ORGANIC AGRICULTURE AND MARKET TRENDS

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10-26-16
Outline

- Market Trends
  - Value of production
  - Acreage and farms
  - Marketing
What’s Organic?

Organic is a labeling term for food or other agricultural products that have been produced using cultural, biological, and mechanical practices that support the cycling of on-farm resources, promote ecological balance, and conserve biodiversity in accordance with the USDA organic regulations. This means that organic operations must maintain or enhance soil and water quality, while also conserving wetlands, woodlands, and wildlife. Synthetic fertilizers, sewage sludge, irradiation, and genetic engineering may not be used.

USDA
What’s Organic?

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Do you need to be Certified Organic?
• It depends on your gross annual sales:

  ◦ More than $5,000 = Certification required
    You can use the “USDA Certified Organic” seal

  ◦ Less than $5,000 = No certification required
    But you need to follow USDA Organic regulations
    Not allowed to use the “USDA Certified Organic” seal
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Organic Certification Process

Application includes:
- Detailed description of the operation
- History of substances applied (last 3 years)
- Organic products grown, raised, or processed
- Written Organic System Plan

Source: USDA
VALUE OF ORGANIC PRODUCTS
What’s the total value of organic sales in the U.S.?

A. $50,000 million
B. $5,000 million
C. $500 million

Retailers

Producers
Total Value of Organic Sales

Final value

In Billions

<table>
<thead>
<tr>
<th>Year</th>
<th>Organic Non-Food Sales</th>
<th>Organic Food Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>$10</td>
<td>$10</td>
</tr>
<tr>
<td>2007</td>
<td>$15</td>
<td>$15</td>
</tr>
<tr>
<td>2008</td>
<td>$20</td>
<td>$20</td>
</tr>
<tr>
<td>2009</td>
<td>$25</td>
<td>$25</td>
</tr>
<tr>
<td>2010</td>
<td>$30</td>
<td>$30</td>
</tr>
<tr>
<td>2011</td>
<td>$35</td>
<td>$35</td>
</tr>
<tr>
<td>2012</td>
<td>$40</td>
<td>$40</td>
</tr>
<tr>
<td>2013</td>
<td>$45</td>
<td>$45</td>
</tr>
<tr>
<td>2014</td>
<td>$50</td>
<td>$50</td>
</tr>
<tr>
<td>2015</td>
<td>$55</td>
<td>$55</td>
</tr>
</tbody>
</table>

Source: OTA, 2016
Organic Food Sales by Category

Note: E=estimate.
# Top States Based on Organic Sales

## Farm gate value

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Sales</th>
<th>Rank</th>
<th>State</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California</td>
<td>$1,149 million</td>
<td>1</td>
<td>California</td>
<td>$2,200 million</td>
</tr>
<tr>
<td>2</td>
<td>Washington</td>
<td>$282 million</td>
<td>2</td>
<td>Washington</td>
<td>$515 million</td>
</tr>
<tr>
<td>3</td>
<td>Pennsylvania</td>
<td>$213 million</td>
<td>3</td>
<td>Pennsylvania</td>
<td>$313 million</td>
</tr>
<tr>
<td>4</td>
<td>Oregon</td>
<td>$156 million</td>
<td>4</td>
<td>Oregon</td>
<td>$237 million</td>
</tr>
<tr>
<td>5</td>
<td>Texas</td>
<td>$149 million</td>
<td>5</td>
<td>Wisconsin</td>
<td>$201 million</td>
</tr>
<tr>
<td>6</td>
<td>Wisconsin</td>
<td>$133 million</td>
<td>6</td>
<td>Texas</td>
<td>$199 million</td>
</tr>
<tr>
<td>7</td>
<td>New York</td>
<td>$105 million</td>
<td>7</td>
<td>New York</td>
<td>$164 million</td>
</tr>
<tr>
<td>8</td>
<td>Vermont</td>
<td>$73 million</td>
<td>8</td>
<td>Colorado</td>
<td>$147 million</td>
</tr>
<tr>
<td>9</td>
<td>Iowa</td>
<td>$72 million</td>
<td>9</td>
<td>Michigan</td>
<td>$125 million</td>
</tr>
<tr>
<td>10</td>
<td>Idaho</td>
<td>$71 million</td>
<td>10</td>
<td>Iowa</td>
<td>$103 million</td>
</tr>
</tbody>
</table>

| Total | $3,165 million | Total | $5,455 million |

Source: USDA

More than 72% increase
Crop Mix – Value of Sales

U.S.

Field crops 23%

Vegetables 43%

Fruits and nuts 34%

TEXAS

Vegetables 19%

Fruits and nuts 6%

Field crops 75%

Source: USDA
What are the most popular organic vegetables sold?
Top Organic Vegetable Sales

- **Texas**
  - Tomatoes: 9.3%
  - Squash: 7.7%
  - Potatoes: 4.0%
  - Watermelon: 3.7%
  - Broccoli: 2.7%

- **US**
  - Lettuce: 20.3%
  - Tomatoes: 6.5%
  - Broccoli: 6.0%
  - Carrots: 5.2%
  - Sweet potatoes: 5.1%

Source: USDA
Organic vs. Conventional – Value of Sales

Final value

Source: OTA, 2016
Organic vs. Conventional – Value of Sales

Farm gate value

U.S.

