

The Economic Impact of the Organic Sector in Wisconsin and Beyond

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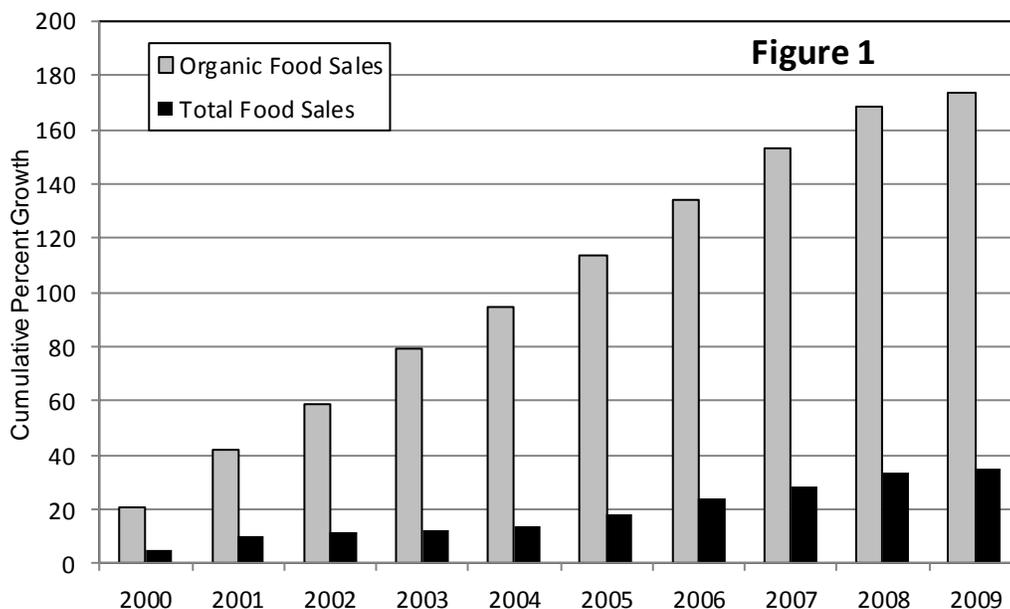
Growth of organic production

Globally, 87 million acres were farmed organically in 2008, representing almost 1.4 million producers in 154 countries. This acreage represents a nine percent growth in organic production over 2007 (Willer and Kilcher 2010). In the United States, the USDA National Organic Program (NOP) governs organic farming and processing. U.S. certified organic acreage reached more than 4.1 million acres and 14,540 producers in 2008 (USDA 2009). Organic production in the U.S. is a small, but rapidly growing percentage of global organic production, having grown by 21% between 2002 and 2007 (USDA Census of Agriculture 2002, 2007).

Wisconsin has seen even more dramatic growth during the years since the National Organic Standard was enacted in 2002. The number of certified organic farms in Wisconsin has grown from 422 in 2002 to 1202 in 2007, an increase of 285%. Wisconsin is second in the nation after California in numbers of organic farms and in the top five states in certified organic acreage (currently at 195,603 acres in WI). The state is in the top five in production of all major organic crops and livestock types.

Consumer demand drives growth

Consumer sales of organic products have exhibited strong growth for nearly two decades. Since 2000, U.S. sales of organic food and beverages grew exponentially from \$6.1 billion to \$29 billion in 2010. Organic food sales as a proportion of total food sales has more than tripled during this time period, although it remains only 3.7 percent of overall food sales in the U.S. Food sales in the US comprise more than half of global organic sales, which reached \$50.9 billion in 2008, double the \$25 billion recorded in 2003 (Willer and Kilcher 2010). In spite of the global economic downturn of the last several years, growth has continued in this sector, with a 7.7% growth rate recorded for 2010. Organic fruits and vegetables lead at 38% of total organic sales in the U.S. (\$9.5 billion), comprising 11.4 percent of all U.S. fruit and vegetable sales (OTA 2011). This healthy growth contrasts with that recorded for the total food industry, which averaged 3.5% growth over the same period. Figure 1 shows the cumulative percent growth in sales between 2000 and 2009 for the organic food sector and total food sales in the US (OTA 2010).



