Farm Economics

ACH12-2/May 2014

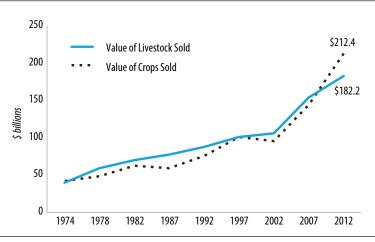
Record high agriculture sales; income and expenses both up.

A farm is....

... any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year.

In 2012, the value of agriculture sales was the highest ever recorded, with both crop and livestock sales at record levels. According to the 2012 Census of Agriculture, farm income was higher than in 2007, but so were production expenses. The increases in income did not benefit all sectors, and production and sales were often concentrated geographically or by farm category or industry. In 2012, crop sales exceeded livestock sales for only the second time in census history (the only other time was in the 1974 agriculture census).

Fig. 1 Value of U.S. Crop and Livestock Sales, 1974 - 2012



Source: USDA NASS, 2012 Census of Agriculture.

Understanding the Numbers

* = statistically significant change

The 2012 Census of Agriculture contains a measure of relative reliability (the coefficient of variation) for every data item published. This Highlights document does not include these numbers, but shows through an asterisk (*) every number that is a statistically significant change from the 2007 Census to the 2012 Census (defined as two or more standard errors).

To learn more about statistical significance and census methodology, go to the frequently asked questions at www.agcensus.usda.gov.

Agriculture Sales

In 2012, U.S. farms sold nearly \$395 billion in agricultural products. This was \$97 billion, or 33 percent, more than in 2007, at the time of the last agriculture census. Crops accounted for \$69 billion of the increase, and livestock accounted for \$29 billion.

Compared to 2007, crop sales were 48 percent higher and livestock sales were up 19 percent. (Table 1) Crops accounted for 54 percent of agriculture

sales in 2012. Five years earlier they accounted for just under half of sales.

Table 1
Value of Agriculture Sales, 2007 and 2012

	2007 (\$ bill	2012 lions)	% change
All products	297.2	394.6	32.8*
Crops	143.7	212.4	47.8*
Livestock	153.6	182.2	18.7*

Source: USDA NASS, 2012 Census of Agriculture.



Geographic Concentration

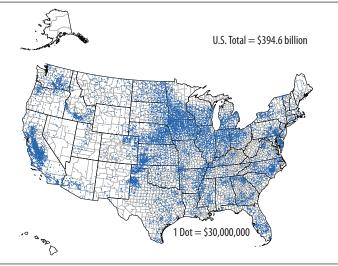
Thirteen states produced more than \$10 billion in agricultural products in 2012 and together accounted for 62 percent of agriculture sales (Table 2). Almost every county has at least some agricultural production, but intensity varies across states and counties (Fig. 2). The top ten counties, nine of which are in California, accounted for \$29 billion or 7 percent of total agriculture sales. At the top of the list, Fresno County, with \$5 billion in agriculture sales, had higher sales than 23 individual states.

Table 2 **Top States in Agriculture Sales, 2012**(more than \$10 billion in sales)

	Sales (\$ billions)	% of U.S. Total ^a
California	42.6	10.8
owa	30.8	7.8
Texas	25.4	6.4
Nebraska	23.1	5.8
Ainnesota	21.3	5.4
Kansas	18.5	4.7
llinois	17.2	4.4
lorth Carolina	12.6	3.2
Visconsin	11.7	3.0
ndiana	11.2	2.8
North Dakota	11.0	2.8
South Dakota	10.2	2.6
Ohio	10.1	2.6

^aTotal U.S. agriculture sales in 2012 = \$394.6 billion. Source: USDA NASS, 2012 Census of Agriculture.

Fig. 2 **U.S. Agriculture Sales, by County, 2012**



Source: USDA NASS, 2012 Census of Agriculture.

