



United States Department of Agriculture

92nd Annual USDA Agricultural Outlook Forum

Arlington, VA ♦ February 25, 2016

The Outlook for Organic Agriculture

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USDA's National Organic Program (NOP)—

U.S. organic production and processing must meet federal standards

Standards address:

- Methods, practices and substances used (i.e. prohibits genetic engineering)
- Third-party certification
- Product labeling
- Trade requirements



Crop producers required to maintain or improve soil conditions.

Livestock producers required to accommodate an animal's natural nutritional and behavioral needs.

**Organic agriculture—
An ecological production system that integrates “cultural, biological, and mechanical practices... to foster cycling of resources, promote ecological balance, and conserve biodiversity”**

—USDA, Agricultural Marketing Service, “National Organic Program; Final Rule,” 7 CFR Part 205, *Federal Register*, Dec. 21, 2000 www.usda.gov/nop



U.S. organic agriculture provides ecosystem services

Environmental benefits that can be attributed to organic systems include:

- Reduced pesticide residue in water and food
- Improved soil tilth and organic matter
- Carbon sequestration
- Enhanced biodiversity

The 2008-09 annual report of the President's Cancer Panel recommended: that individuals reduce their environmental cancer risk by choosing, **“to the extent possible, food grown without pesticides or chemical fertilizers and washing conventionally grown produce to remove residues.”**

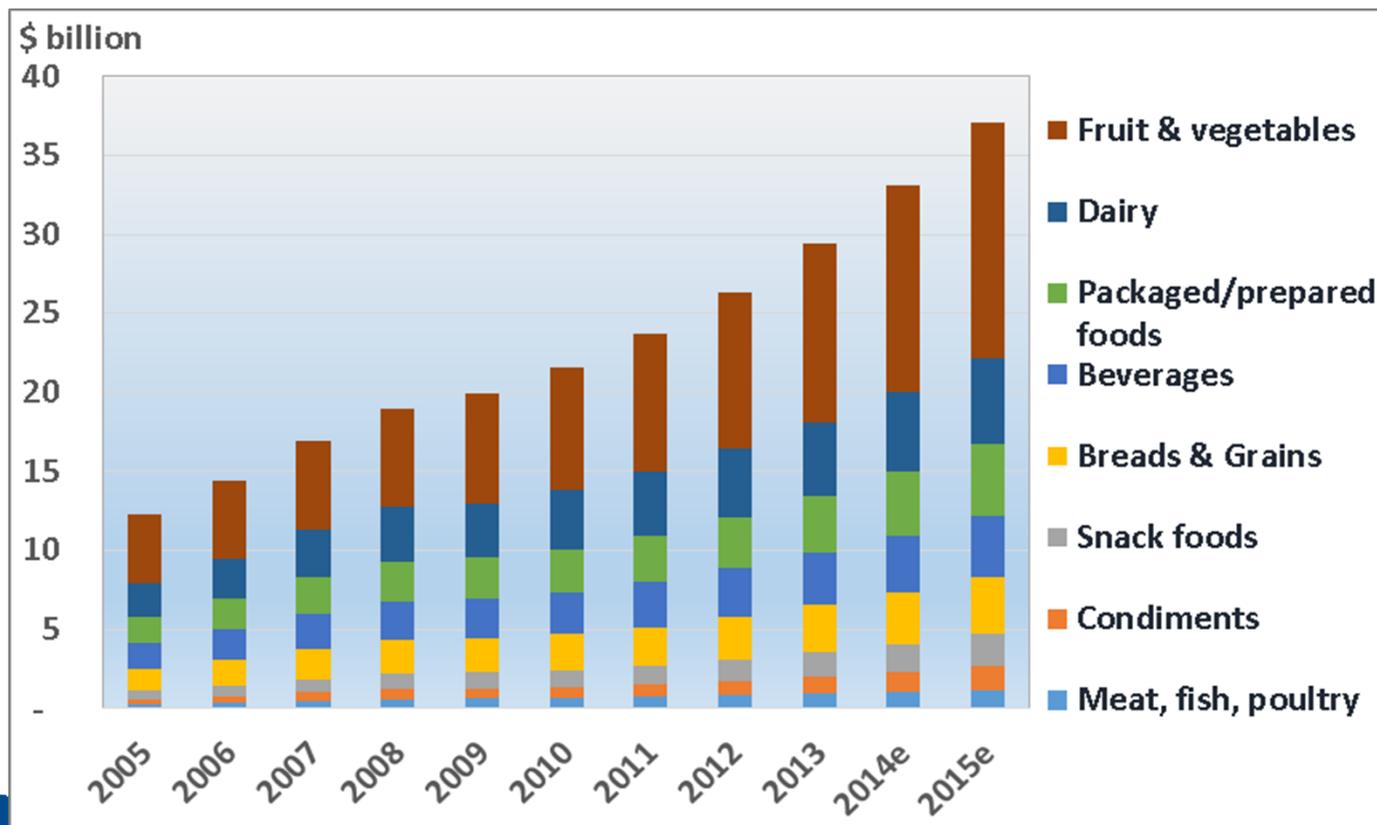
—U.S. National Institutes of Health, 2010, Department of Health and Human Services, p. 112



