

# Value-Added Agriculture in Tennessee: A Summary of 2012 Census Results

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## Introduction

The enterprises, commodities and value of sales that make up Tennessee's agriculture have changed over the years. The U.S. Department of Agriculture Census of Agriculture that is conducted every five years has helped to define and track these changes in Tennessee and across the nation. Since 1997, the census has provided additional data related to direct marketing, value-added agriculture, organics and agritourism.

Evaluating the census data provides an indication of the growth and status of value-added agriculture practices in Tennessee and the U.S. This publication presents information from nine areas of the census related to value-added agriculture — the data are summarized in ***Appendix A*** and ***Appendix B***.

## Foreword

The way that food is produced and marketed in the U.S. has undergone some significant changes over the past few years. The demand for foods that consumers identify as “local,” “fresh” or “organic” has significantly increased. Changes in the way vegetables, fruit and meat are produced and sold reflect these changes in consumer demand. An increase in consumer demand for fresh fruits, vegetables and meats is only half of the story however. Farmers must successfully grow and market the food that consumers demand. The UT Extension Center for Profitable Agriculture has played a vital role in educating and preparing producers to manage changes in food production and marketing in order to meet these changing consumer demands. Center for Profitable Agriculture education programs, such as the Farmers Market Boot Camp, Direct Farm Marketing for Success and the Tennessee Value-Added Beef Program, have helped to better prepare Tennessee farmers to successfully meet changing consumer demands and have contributed to the growth in value-added opportunities for Tennessee producers that is reported in this document.

**-Robert Burns, Assistant Dean**  
*Agricultural and Natural Resources*  
*and Community and Economic Development*  
UT Extension

## **Value-Added Activities Reported by the Census**

In 1997, the Census of Agriculture included three new questions pertaining to value-added farm activities:

1. The number of farms with direct sales to consumers.
2. The statewide value of farm products sold directly to consumers.
3. The average sales per farm (farm products sold direct to consumers).

In 2007, the census added five new questions/calculations pertaining to value-added farm activities:

1. The number of farms offering agritourism and recreational services.
2. The statewide value of agritourism and recreational sales.
3. The average sales per farm (agritourism and recreational sales).
4. The number of farms producing and selling value-added products.
5. The number of farms marketing products through CSA (community supported agriculture) enterprises.

In the 2012 census, one additional question was added to capture information on the number of farms that marketed products direct to retail outlets.

## Farms with Direct Sales to Consumers for Human Consumption

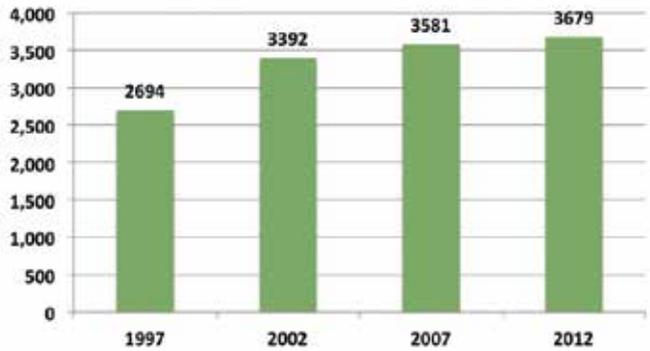
The number of farms with direct sales to consumers for human consumption has increased steadily since 1997. Overall, from 1997 to 2012 the number of Tennessee farms with direct sales to consumers increased from 2,694 to 3,679 farms. This 36.6 percent increase was paralleled by a 128.9 percent increase in the value of agricultural products sold directly to consumers. That is, from 1997 to 2012, the value of agricultural products sold by Tennessee farmers directly to consumers increased from \$8,380,000 to \$19,182,000. As shown in **Table 1**, the increase in both the number of farms selling direct to consumers and the value of such sales in Tennessee outpaced the U.S. average. The average value of direct sales per farm has steadily increased in Tennessee by 67.6 percent from 1997 to 2012. This is slightly lower than the U.S. average increase for the same time period of 69.4 percent. The average value of direct sales per farm in Tennessee in 2012 was \$5,214 compared to the U.S. average of \$9,063.

