

Tennessee Ag Stats 2015

Economic Contributions of Agriculture and Forestry in Tennessee

Jamey Menard, Burton C. English and Kimberly Jensen
Agri-Industry Modeling & Analysis Group (AIM-AG)
Department of Agricultural and Resource Economics

AIM-AG

Agri-Industry Modeling
& Analysis Group

AGRICULTURAL &
RESOURCE ECONOMICS

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AGRICULTURE
THE UNIVERSITY OF TENNESSEE



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Information for this summary document was taken from the Research Series 17-002 report titled "Economic Contributions of Agriculture and Forestry in Tennessee, 2015," found at: aimag.tennessee.edu

This study continues the series of previous biannual reports beginning in 2001 using IMPLAN data to analyze the economic contributions and importance of agricultural and forestry industrial complexes on Tennessee's economy.

Publication designed by Tina M. Johnson
Department of Agricultural and Resource Economics

\$81.8 billion

In 2015, the *agri-forestry industrial complex* directly and indirectly contributed an estimated \$81.8 billion to the Tennessee economy, accounting for multiplier effects, which was **12.8%** of the economic activity conducted within the state.

EMPLOYOS 351,164

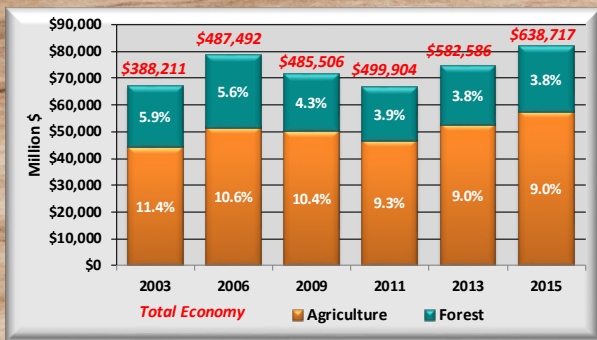
Agriculture accounted for:

9% OF THE STATE'S ECONOMY

\$57.6 BILLION IN OUTPUT

250,000 IN EMPLOYMENT

Tennessee's **agri-forestry industrial complex** includes the primary industries typically associated with agricultural and forestry operations such as growing crops, the breeding and feeding of livestock, along with the management and logging of trees. The **industrial complex** also includes both input-supplying industries and value-added subsectors comprised of food and beverage manufacturing, apparel and textiles, and forestry products manufacturing.



Growth in Total Agriculture and Forestry as a Percentage of Tennessee's Total Economy

(Source: IMPLAN Group, LLC, 2003-2015)

The following statistics are based upon a study using the Tennessee Agri-Industry Model (TN-AIM) and the Impact Analysis for Planning (IMPLAN) model's most recent data set (2015) to measure the economic contributions and importance of the agricultural and forestry industrial complex on Tennessee's economy. In addition to state-level analysis, TN-AIM was used to trace transactions for five trading regions within the state, in attempts to quantify the economic interdependencies within each region's economy for a given point in time. Not only were direct economic contributions on related input industries and resulting expenditures by households determined but also the indirect and induced impacts that economic activity in one region might have on the entire Tennessee economy (**multiplier effects**).

Multipliers measure the response of the economy to a change in production or demand. The concept of multipliers rests on the difference between the initial impact of the final demand and total **impacts** of a change.

- **Direct impacts** measure the responses of an industry given a change in final demand for that same industry.
- **Indirect impacts** represent the response by all local industries that occur as a result of a change in final demand for a specific industry.
- **Induced impacts** represent the response by all local industries caused by increased or decreased expenditures of new household income and interinstitutional transfers generated (lost) from the direct and indirect impacts of the change in final demand for a specific industry.

Output from TN-AIM includes descriptive measures of the economy including total industry output (a measure of economic activity), employment, labor income, and total value-added for 536 industries in the Tennessee economy.

- **Employment** represents total wage and salary employees, as well as self-employed jobs in a region, both full-time and part-time workers.
- **Labor income** is defined as employee compensation, as well as benefits and proprietary (owner-operator) income.
- **Total Industry output** is defined as the value of production by industry per year or a measure of overall economic activity by that industry.
- **Total value-added** is defined as all income to workers paid by employers; self-employed income; interests, rents, royalties, dividends and profit payments; and excise and sales taxes paid by individuals to businesses.