U.S. organic food sales by category, 2005-2015e

(Source—Nutrition Business Journal, Chart 22; e=estimate)

- Top category is produce, with 40% of total sales—followed by dairy with 15% of the total
- Organic sales growth expected to continue as more regions and retailers widen access
- The country's top food retailers, including Costco, Kroger, Walmart and Target, have expanded their organic food offerings in recent years, and have announced initiatives which could further boost demand.

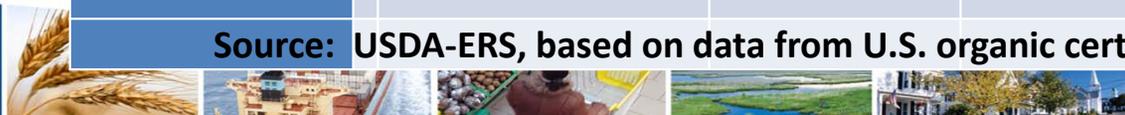


Adoption of organic systems highest for fruits and vegetables

- Since 2011, U.S. producers have expanded certified organic cropland acres
- **Certified organic fruit and vegetable acreage climbed 39 percent** between 2011 and 2014, according to USDA producer survey data
- **Certified organic field crop acreage increased 9 percent** between 2011 and 2014

	Certified Acres-2011	%Total-2005	%Total-2011
Grains & Oilseeds			
Corn	234,470	0.2	0.3
Wheat	344,644	0.5	0.6
Oats	62,015	1.1	2.5
Barley	63,903	1.0	2.5
Sorghum	17,360	0.1	0.3
Rice	48,533	0.8	1.8
Rye	21,458	0.6	1.7
Soybeans	132,411	0.2	0.2
High-Value Specialties			
Tomatoes	9,271	1.6	2.5
Lettuce	34,967	3.7	11.6
Carrots	12,080	5.8	14.3
Fruits	131,498	2.7	4.6

Source: USDA-ERS, based on data from U.S. organic certifiers



U.S. organic producers reported \$5.5 bill. in organic sales in 2014, up 77 percent since 2011

Top crops--farm sales:

- Lettuce (\$264 mil.)
- Apples (\$250 mil.)
- Grapes (\$195 mil.)
- Corn (\$155 mil.)
- Hay (\$139 mil.)
- Spinach (\$117 mil.)
- Mushrooms (\$109 mil.)
- Wheat (\$102 mil.)