<b>Change from 1997 to 2012 in:</b>	<b>Tennessee</b>	<b>United States</b>
<i>Number of farms with direct sales to consumers</i>	<b>36.6%</b>	<b>30.1%</b>
<i>Value of farm products sold direct to consumers</i>	<b>128.9%</b>	<b>121.3%</b>
<i>Average value of farm products sold per farm</i>	<b>67.7%</b>	<b>69.4%</b>

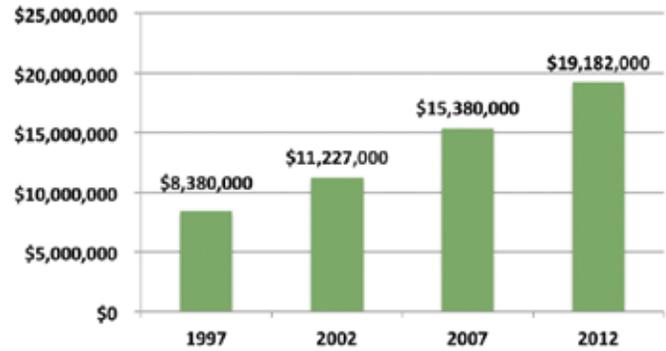
**Table 1.** Comparison of Tennessee and United States Average Change in the Number of Farms with Direct Sales, the Value of Products Sold Direct, and Value of Products Sold Per Farm from 1997 to 2012.

As shown in **Figure 1**, the largest increase in the number of farms with direct sales was from 1997 to 2002 when Tennessee increased from 2,694 to 3,392 – a 26 percent rate of growth. From 2002 to 2007 and from 2007 to 2012 the number of farms with direct sales increased at lower rates, 5.6 percent and 2.7 percent respectively.

**Figure 2** shows a steady increase from 1997 to 2012 in the value of farm products sold direct to consumers for human consumption.



**Figure 1.** Number of Tennessee Farms with Direct Sales to Consumers for Human Consumption from 1997 to 2012.



**Figure 2.** Value of Farm Products Sold Direct to Consumers for Human Consumption from 1997 to 2012.

In the 2012 Census of Agriculture, direct sales for human consumption was defined as those commodities sold directly to consumers for human consumption such as vegetables, fruit, eggs, milks, cattle, chickens, hogs and turkeys. Farmers were asked to only report commodities grown or raised by the operation and were asked to exclude crops, livestock, poultry or other products that were bought and resold within 30 days. Craft items such as birdhouses and woodwork items were also excluded.

### **Farms Offering Agritourism and Recreational Sales**

Beginning in 2007, the agriculture census captured data on agritourism and recreational services such as farm or winery tours, hayrides, hunting and fishing. From 2007 to 2012, the number of farms offering agritourism and recreational services in Tennessee increased by 20.8 percent (from 510 farms in 2007 to 616 farms in 2012). Interestingly, the value of agritourism and recreational sales increased by 83.1 percent over the same time period (from \$6,507,000 in 2007 to \$11,915,000 in 2012). Similarly, the average agritourism sales per farm increased from \$12,759 to \$19,342, which is a 51.6 percent increase.

While the number of farms in Tennessee offering these services increased less than the national average from 2007 to 2012, the increase in the value of sales and the increase in the value of sales per farm were significantly greater in Tennessee than the national average. The comparison of Tennessee's agritourism growth with the national average from 2007 to 2012 is shown in **Table 2**. The average value of agritourism sales per farm decreased by 12.5 percent for the U.S. while the average per farm value in Tennessee increased to \$19,342.

Change from 2007 to 2012 in:	Tennessee	United States
<i>Number of farms with agritourism and recreational sales</i>	<b>20.8%</b>	<b>42.0%</b>
<i>Value of agritourism and recreational sales</i>	<b>83.1%</b>	<b>24.23%</b>
<i>Average value of agritourism and recreational sales per farm</i>	<b>51.6%</b>	<b>-12.5%</b>

**Table 2.** Comparison of Tennessee and United States Average Increase in the Number of Farms with Agritourism and Recreational Services, the Value of Agritourism and Recreational Sales, and the Value of Agritourism and Recreational Sales per Farm from 2007 to 2012.

## Farms Producing and Selling Value-Added Products

The census defines value-added as crops, livestock or products such as beef jerky, fruit jams, jellies, preserves and floral arrangements. The number of Tennessee farms reporting value-added processing activities in 2012 was 3,551. This was an increase of 30.6 percent from 2007. With 3,551 farms reporting value-added processing activities, Tennessee ranked sixth nationwide in 2012. A total of 94,799 farms across the U.S. were involved with producing and selling value-added products. As shown in **Table 3**, with a 30.6 percent increase, Tennessee had a greater increase in the number of farms producing and selling value-added products from 2007 to 2012 than the U.S. average of 20.9 percent.



