



# Missouri Economic Research Brief

## FARM AND AGRIBUSINESS

### Missouri's Farm and Agribusiness

Missouri's farm and agribusiness sectors include crops, livestock, industries supporting farm production and farm-related industries. Missouri ranks second in the nation in the number of farms, with 107,825. Missouri employs 298,320 workers in farms and agribusiness industries. Missouri's top agribusiness industries are pesticides and chemical manufacturing plants, farm supplies, meat and poultry processing plants.

Location Quotient (LQ) measures Missouri's share of agribusiness industries employment to its share of total national employment. A LQ greater than 1 indicates a high degree of specialization in agriculture. A majority of counties in northeast, southwest and southeast Missouri are specialized in agriculture.

### Top Agricultural Products by Market Value

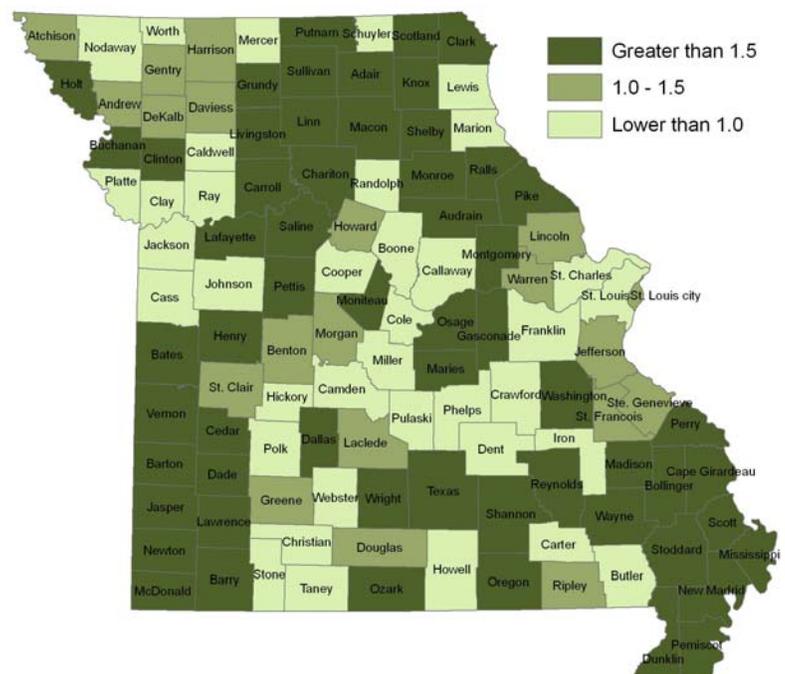
Product	2007 (\$)
Corn	1,909,026,000
Soybeans	1,768,763,000
Cattle and calves	1,676,632,000
Poultry and eggs	1,265,166,000
Hay	746,372,000
Hogs and pigs	725,738,000
Milk and dairy	302,684,000
Cotton	210,497,000
Wheat	195,633,000
Rice	146,120,000
Grain Sorghum	35,912,000
Oats	1,140,000

Source: 2007 Census of Agriculture, Missouri Agricultural Statistics Service

### Farm and Agribusiness Facts



### Agribusiness Employment Location Quotient



## Missouri's Agricultural Labor, Farms and Market Value 2002 Vs 2007

Item	2002	2007	Change	% Change
Hired/Contracted Labor	66,201	47,033	-19,168	-28.95%
Farm Owners/Operators	157,863	163,553	5,690	3.60%
Agribusiness employment	87,590	87,734	144	0.16%
<b>Total Missouri Farm &amp; Agribusiness Labor</b>	<b>311,654</b>	<b>298,320</b>	<b>-13,334</b>	<b>-4.28%</b>
Number of Farms	106,797	107,825	1,028	0.96%
Land in Farms (acres)	29,946,035	29,026,573	-919,462	-3.07%
Average size of farm (acres)	280	269	-11	-3.93%
Market value of production (2007 \$)	5.73 B	7.51 B	1.78 B	31.10%
Market value of production/farm (2007 \$)	46,661	69,677	23,016	49.33%