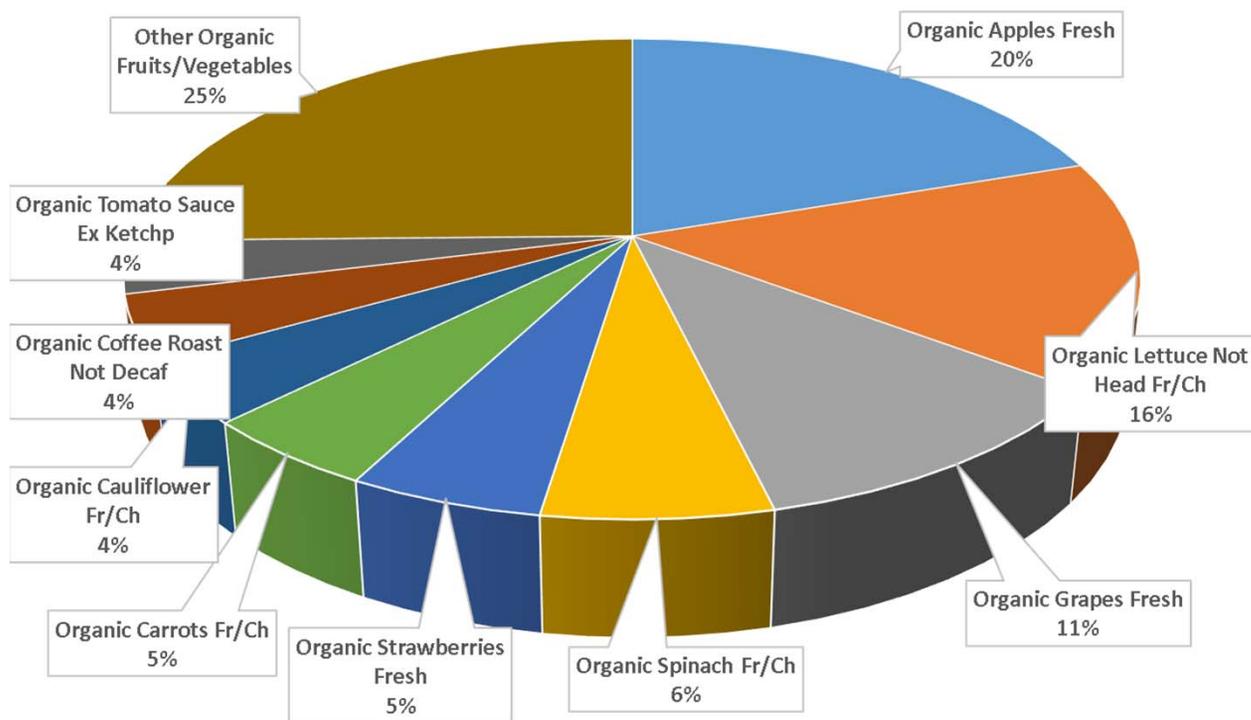
Top livestock/poultry sales:

- Milk (\$1.1 bill.)
- Eggs (\$420 mil.)
- Broilers (\$372 mil.)
- All cattle and cows (\$216 mil.)



Fresh fruits and vegetables are also top U.S organic exports

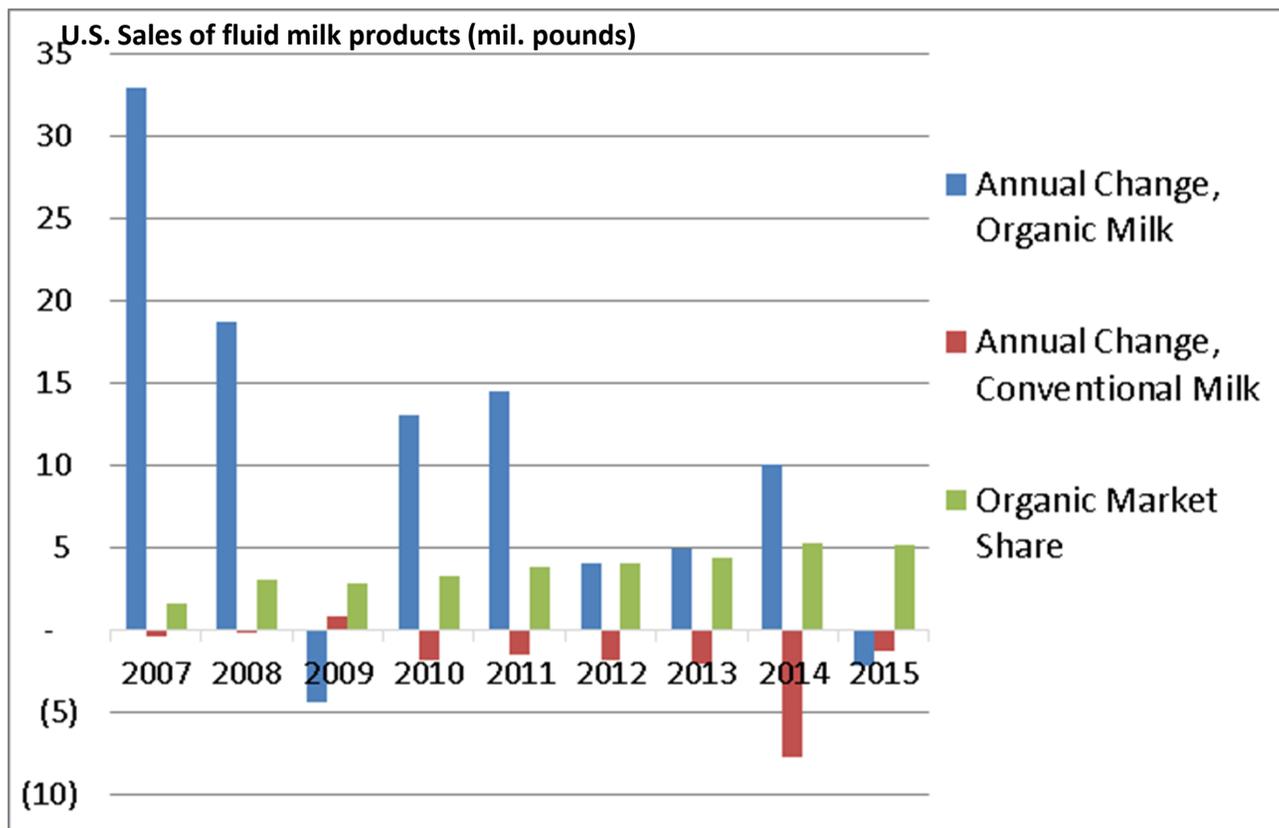
- The U.S. began tracking a portion of organic trade in 2011
- The top three tracked organic exports are apples, lettuce and grapes
- The top tracked organic imports include coffee, soybeans, bananas, olive oil, corn and wine
- A larger share of organic fruits and vegetables are exported than compared with their conventional counterparts