More than half of sales of organic food occur through mainstream grocers (54%), with natural retailers, food coops, and health food stores comprising 38% of food sales on a national level (OTA, 2011).

In a 2010 national survey of its members, the

Organic Trade Association found that 40 percent of surveyed organic companies reported positive full-time employment growth. Companies with fewer than five employees were least likely to add full-time employees (23 percent). About half of companies with more than 50 employees experienced positive full-time employment growth. What's more, in 2011, 46 percent of respondents anticipate an increase in employment over 2010 levels. In addition, 50 percent expect employment to remain even, and only five percent foresee a decrease.

Farmer income from organic production in Wisconsin

On-farm income from sales of organic crops and livestock products in WI totaled \$132,764,000 in 2008 (USDA 2008). Dairy comprised the largest share of those sales (64%) at more than \$85 million. Organic egg sales, other cattle sales, dairy cow sales, and broiler sales were the next highest totals (Table 1).

Organic crop production comprised the remaining \$28 million in farmgate income. Organic field crop production yielded Wisconsin farmers \$18,574,496 in 2008, with \$7.3 million in corn grain sales, forage crops bringing in \$5.6 million, soybeans at \$2.9 million, and small grains at \$2.6 million.

Organic vegetable crop production generated \$6.5 million for 254 farmers in 2008, with potatoes leading at \$660,000 (149 acres) and tomatoes second highest at \$406,000 (48 acres). Organic fruit production (tree fruits and berries) totaled \$2,973,732, with organic cranberries accounting for \$2,365,988 of that amount (80%).

In 2008, approximately 12% of all sales of organic products were through direct to consumer or retail markets (USDA 2008). The largest shares of sales were to processors or mills (33.5%) or grower cooperatives (34%).

Organic food processing companies in Wisconsin

Nationally, the largest proportion of organic food sales occur in the Fruit and Vegetable category (38%), with dairy (15%), prepared foods (14%), beverages (13%), and grain products (11%) as other major categories. Meat products remain the smallest category with only 2% of total organic sales (OTA 2011). Non-food products comprise about 6% of the total organic market.

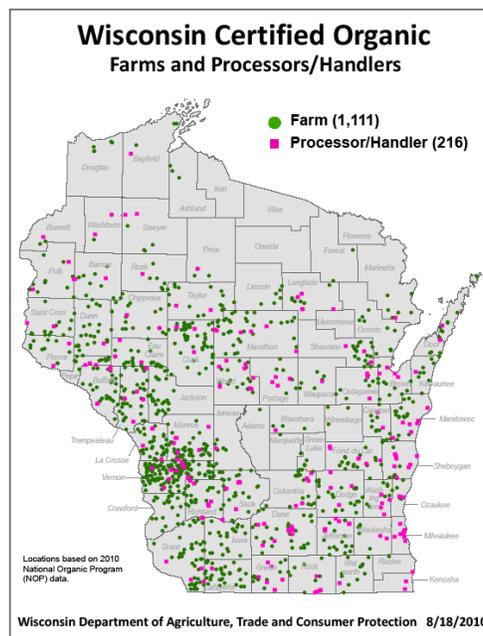
In Wisconsin, the number of companies that handle or process organic products has increased by 65% since 2005. Growth has been the strongest in areas in which Wisconsin has significant infrastructure and expertise, such as dairy and meat processing. Among the 218 companies certified to handle organic products in the state, 72 process dairy products (33%), 36 produce value-added, prepared, or

Table 1. Organic livestock farms and sales.

Item	Number of Farms	Value of Sales
Milk sales	479	\$85,143,556
Egg sales	111	\$7,503,408
'Other' cattle sales ¹	518	\$4,974,345
Milk cows	479	\$3,182,616
Broiler sales	37	\$2,542,196
Beef cattle	109	\$475,618
Hogs	32	\$419,528
Laying hens	111	\$152,777
Turkeys	16	\$144,288
Goats	18	\$18,828
Sheep	24	\$13,439
Total		\$104,570,599

¹ Beef & dairy breeding stock, calves, cull cows, etc.

