affected by large scale investment by food manufacturers and processors. Dean Foods owns Horizon Organic, Rachel's Organic and Organic Cow of Vermont. Unilever's Ben and Jerry's label also offers some organic ice cream products (Brady, p.52).

Dairy research and development professionals remain interested in organic dairy products. Thirty percent are interested in organic milk and 30 percent are interested in organic ingredients (Mintel, FPSA, p.4); 67.6 percent see organic food as a trend in the dairy industry (Mintel, FPSA, p.68). It is likely that organic dairy products will extend beyond milk and yogurt and include cheese and other products.

The price of organic milk is much higher than milk produced conventionally. Often the wholesale price of organic milk is double the price of conventionally produced milk (Brady, p.54). Farmers interested in this market still have opportunities.

Meat

Organic meat products are the fastest growing sector of the organic industry. The demand for organic meat products is so strong that the U.S. has become a major importer of organic meats (Mintel Organic Foods, p.1). From 2004 to 2006, sales of organic meat increased by 140 percent (Mintel Organic Foods, p.8). The number of organic animals is also increasing dramatically. From 2000 to 2003 the number of organic hogs rose from 1,724 to 6,564 an increase of 280.7 percent, the number of beef cows increased from 13,829 to 27,285, an increase of 97.3 percent, and the number of broilers increased from 1.92 million to 6.30 million an increase of 227.4 percent (Mintel Organic Foods, p.16).

From 2004 to 2006, sales of organic meat products increased from $121 million to $291 million, an increase of 140.5 percent. Organic meats sales as a percentage of total organic food sales increased from 4.5 to 7.9 percent (Mintel Organic Foods, p.30).

Of those consumers surveyed who purchased organic food, 31 percent purchased organic poultry and 25 percent purchased organic red meat (Mintel, Organic Foods, p.78). Coupling organic meat with free range, or other animal welfare attributes presents opportunities.

Growth of this market segment is expected to remain strong. In 2011, sales of organic meat products are expected to be $590 million, an increase of 103 percent from 2006. As is the case with dairy products, finding organic feed may be a barrier to expansion of the organic meat sector.

Of all the organic market segments, organic meat is the most dependent on imports; Canada, Australia, and Latin America are all exporters of organic meat products to the U.S. (Mintel, Organic Foods, p.38). U.S. producers face high organic feed costs, as well as the lack of certified processing plants and other infrastructure to take advantage of this opportunity (Mintel, Organic Foods, p.38). If these barriers can be overcome, there is a great deal of potential to expand domestic production of organic meat products.

Organic meat products will remain an important trend in the meat industry. Organic meat products were identified as a trend by 67.1 percent of the professionals in the meat industry (Mintel, FPSA, p.92). This was identified as a trend more than any other.

Other Organic Foods

Sales of other organic foods increased from $287 million in 2004 to $371 million in 2006. This represents an increase of 29.3 percent. Sales of other organic foods as a percentage of total organic sales declined from 10.7 percent to 10.0 percent during this time period (Mintel Organic Foods, p.30). Other organic foods include items such as condiments, tofu, sweeteners and seasonings (Mintel, Organic Foods, p.39).

In 2006, sales of other organic food products from traditional sources were $178 million or 48.0 percent of the total. Sales of other organic food products from natural food stores were $193 million or 52.0 percent of the market (Mintel, Organic Foods, p.50). In this segment, natural food stores are holding their own with supermarkets and mass merchandisers.

Sales of other organic foods are expected to be $607 million by 2011, an increase of 64 percent from 2006 (Mintel, Organic Foods, p.95). As is the case with other organic segments the rate of growth is expected to slow down in the future.

Barriers to Market Growth

The single biggest barrier to market growth of organic foods is the lack of certified organic crops and livestock products (Mintel, FPSA, p.6). There are shortages of organic dairy farms, organic feed producers, sugar producers and fruit and vegetable producers (Brady, p.51). Converting from conventional to organic production is expensive and time consuming. Also, the rapid growth of the ethanol industry which does not require organic production practices may also slow the growth of organic production. Shortages of organic milk, produce and meat are all restricting the growth of these market segments (Mintel, FPSA, p.14).

One issue with organic farming is the need to keep good records. Additional paperwork is required in order to establish and show that a farm meets the organic standard (Brady, p.54).

A problem from the processors and manufacturers perspective is the variability in quality of organic food (Brady, p.54). Consumers still prefer products of a consistent quality, and maintaining consistent quality is more difficult in producing organic foods than it is in producing food from conventional methods. The use of chemical fertilizers and pesticides not only increases yields but also improves consistency. Those organic producers and processors that can adequately address the issue of consistency will possess a competitive advantage.

Conclusion

The organic food market is in the process of being split into two groups. The first and largest is the market for organic foods that are considered by consumers to be healthy. The needs of this group of consumers are increasingly being met by large scale producers, processors and retailers of organic food. These consumers also tend to be somewhat price sensitive. In order to supply this market being a low cost producer is very important. This market is in the process of becoming a commodity market. Many large food processors and retailers are increasingly becoming involved in this market segment.

The second market is the market for organics as a social choice. In additional to being perceived as a healthier option, these consumers buy organic because they believe buying organics is good for the environment, support sustainable farming systems, support humane treatment of livestock, and support alternative retailers. For many of these consumers locally grown food is an important product attribute. While this market is smaller than the first market, it has the potential for high profit margins and it creates opportunities for smaller producers and processors who may have higher production costs. Direct marketing through farmers markets or by other means also has potential for local producers. This market segment still presents opportunities for smaller producers and processors interested in providing products with attributes above and beyond organic.

The market for organics continues to grow in all food categories. Perhaps because it is the most established the market is fruits and vegetables, it may be somewhat more difficult to get established in this market. Perhaps the markets that show the most potential are dairy and meat, the primary difficulty in becoming established in this market is the lack of organic feed. The demand for all organic food products remains strong, this includes the market for processed foods and prepared organic meals. The potential for profits in the organic food sector exists for all industries along the supply chain. This is especially true for products in the social choice market segment.

References

Brady, D. *The Organic Myth*, Business Week, October 16, 2006 (50-56).

Burros, M. *Is Whole Foods Straying From Its Roots?*, The New York Times, February 28, 2007. http://www.nytimes.com/2007/02/28/dining/28whole.html?ei=507

Mintel (Mintel, FPSA). *FPSA State of the Industry and Forward Look.* Chicago: Mintel, 2006.

Mintel (Mintel, Organic Foods). *Organic Foods – US.* Chicago: Mintel, 2006.