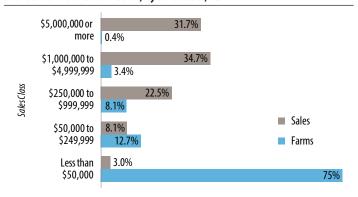
Concentration by Farm Size

Most farms are small, but the value of agricultural production is concentrated on a relatively few large farms. In 2012, 75 percent of all farms had sales of less than \$50,000 but together these farms produced only 3 percent of the total value of agricultural products sold. In contrast, less than half of one percent of farms had agriculture sales of more than \$5 million, but these few farms produced 32 percent of the total value of all agricultural products sold. Farms with sales of \$1 million or more – 4 percent of all farms – produced 66 percent of the total value. (Fig. 3)

The larger farms are not distributed equally across the United States. States in New England and the Southeast have higher proportions of farms with sales under \$50,000. In some Midwest states, nearly half of farms had sales of \$50,000 or more.

Fig. 3

Share of Farms and Farm Sales, by Sales Class, 2012



Source: USDA NASS, 2012 Census of Agriculture.

Concentration by Industry

Although both crop and livestock sales increased from 2007 to 2012, not all commodity sectors benefited. Among commodities, the grain and oilseed category had the largest increase (70 percent), but even within this category, crops varied widely, with soybeans increasing 91 percent, corn 69 percent, and wheat 48 percent. Other commodities had much smaller increases, and the value of nursery/greenhouse products decreased.

In the livestock sector, sales of cattle and calves (25 percent) and hogs and pigs (25 percent) had the largest percentage increases.

2 Farm Economics

The Balance Sheet: Income and Expenses

In addition to agriculture sales, farm income includes government payments and earnings from a variety of farm-related activities. With these items included, total U.S. farm income in 2012 was \$421 billion. However, at \$329 billion, farm production expenses were up as well – 36 percent more in 2012 than 2007. As a result, U.S. farm operations had net cash income of \$92 billion in 2012; this was 24 percent higher than in 2007. Net cash income is the amount an operation receives from agriculture sales, government payments, and farm-related income after expenses. (Table 3)

Table 3 Income and Expenses, All U.S. Farms, 2007 and 2012

	2007	2012	%
	(\$ bill	ions)	change
Agriculture sales	297.2	394.6	32.8*
Government payments	8.0	8.1	0.9
Farm-related income	10.5	18.5	76.6*
Production expenses	241.1	328.9	36.4*
Net cash farm income	74.6	92.3	23.7*

Source: USDA NASS, 2012 Census of Agriculture.

Government Payments

Government payments to farmers include conservation payments, direct payments, loan deficiency payments, disaster payments, and payments from various other federal programs. The 2012 Census collected data based on programs in effect under the 2008 farm bill.

Of the nation's 2.1 million farmers, 811,387 received a total of \$8.1 billion in government payments from federal farm programs. This was 3 percent fewer farms than in 2007 but a 1 percent increase in payments. The largest change came from decreased participation in federal conservation programs. According to the 2012 Census, farmers enrolled 29 percent fewer acres and received 18 percent less in conservation payments in 2012 than 2007.

Farm-related Income

Farm-related income refers to payments received for rent, custom work on other farms, forest product sales, recreational services provided, patronage dividends, crop and livestock insurance payments, and other activities and services closely related to the agricultural operation. For

all U.S. farms, this income source increased 76 percent between 2007 and 2012. Crop insurance payments alone increased more than 300 percent from 2007, primarily because of the large area affected by drought in 2012.

Production Expenses

Between 2007 and 2012, agricultural production costs increased 36 percent. The largest expense categories in 2012 were feed, livestock and poultry purchases, fertilizer, hired labor, and cash rent. The largest percentage increases were in seeds, chemicals, and cash rent. (Table 4)

Table 4
Agricultural Production Expenses, 2007 and 2012

	2007	2012	%
	(\$ billions)		change
Total	241.1	328.9	36.4*
Feed	49.1	75.7	54.2*
Livestock and poultry purchases	38.0	41.6	9.4
Fertilizer	18.1	28.5	57.6*
Hired labor	21.9	27.0	23.4*
Cash rent	13.3	21.0	58.2*
Seeds	11.7	19.5	66.0*
Supplies and repairs	15.9	18.9	18.7*
Gasoline, fuels, and oils	12.9	16.6	28.4*
Chemicals	10.1	16.5	63.4*
Other	50.1	63.7	27.1*

Source: USDA NASS, 2012 Census of Agriculture.