Figure 2

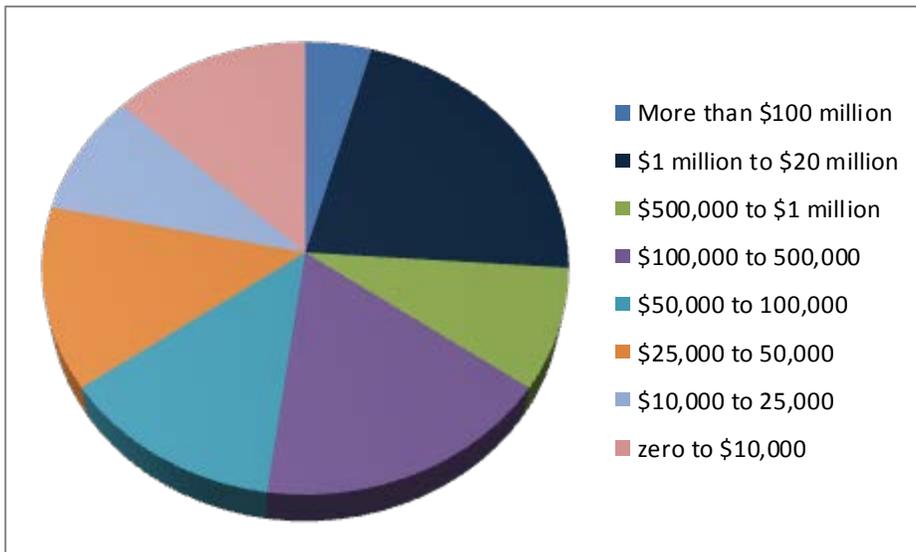


processed foods (17%), 22 handle fruits and vegetables (10%), 17 process meats and eggs (13%), 16 sell beverages (7%), and 14 produce grain products including flour, rice, and bread products (6%). Another 23 companies provide certified feed mills and seed and input handling services. This growth is a direct response to the large number and geographic dispersion of organic farms around the state (Figure 2).

We conducted an informal survey of 30 companies processing organic products for this report. Among the 30 companies were 13 dairy processors, four companies producing ingredients such as spices and seasonings, three beverage producers, three produce companies including one producing canned salsas and pickles, two meat and poultry companies, and one each in distribution, grain products, and feeds (hay and forage production).

Among the companies, 17 produce products under their own label, with the remaining 13 doing only contract processing for other companies. Of the companies producing their own brand, eight also do contract processing for other companies.

Figure 3. Income from organic sales among surveyed companies.



Gross annual income from organic sales ranged from over \$100 million to under \$10,000 among the 24 companies providing income estimates. A breakdown of company income from organic sales is provided in Figure 3.

Fourteen of the 30 companies started selling organic products prior to the 2002 initiation of the USDA National Organic Program. Of those companies better established in the organic