2015 CASH RECEIPTS FOR
CROP & LIVESTOCK COMMODITIES
TOTALLED

\$3.7 BILLION.

TENNESSEE RANKED IN THE UPPER
HALF OF THE NATION FOR MOST
MAJOR CROPS.

**Crops with the largest
cash receipts:**
Soybeans
Corn
Wheat
Hay
Tobacco
Cotton

2015 Tennessee Crop Commodity Rankings

Crops	Harvested Acreage	State Ranking	Cash Receipts	Percent of Total
	(Thousand Acres)		(Thousand \$)	
Hay (all types)	1,765	b	\$127,298	3.5
Soybeans	1,720	17	\$744,784	20.3
Corn for grain	730	18	\$397,055	10.8
Winter wheat	395	17	\$136,797	3.7
Cotton, lint	140	9	\$108,549	3.0
Corn for silage	40	29	--	--
All tobacco	20.8	4	\$117,494	3.2
Vegetables ^a	11.0	c	\$76,550	2.1

^aSnap beans, squash and tomatoes.

^bTennessee is ranked 10th for all hay, 33rd for alfalfa.

^cTennessee is ranked 4th for snap beans, 12th for squash and 4th for tomatoes.

CASH RECEIPTS FOR
2015 CROP COMMODITIES
TOTALLED

\$2.1 billion.

Of the 4.8 million acres harvested:

36.6% in hay

35.7% in soybeans

15.1% in corn for grain

8.2% in cotton

2.9% in wheat

2015 Tennessee Livestock Rankings

CASH RECEIPTS FOR
2015 LIVESTOCK COMMODITIES
TOTALLED

\$1.6 billion.

Livestock	Inventory (Number)	State Ranking	Cash Receipts ^a (Thousand \$)	Percent of Total
Broilers	185,200,000	16	\$528,101	33.7
All chickens ^b	2,495,000	31	\$69,571 ^c	4.4
Cattle & calves ^c	1,720,000	15	\$693,465 ^f	44.3
Beef cows ^c	873,000	12	--	--
Hogs ^b	220,000	22	\$63,251	4.0
Equine ^d	96,541	13	--	--
Milk cows ^c	47,000	29	\$138,556 ^e	8.8

^aFor 2015, cash receipts for all commodities were \$3.7 billion (\$2.1 billion for crops; \$1.6 billion for livestock and products).

^bDecember 2015 inventory.

^cJanuary 2016 inventory.

^d2012 Census of Agriculture.

^eIncludes eggs and farm chickens; excludes commercial broilers.

^fIncludes beef cows; milk cows; replacement heifers; steers and bulls 500 pounds or greater; and calves less than 500 pounds.

^cCash receipts from marketing milk and cream, plus value of milk used for home consumption and farm-churned butter.

TN RANKS

12th

in the U.S. for number of
beef cows on farms.

Tennessee's top cattle county is Greene County,
based on numbers for all cattle.

TN RANKS

15th

in the U.S. for the
number of cattle &
calves on farms.