U.S. market penetration of organic milk, 2007-2015

- Organic sales more than tripled—to 5% of total; Conventional sales declined
- Chronic shortages of feed grains during this period--organic milk supply did not keep up with demand last year
- New venues for organic dairy products continue to emerge—for example, refrigerated cases in drug stores

Source: USDA-AMS Market News; Greene and McBride (2015)

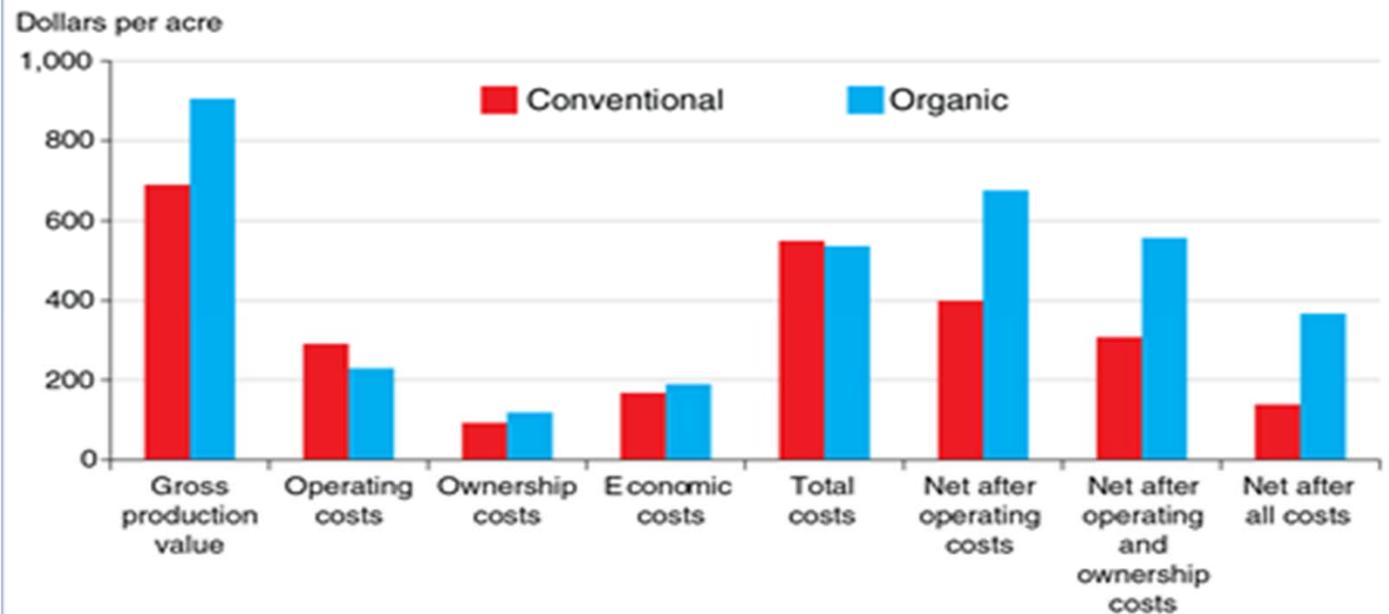


ERS analysis shows net returns for organic corn exceed conventional



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Conventional and organic corn production value, costs, and returns per planted acre in 2010