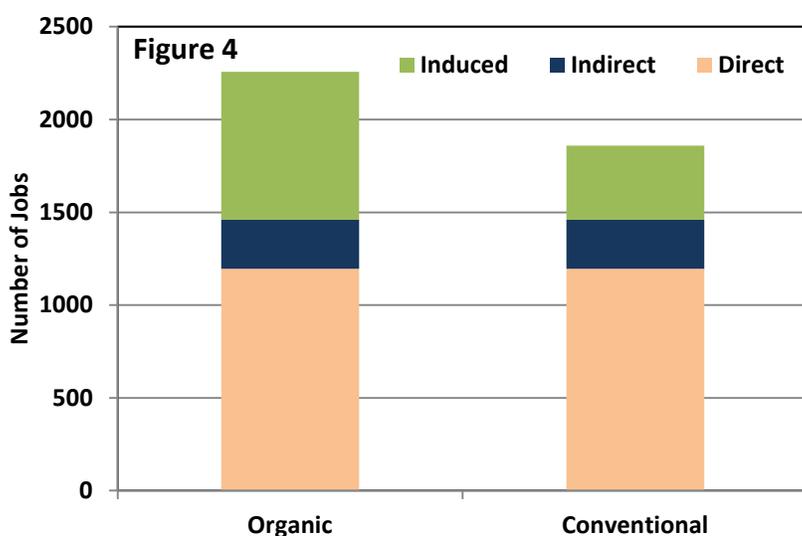
sector, 11 reported sales growth in the last three years with six companies averaging 1 to 5% growth, one reporting 5 to 10% growth, three reporting 10 to 25% growth and one reporting growth of 50 to 75%. In contrast, among the 12 companies that reported launching organic sales since 2002, five reported growth, three reported no change and three reported decreases in organic sales. Among the companies launching since 2008, only one reported growth at the 1 to 5% level. This reflects the challenges with entering a new area of sales at a time of economic uncertainty. Nineteen of the thirty companies expect growth in the coming years, regardless of their current situation.

Overall impacts of organic agriculture as a part of Wisconsin's agricultural economy

In a 2004 publication, updated in 2009, Dr. Steve Deller calculated the overall impacts on the state's economy from agricultural production. His research shows that for every dollar generated from the sale of raw agricultural products, \$1.38 in economic activity is generated through purchasing of inputs, job creation, and the resulting spending in local communities (processing excluded). He found that, for every direct on-farm job, the agriculture sector employs 1.35 positions in production related activities such as input provision and sales of goods (Deller 2009). A similar study comparing organic and conventional crop production was conducted at Iowa State University in 2007 (Swenson et al 2007).

This study reported similar values for Iowa conventional farms to Deller’s work in Wisconsin. However, it found that organic production resulted in greater economic impacts on a per acre or per dollar of direct income basis compared to conventional production. Indirect impacts (defined as economic activity related to production and purchasing of inputs) were similar, but direct impacts (sales of agricultural products) and induced impacts (spending in the local community resulting from farm related employment) were both significantly higher for organic farms (Swenson et al 2007).

System	Multiplier	Direct	Indirect	Induced	Total
Conventional	1.4	\$100,000	\$19,051	\$20,899	\$139,950
Jobs created	1.55	0.9	0.2	0.3	1.4
Organic	1.58	\$100,000	\$13,811	\$44,023	\$157,834
Jobs created	1.83	0.9	0.2	0.6	1.7