Organic, 1.38%
Conventional, 98.62%

TEXAS

Organic, 0.78%
Conventional, 99.22%

Source: USDA
ORGANIC ACREAGE AND NUMBER OF FARMS
## Top States Based on Organic Acreage

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Acreage</th>
<th>Rank</th>
<th>State</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wyoming</td>
<td>677,147</td>
<td>1</td>
<td>California</td>
<td>687,168</td>
</tr>
<tr>
<td>2</td>
<td>California</td>
<td>470,903</td>
<td>2</td>
<td>Montana</td>
<td>317,925</td>
</tr>
<tr>
<td>3</td>
<td>Texas</td>
<td>314,279</td>
<td>3</td>
<td>Wisconsin</td>
<td>228,605</td>
</tr>
<tr>
<td>4</td>
<td>Montana</td>
<td>284,482</td>
<td>4</td>
<td>New York</td>
<td>212,701</td>
</tr>
<tr>
<td>5</td>
<td>Wisconsin</td>
<td>195,603</td>
<td>5</td>
<td>Oregon</td>
<td>204,166</td>
</tr>
<tr>
<td>6</td>
<td>New York</td>
<td>168,428</td>
<td>6</td>
<td>North Dakota</td>
<td>134,632</td>
</tr>
<tr>
<td>7</td>
<td>Colorado</td>
<td>153,981</td>
<td>7</td>
<td>Minnesota</td>
<td>133,033</td>
</tr>
<tr>
<td>8</td>
<td>North Dakota</td>
<td>152,728</td>
<td>8</td>
<td>Wyoming</td>
<td>128,502</td>
</tr>
<tr>
<td>9</td>
<td>Idaho</td>
<td>148,425</td>
<td>9</td>
<td>Texas</td>
<td>126,639</td>
</tr>
<tr>
<td>10</td>
<td>Nebraska</td>
<td>146,188</td>
<td>10</td>
<td>Idaho</td>
<td>125,141</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>4,077,337</strong></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>3,670,560</strong></td>
</tr>
</tbody>
</table>

Source: USDA

3.5% decrease in organic acreage from 2008 to 2014.

10% decline in total organic acreage.
Certified and Exempt Organic – Number of Farms

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempt organic</td>
<td>1,453</td>
<td>52</td>
</tr>
<tr>
<td>Certified organic</td>
<td>12,595</td>
<td>178</td>
</tr>
</tbody>
</table>

Source: USDA
### Certified and Exempt Organic – Acreage

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempt organic</td>
<td>27,627</td>
<td>1,266</td>
</tr>
<tr>
<td>Certified organic</td>
<td>3,642,933</td>
<td>125,373</td>
</tr>
</tbody>
</table>

- **Percent of Farms**
  - Certified organic: 99.2% (U.S.), 99.0% (Texas)
  - Exempt organic: 0.8% (U.S.), 1.0% (Texas)

Source: USDA
Texas Organic Farmers

Source: AMS, 2016

- cotton and peanuts
- rice
- vegetables and fruits

Adapted from NCAT, 2016
MARKETING TRENDS
Organic Sales by Market Outlet

Source: USDA
Organic Sales by First Point of Sales

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2014</td>
</tr>
<tr>
<td>Local</td>
<td>44.3%</td>
<td>46.0%</td>
</tr>
<tr>
<td>Regional</td>
<td>29.3%</td>
<td>34.0%</td>
</tr>
<tr>
<td>National</td>
<td>2.1%</td>
<td>2.0%</td>
</tr>
<tr>
<td>International</td>
<td>24.2%</td>
<td>18.0%</td>
</tr>
</tbody>
</table>

Source: USDA
Organic Products at Retail Supermarkets

- Fruits and Vegetables: 45%
- Livestock: 7%
- Poultry: 22%
- Dairy: 22%

Source: USDA
U.S. Net Trade of Fresh Fruits & Vegetables

Source: USDA
U.S. Organic Net Trade

Top Imports:
- Bananas
- Soybeans
- Corn
- Coffee
- Apples

Top Exports:
- Apples
- Grapes
- Onion
- Carrots
- Cauliflower

Source: USDA
Primary Production Challenges

Source: USDA
Willingness to Pay for Food Attributes

- Genetically Modified Organism (GMO) Free: 18 Very Willing, 38 Moderately Willing, 33 Slightly Willing, 10 Not Willing
- All Natural: 20 Very Willing, 39 Moderately Willing, 34 Slightly Willing, 8 Not Willing
- Low Sugar/Sugar Free: 13 Very Willing, 38 Moderately Willing, 35 Slightly Willing, 14 Not Willing
- Made from Vegetables/Fruits: 16 Very Willing, 38 Moderately Willing, 35 Slightly Willing, 11 Not Willing
- Organic: 18 Very Willing, 40 Moderately Willing, 34 Slightly Willing, 8 Not Willing
- Vitamin Fortified: 12 Very Willing, 36 Moderately Willing, 40 Slightly Willing, 12 Not Willing

Base: All Respondents who think respective health attribute is important
Source: Nielsen Global Health & Wellness Survey, Q3 2014
Organic Premiums

Broccoli

Lettuce

Tomatoes

Source: USDA
Five-year Production Plan

The chart shows the percentage of farms in the U.S. and Texas for different production plans over a five-year period. The plans include:
- Increase organic production
- Maintain current level of organic production
- Decrease organic production
- Discontinue organic production
- Discontinue all production
- Do not know

Source: USDA
Production Practices

- Used water management practices
- Maintained buffer strips
- Used green or animal manures
- Produced or used organic mulch/compost
- Chose pest resistant varieties
- Selected planting location to avoid pests
- Planned plantings to avoid cross-contamination
- Used no-till or minimum till
- Practiced biological pest management
- Maintained beneficial insect/vertebrate habitat
- Released beneficial organisms

Percent of Farms

- Texas
- U.S.
Previous Workshops

bit.ly/agrilife
Thank you!

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