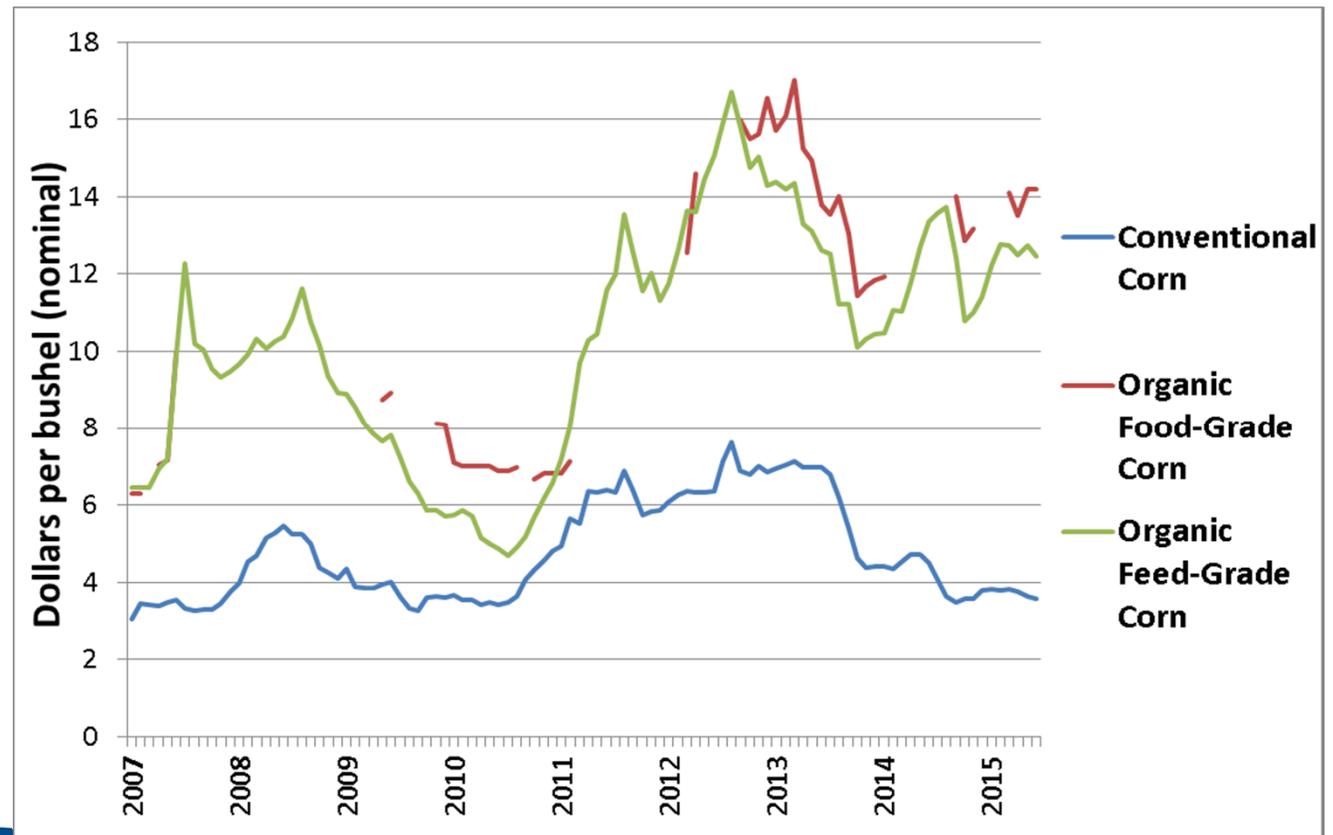


Source: USDA, Economic Research Service and USDA, National Agricultural Statistics Service, 2010 Agricultural Resource Management Survey; and USDA, Economic Research Service, Cost of Production accounts.