## Farms Marketing through CSA (Community Supported Agriculture) Enterprises

Beginning in 2007, the agriculture census reported the number of farms marketing products through CSA (community supported agriculture) enterprises. While the increase in the number of farms with CSAs in Tennessee from 2007 to 2012 was relatively small at just under 6 percent, the number of CSA farms nationwide was much less at 0.54 percent. As shown in Table 3, the number farms with CSA enterprises in Tennessee increased from 251 to 266 while the number across the country increased from 12,549 to 12,617.

Change from 2007 to 2012 in:	Tennessee	United States
<i>Number of farms producing and selling value-added products</i>	<b>30.6%</b>	<b>20.9%</b>
<i>Number of farms marketing products through CSA enterprises</i>	<b>5.98%</b>	<b>0.54%</b>

**Table 3.** Comparison of Tennessee and United States Average Increase in the Number of Farms Producing and Selling Value-Added Products and the Number of Farms Marketing Products through CSA Enterprises from 2007 to 2012.

## **Farms Marketing Products Direct to Retail Outlets**

The 2012 Census of Agriculture included a new measure related to value-added agriculture. In 2012, there were 1,102 farms in Tennessee that reported marketing products direct to retail outlets. This number indicates that 1.6 percent of all Tennessee farms sold products direct to retail outlets.

Nationwide, 49,043 farms reported marketing products direct to retailers, which is 2.3 percent of all farms in the U.S.

Marketing products direct to retail outlets was further defined in the census to include sales to restaurants, grocery stores, schools, hospitals or other businesses that in turn sell directly to consumers.

## **Organic Agriculture**

In addition to the data collected on value-added agriculture, direct marketing and agritourism, the agriculture census reported some information on organic agriculture in 2007 and 2012. This information is provided in **Table 4**.

It is important to note that actual questions used to capture organic production data differed for the 2007 and 2012 census. In 2012, the census captured data specific to three areas of organic production: (1) the number of Tennessee farms that are USDA Certified Organic, (2) the number of farms that are exempt from USDA Organic Certification and (3) the number of farms that have acres in transition to USDA Organic Certified.

The total number of growers in these three areas for 2012 was 122.

In 2007, the census questionnaire only identified the farms with organic sales and the value of those sales. Because of the difference in the way organic data was collected, it is difficult to directly compare the number of organic growers from 2007 to 2012. The data does show that the value of organic sales increased by 35.4 percent.

	2007	2012	Percent Change from '07 to '12
<i>Number of farms in Tennessee that are USDA Certified Organic</i>	--	36	--
<i>Number of Farms in Tennessee that are exempt from USDA Organic Certification</i>	--	51	--
<i>Number of Farms in Tennessee with acres in transition to USDA Organic Certified</i>	--	35	--
<i>Number of farms with organic sales</i>	137	--	--
<i>Value of organic sales</i>	\$1,126,000	\$1,525,000	35.4%

**Table 4.** Summary of Organic Agriculture Data for Tennessee Farm from the Census of Agriculture.

-- indicates that the data was not collected in the census.



**VEGETABLES**  
**FARM FRESH**



## Summary

The Census of Agriculture data provides insight into the status of the industry in Tennessee and across the country. Census data analysis indicates the role of value-added agriculture, direct marketing, organics and agritourism in the number of enterprises participating and the value of sales through these enterprises is growing over time in Tennessee.

### ***128.9% increase in the value of direct-to-consumer sales***

From 1997 to 2012, the number of Tennessee farms with direct sales to consumers increased 36.6 percent. In addition, the value of agricultural products sold by Tennessee farmers directly to consumers increased by 128.9 percent.

### ***83.1% increase in the value of agritourism and recreational sales***

Over the same time period, the number of farms offering agritourism and recreational services in Tennessee increased by 20.8 percent. The value of agritourism and recreational sales increased by 83.1 percent. Similarly, the average agritourism sales per farm increased by 51.6 percent. While the average value of agritourism sales per farm decreased by 12.5 percent for the U.S. from 2007 to 2012, the average per farm value in Tennessee increased by 51.6 percent.