Source: 2002 and 2007 Census of Agriculture, Missouri Agricultural Statistics Service

Agriculture is an important aspect of the Missouri economy. Many changes have taken place in agriculture over the past five years. Technological advancement and improvements in agricultural productivity led to nearly 29% reduction in farm labor. According to a University of Illinois report, an increasing number of Missouri farmers are taking up jobs off-farm for additional income in order to continue farming under adverse economic conditions.

Missouri Agricultural Statistics Services defines farms as places with \$1,000 or more in annual sales of agricultural products. According to the 2007 Census of Agriculture, the percentage of farms selling agricultural products valued between \$1,000 and \$2,499 was 8.2%. This low sales number propped up the number of farms by 1% in the state when compared to 2002.

Although the number of farms increased over the years, the acreage per farm shrunk by 3% and the average farm size decreased by nearly 4%. According to the USDA, the current trends indicate consolidation of farms. High commodity prices increased both the value of production and the sales classes of farms upwards.

## Ethanol/Biodiesel Production

In January 2008, the Missouri Renewable Fuel Standard Act became effective and all gasoline sold was mandated to contain 10% ethanol with a few exceptions. With the support for ethanol and biodiesel production by the State Government, Missouri now boasts of six operating ethanol plants with a capacity of 283.5 Million Gallons and another eight plants under construction with a capacity of 645 Million Gallons. On the other hand, six biodiesel plants are operating with a capacity of 142 Million Gallons, which are expected to double in number and capacity in the near future.

Item	2002	2007	Change	% Change
Corn (Farm numbers)	15,665	15,735	70	0.45%
Corn (Cropped acres)	2,677,491	3,256,195	578,704	21.61%
Corn (Harvested bushels)	268,224,535	439,417,160	171,192,625	63.82%
Soybeans (Farm numbers)	21,687	18,388	-3,299	-15.21%
Soybeans (Cropped acres)	5,001,858	4,672,738	-329,120	-6.58%
Soybeans (Harvested bushels)	165,048,253	165,947,323	899,070	0.54%
Sunflower (Farm numbers)	28	62	34	121.43%
Sunflower (Cropped acres)	1,963	3,668	1,705	86.86%
Sunflower (Harvested pounds)	2,456,340	3,158,151	701,811	28.57%