U.S. organic and conventional corn prices, 2007-2015— Price premiums have widened

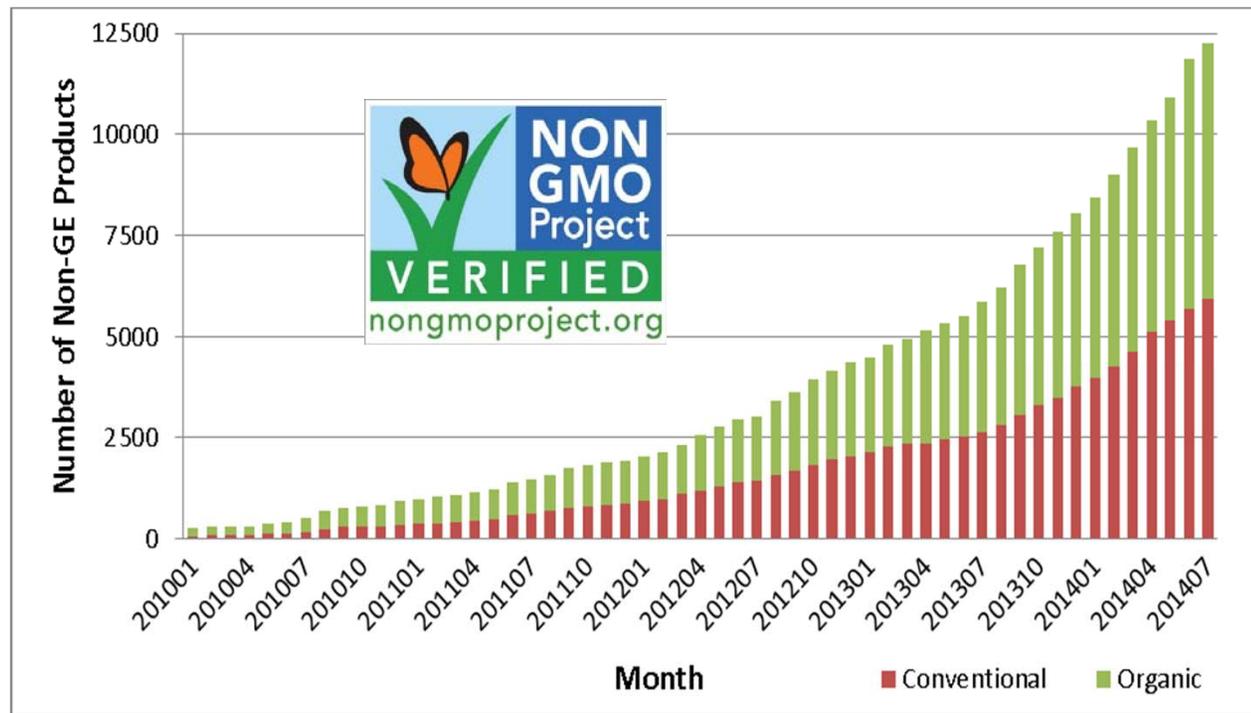
- Interest in organic grain production has strengthened—with lower commodity prices, and strong demand from organic dairy & poultry sectors
- New mechanisms—i.e. contract prices and insurance coverage—assisting during transition



Non-GMO and other eco-labels have proliferated in recent years

- Non-GMO labels have grown rapidly with private sector verification services
- Many eco-labels aren't well defined
- “Local” may emerging as the most trusted label, according to the 2014 Hartman Group Report— is it a complement or competition for organic?

Cumulative monthly “Non-GMO Project Verified” Products, 2010-14



Source: USDA-ERS analysis based on data from non-GMO Project Verified



Conclusions



- Organic food sales in the United States have shown double-digit growth during most years since the 1990s, and this trend shows no sign of slowing
- Price premiums reflect growing consumer demand as well as higher costs of production
- The expanding domestic market and growing export markets continue to provide opportunities for U.S. producers and handlers



For more information

- **USDA Organic Agriculture (links to all agencies)**
<http://www.usda.gov/wps/portal/usda/usdahome?navid=organic-agriculture>
AMS, NASS and other agencies have substantially increased data collection over the last decade to provide the market information that is important for industry development and growth; RMA, NRCS and other agencies have been tailoring programs to meet organic sector needs as well.
- **USDA-ERS Organic Topic Page (links to ERS reports, articles, and data products)**
<http://www.ers.usda.gov/topics/natural-resources-environment/organic-agriculture.aspx> [Recent reports include McBride et al. (2015) *The Profit Potential of Certified Organic Field Crop Production*, and recent articles include Greene and McBride (2015) “Consumer Demand for Organic Milk Continues to Expand-Can the U.S. Dairy Sector Catch Up?” *AAEA, Choices*, 1st Qtr.]
- **Proceedings of the USDA Organic Farming Systems Research Conference: Exploring Agronomic, Economic, Ecological, and Social Dimensions, March 16-18, 2011, Washington, December 2013, online access: [Crop Management](#)**