Per Farm Average

At the farm level, the story was similar. Average agriculture sales per farm were 39 percent higher in 2012 than 2007, and farm-related income was up 51 percent. But steep increases in production expenses resulted in average farm increases in net income of 29 percent. Average net cash income per farm was \$43,750 in 2012. (Table 5)

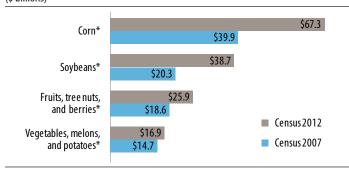
Table 5
Income and Expenses, Per Farm Average, 2007 and 2012

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	2007	2012	%
	(doll	ars)	change
Agriculture sales	134,807	187,097	38.8*
Government payments	9,523	9,925	4.2*
Farm-related income	15,133	22,840	51.0*
Production expenses	109,359	155,947	42.6*
Net cash farm income	33,827	43,750	29.3*

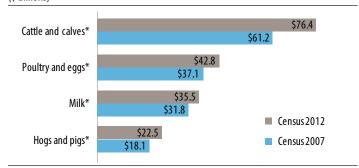
Source: USDA NASS, 2012 Census of Agriculture.

The top five commodities in 2012 sales were cattle and calves, poultry and eggs, corn, soybeans, and milk. Together, these accounted for \$261 billion in sales, or 66 percent of total agriculture sales.

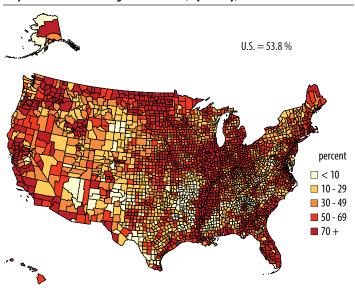
Top Crop Commodities by 2012 Sales Value, 2007 and 2012 (\$ billions)



Top Livestock Commodities by 2012 Sales Value, 2007 and 2012 (\$ billions)



Crop Sales as Percent of Agriculture Sales, by County, 2012



Top Ten States		
crop sales	livestock sales	
California	Texas	
Iowa	Iowa	
Illinois	California	
Minnesota	Nebraska	
Nebraska	Kansas	
North Dakota	North Carolina	
Indiana	Minnesota	
Texas	Wisconsin	
Kansas	Georgia	
Ohio [†]	Colorado [†]	
†Not in Top 10 in 2007.		

About the Census of Agriculture

The Census of Agriculture is the leading source of facts and figures about American agriculture. USDA's National Agricultural Statistics Service (NASS) conducts the census once every five years, and conducted the 2012 Census of Agriculture in early 2013 based on 2012 end-of-year data.

The 2012 Census results are now available, providing information at national, state, and county levels about what agricultural products were raised in the United States in 2012, where, how, and by whom.

Census data are available in multiple formats to help all users, professional and casual, find and use exactly what they need. Available tools include:

- Quick Stats 2.0 an online database to retrieve customized tables
- A <u>new tutorial video</u> easy-to-follow instructions for Quick Stats
- An <u>API for developers</u> http://quickstats.nass.usda. gov/tutorials
- Desktop Data Query Tool a downloadable desk top tool to analyze data without Internet access
- <u>Agricultural Atlas</u> pattern and dot maps profiling many aspects of agriculture at the county level
- Infographics fun, informative snippets of Census data and context
- <u>Highlights</u> more documents like this one summarizing key facts on a topic

A link to census data is also available on USDA's open data portal, www.usda.gov/data.

www.agcensus.usda.gov