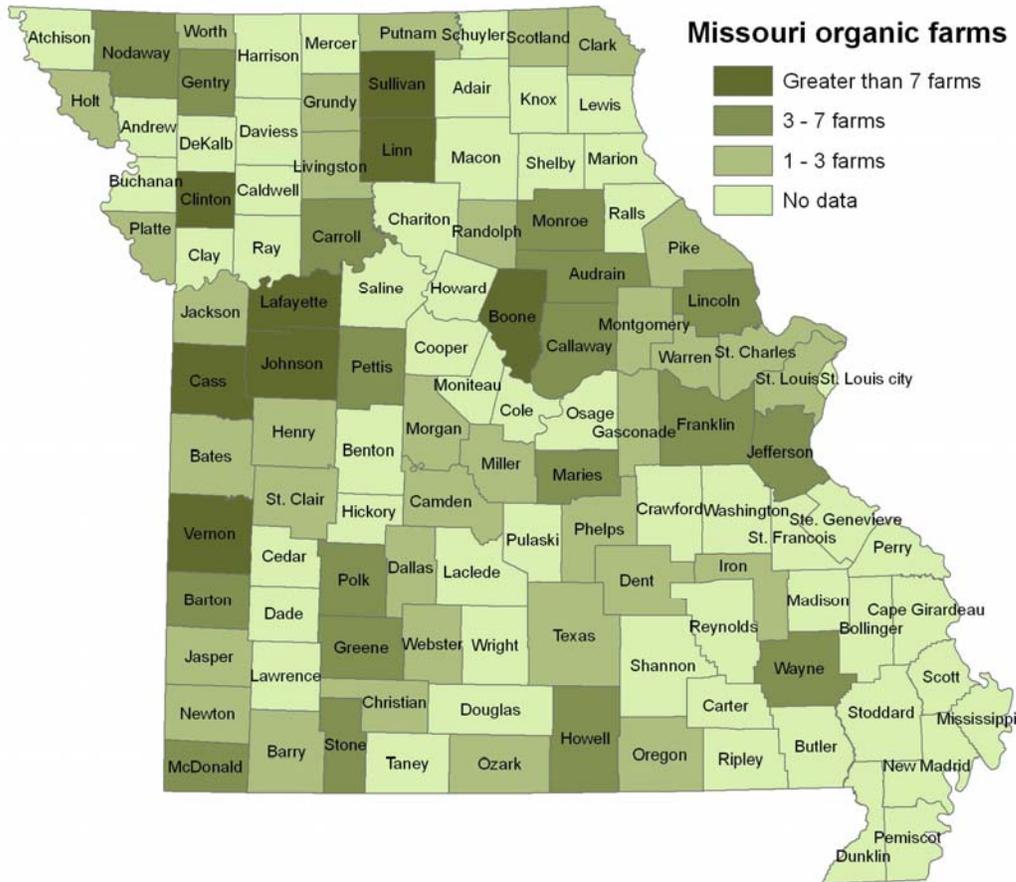
Source: 2007 Census of Agriculture, Missouri Agricultural Statistics Service

Ethanol is produced from crops rich in starch and sugar. Corn is a major source for ethanol production in Missouri. Soybeans and sunflower are predominantly used for biodiesel production. Soybeans have a high yield per acre as compared to other crops and the relative high oil content of sunflower makes both the crops suitable for biodiesel production.

In order to meet the demands of corn based ethanol production, corn producers expanded the acreage by 21% from 2002. This increase in acreage led to an increase in corn yield by nearly 64% over the years.

To meet the demands of biodiesel production, sunflower producers doubled their farms and nearly doubled the acreage, increasing the crop yield for sunflower nearly 28% in the last five years. Although soybean farms and acreage shrunk modestly over the year, the yields did increase by a very small margin.