### ***30.6% increase in the number of farms with value-added processing activities***

With 3,551 farms reporting value-added processing activities, Tennessee ranked sixth nationwide in 2012 with an increase of 30.6 percent from 2007. In 2012, there were 1,102 farms in Tennessee that reported marketing products direct to retail outlets, 1.6 percent of all Tennessee farms sold products direct to retail outlets.

**Appendix A.** Summary of Census of Agriculture Data Pertaining to Value-Added Activities by Tennessee Farmers.

-- indicates that the data was not collected in the census.

					Percent Change			
	1997	2002	2007	2012	'97 to '02	'02 to '07	'07 to '12	'97 to '12
<i>Number of farms with direct sales</i>	2,694	3,392	3,581	3,679	26.0%	5.6%	2.7%	36.6%
<i>Value of farm products sold directly to consumers</i>	\$8,380,000	\$11,227,000	\$15,380,000	\$19,182,000	34.0%	37.0%	24.7%	128.9%
<i>Average sales per farm (farm products sold direct)</i>	\$3,111	\$3,310	\$4,295	\$5,214	6.4%	29.8%	21.4%	67.7%
<i>Number of farms offering agritourism and recreational services</i>	--	--	510	616	--	--	20.8%	--
<i>Value of agritourism and recreational sales</i>	--	--	\$6,507,000	\$11,915,000	--	--	83.1%	--
<i>Average sales per farm in agritourism and recreational sales</i>	--	--	\$12,759	\$19,342	--	--	51.6%	--
<i>Number of farms producing and selling value-added products</i>	--	--	2,719	3,551	--	--	30.6%	--
<i>Number of farms marketing products through CSA (community supported agriculture) enterprises</i>	--	--	251	266	--	--	5.98%	--
<i>Number of farms marketing products direct to retail outlets</i>	--	--	--	1,102	--	--	--	--

**Appendix B.** Summary of Census of Agriculture Data Pertaining to Value-Added Activities by United States Farmers.

-- indicates that the data was not collected in the census.

					Percent Change			
	1997	2002	2007	2012	'97 to '02	'02 to '07	'07 to '12	'97 to '12
<i>Number of farms with direct sales</i>	110,639	116,733	136,817	144,530	5.5%	17.2%	5.6%	30.1%
<i>Value of farm products sold directly to consumers (\$ million)</i>	\$591,800	\$812,200	\$1,211,270	\$1,309,827	37.2%	49.1%	8.1%	121.3%
<i>Average sales per farm (farm products sold direct)</i>	\$5,349	\$6,958	\$8,853	\$9,063	30.0%	27.2%	2.4%	69.4%
<i>Number of farms offering agritourism and recreational services</i>	--	--	23,350	33,161	--	--	42.0%	--
<i>Value of agritourism and recreational sales (\$ million)</i>	--	--	\$566,834	\$704,038	--	--	24.2%	--
<i>Average sales per farm in agritourism and recreational sales</i>	--	--	\$24,276	\$21,231	--	--	-12.5%	--
<i>Number of farms producing and selling value-added products</i>	--	--	78,418	94,799	--	--	20.9%	--
<i>Number of farms marketing products through CSA (community supported agriculture) enterprises</i>	--	--	12,549	12,617	--	--	0.54%	--
<i>Number of farms marketing products direct to retail outlets</i>	--	--	--	49,043	--	--	--	--

## The Center for Profitable Agriculture

The Center for Profitable Agriculture is the department within UT Extension that assists farmers in analyzing and developing value-added enterprises. The Center generally defines value-added farm enterprises as those activities involving processing, packaging and marketing farm commodities and farm resources in ways that allow the farmer to capture a larger share of the consumer dollar. For example, Tennessee farmers add value by bottling milk from their dairy and selling directly to consumers from an on-farm store, manufacturing jams and jellies from peaches and selling at an on-farm retail market, and selling meat from their livestock directly to consumers at a farmers market. Value-added agriculture also includes directly marketing products such as fresh fruits and vegetables to consumers through a farmers market or Community Supported Agriculture (CSA) program and offering agritourism activities on the farm.

*Learn more about resources available through the Center for Profitable Agriculture at [ag.tennessee.edu/cpa](http://ag.tennessee.edu/cpa).*



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