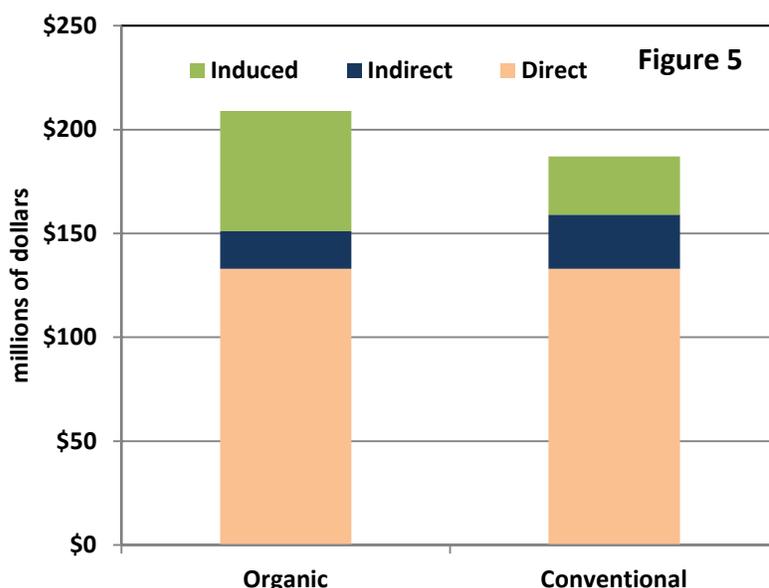


In Figures 4 and 5, we extrapolate the multipliers generated in the Iowa State study to compare Wisconsin’s \$136 million in farmgate sales of organic products with an equivalent amount of sales of conventional agricultural products. As Figure 4 shows, organic production tends to involve more labor, and thus more job creation (represented in green—“induced”) than conventional production on a per dollar of sales basis. In Figure 4, for an equivalent amount of direct sales, organic production results in a smaller amount of economic activity related to purchased inputs (red bar—“indirect”), but a larger amount of economic activity related to labor and local

spending (green bar—“induced”). Overall, more jobs and a larger amount of economic activity result from organic farming practices on a per-acre or per dollar of product sales basis than from conventional farming.

Summary and Conclusions

Organic farming and associated processing and economic activity account for a small, but rapidly growing portion of Wisconsin’s agricultural economy. The fastest growing areas include vegetable production and dairy.



About 250 farmers raise and sell organic vegetables on about 1750 acres in Wisconsin. With per acre income levels averaging \$3741, these farms generate about 70% more income per acre than their non-organic counterparts. With our existing vegetable growing expertise and processing infrastructure in the state, and the proven strength in organic produce sales (about 38% of total organic sales nationally), there is great potential for growth in this sector in future years.

Organic dairy production and processing continue to be an area of strength and growth for Wisconsin. About one-third of Wisconsin dairy processing facilities are certified to produce either their own or private label dairy products for other companies, providing multiple options for Wisconsin organic dairy farmers for marketing their milk. Wisconsin leads the nation with 23% of all organic dairy farms (479 farms). About 14% of all dairy cows live in Wisconsin and we produce about 12% of all organic milk produced in the nation. Wisconsin organic dairy farms tend to be relatively small, averaging about 66 cows, but as a result of premiums and low-cost production practices, most can generate a sustainable living for a farm family. Based on data from the University of Wisconsin Center for Dairy Profitability, even in the current economic downturn, Wisconsin organic farms generated nearly \$1000 in net profit per cow in 2009 while farmers receiving conventional prices for their milk lost \$147 per cow (Kreigl 2010). The organic farms in the study averaged \$65,000 in net farm income in 2009. Wisconsin's 12,000 dairy farms are at a turning point, with aging facilities and many farmers nearing retirement. Organic and value-added dairy production and processing may be a good option for these farmers or the next generation of Wisconsin dairy farmers.

References

Deller, S. and D. Williams. 2009. "The Contribution of Agriculture to the Wisconsin Economy."
<http://www.uwex.edu/ces/ag/wisag/>

Kreigl, T. 2010. Preliminary 2009 Dairy Farm Financial Performance Update. UW Center for Dairy Profitability. Unpublished report.

OTA (Organic Trade Association). 2010. 2010 Organic Industry Survey. Accessed on line at:
<http://www.ota.com/bookstore/14.html>

OTA (Organic Trade Association). 2011. "Industry Statistics and Projected Growth." Last updated April 11. <http://www.ota.com/organic/mt/business.html>.

Swenson, D., L. Eathington, and C. Chase. 2007. "Determining the Methods of measuring the Economic and Fiscal Impacts Associated with Organic Crop Conversion in Iowa."
http://www.leopold.iastate.edu/research/marketing_files/woodbury.htm

USDA (United States Department of Agriculture). 2002, 2007. "Census of Agriculture"
<http://www.nass.usda.gov/index.asp>.

USDA (United States Department of Agriculture). 2008. "Organic Production Survey"
<http://www.nass.usda.gov/index.asp>.

USDA (United States Department of Agriculture). 2009. "Organic Production."
<http://www.ers.usda.gov/Data/Organic/>.

Willer, H., and L. Kilcher, eds. 2010. The World of Organic Agriculture -- Statistics and Emerging Trends 2010. Bonn: IFOAM (International Foundation of Organic Agriculture Movements).