## Missouri Organic Farms



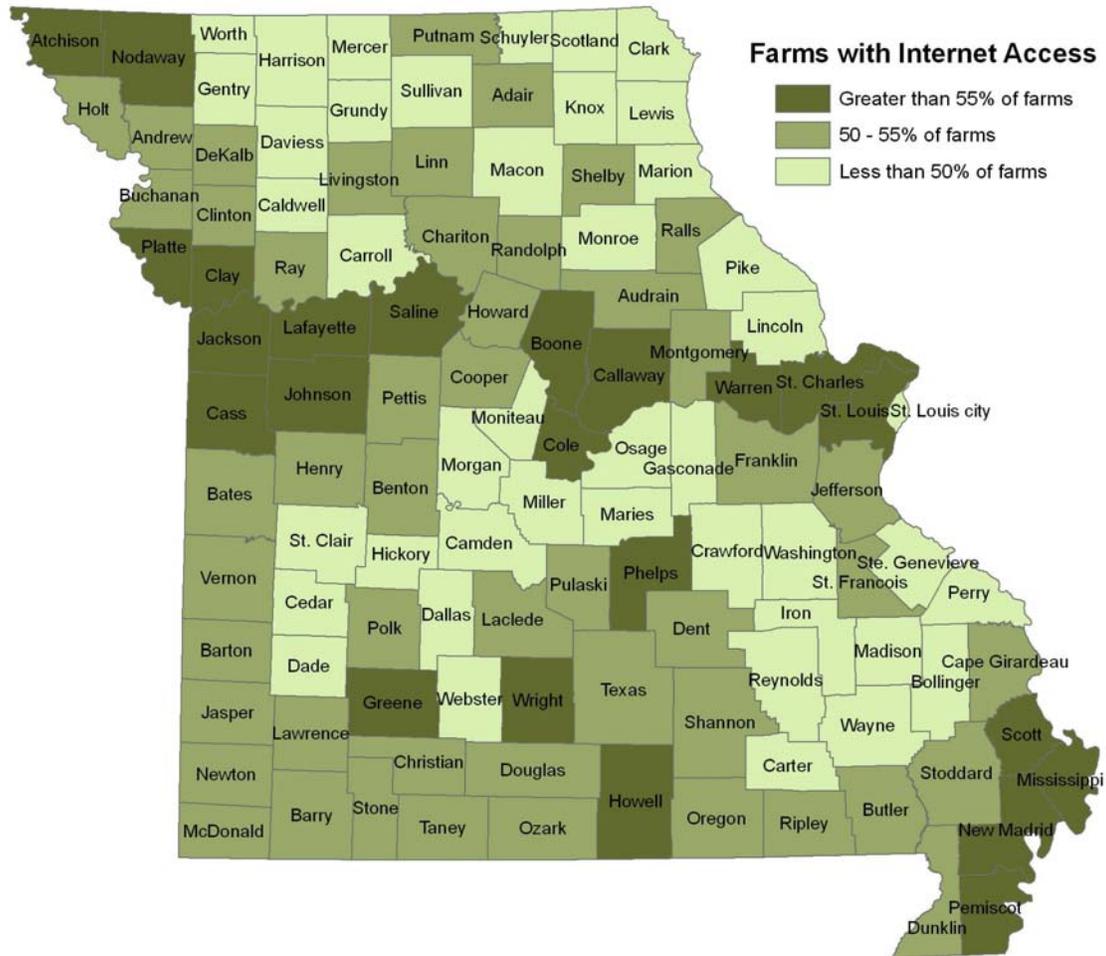
Organic production is increasing in popularity in Missouri. As of 2007, 273 organic farms existed with 21,738 acres under organic production. The number of organic farms is set to double and the acreage is expected to increase by 64%.

Organic crop production accounts for two-thirds of the organic foods market value. Livestock, poultry and their products account for the other third. According to the 2007 Census of Agriculture, the total market value of organic products in Missouri is \$3.8 Million.

Organic Production	2007
Organic Farms (number)	273
Land under Organic Production (acres)	21,738
Organic Crops farms(number)	168
Market Value of Production	\$2,563,000
Livestock and Poultry farms (number)	46
Market Value of Production	\$494,000
Livestock and Poultry product farms (number)	36
Market Value of Production	\$764,000

Source: 2007 Census of Agriculture, Missouri Agricultural Statistics Service

## Farms with Internet Access



Farms have taken advantage of internet as a management tool for information, financial activities, communication, crop and livestock market data and online sales as well as purchases. In Missouri, farms with internet access increased nearly 7% from 47,921 in 2002 to 55,844 in 2007. According to the 2007 Census of Agriculture, more than half of the farms (51.8%) are connected as compared to 2002 (44.9%). About a quarter of the total farms are now connected with high-speed internet.

Farms in Pemiscot County are the most connected followed by Boone. The counties that are well connected are located in the metropolitan region, southeast, northwest and counties surrounding, Kansas City, St. Louis, Columbia and Cape Girardeau.

Farms in Perry County are the least connected followed by Ste. Genevieve. The counties that are not well connected are located in the Ozark forest region, west central, northeast, north-central and southeast region of the state.

## Data Sources

1. 2002 and 2007 Census of Agriculture, Missouri Agricultural Statistical Service.
2. “What does your Off-farm job allow you or prohibit you from doing”, University of Illinois Extension Report.  
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4. US Bureau of Labor Statistics.
5. Missouri Fuel Quality Program, Department of Agriculture.  
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