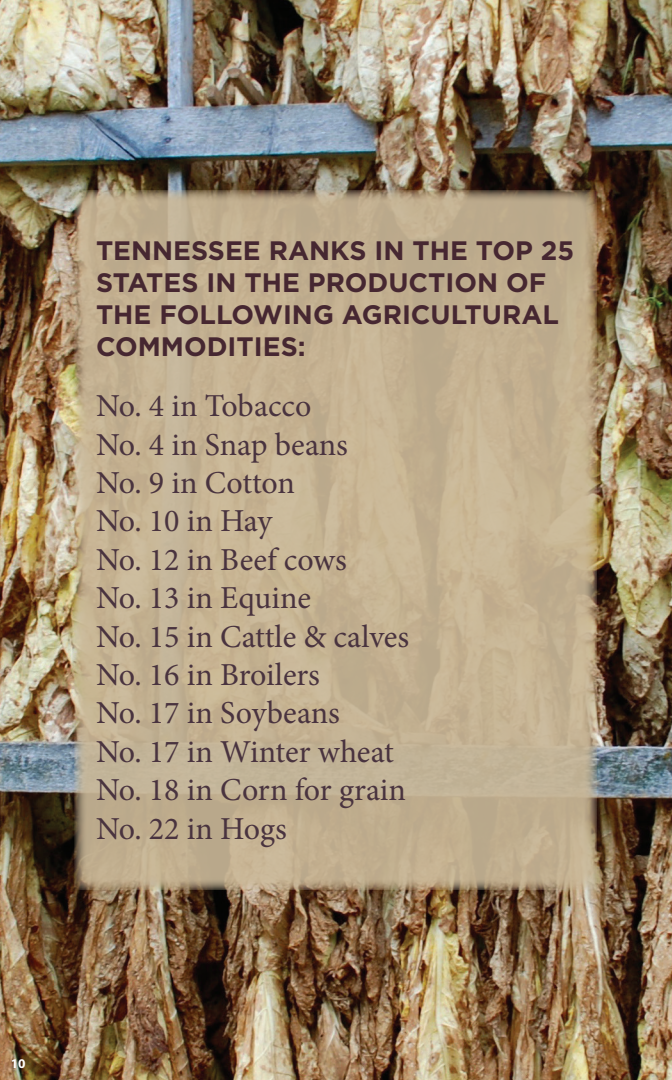


TN RANKS

16th

in the U.S. for the
number of broilers
on farms.





TENNESSEE RANKS IN THE TOP 25 STATES IN THE PRODUCTION OF THE FOLLOWING AGRICULTURAL COMMODITIES:

No. 4 in Tobacco
No. 4 in Snap beans
No. 9 in Cotton
No. 10 in Hay
No. 12 in Beef cows
No. 13 in Equine
No. 15 in Cattle & calves
No. 16 in Broilers
No. 17 in Soybeans
No. 17 in Winter wheat
No. 18 in Corn for grain
No. 22 in Hogs

Tennessee farmers earned the majority of their cash receipts from:

- Soybeans
- Beef cattle and calves
- Broilers
- Corn
- Miscellaneous crops
- Dairy products
- Wheat
- Hay
- Tobacco
- Cotton



In 2015, the average farm size was 162 acres.



Approximately 63% of all TN farms had sales in the \$1,000-\$9,999 range and 7% had sales of \$100,000 or more.



In 2015, 67,300 Tennessee farms used 10.9 million acres or close to 41% of the state's land base.

State Value of Agricultural Commodities & U.S. Market Share, 2015

Commodity	Value	U.S. Market Share
	(Million \$)	
Oilseed farming	\$736.0	2.1
Beef cattle farming	\$717.6	0.9
Poultry & egg production	\$627.1	1.3
Grain farming	\$598.9	0.9
All other crop farming*	\$471.3	1.9
Greenhouse, nursery & floriculture production	\$399.6	2.4
Dairy cattle & milk production	\$190.9	0.4
Tobacco farming	\$114.8	8.1
Cotton farming	\$113.7	2.3
Animal production, except cattle, poultry & eggs ^b	\$98.1	0.4
Vegetable & melon farming	\$78.7	0.4
Commercial hunting & trapping	\$35.9	2.4
Fruit farming	\$27.4	0.13
Tree nut farming	\$0.3	0.004

*Primarily hay/seed farming.

^bPrimarily hogs; sheep and goats; aquaculture; equine; and apiculture.

Source: IMPLAN Group, LLC, 2015

TN **8.1%** **Tobacco**
AGRICULTURAL **2.4%** **Greenhouse,**
COMMODITIES **WITH** **nursery &**
LARGEST U.S. **2.3%** **floriculture**
MARKET SHARES **2.1%** **Cotton**
Oilseeds

59.5%

The percentage of dairy cattle on farms between 100-499 head.

The dairy industry in Tennessee is comprised of many small farms but with medium-sized farms comprising the largest percentage of the state's dairy herd.

Dollar-Value Rankings of Agricultural Commodities in Tennessee

- Oilseed farming** (primarily soybeans)
- Beef cattle farming**
- Poultry & egg production**
- Grain farming** (barley, corn, oats, sorghum & wheat)
- All other crop farming** (primarily hay & seed)
- Greenhouse, nursery & floriculture production**
- Dairy cattle & milk production**
- Tobacco farming**
- Cotton farming**
- Animal production** (except cattle, poultry & eggs)
- Vegetable & melon farming**



**Predominant Hardwood
Species in TN**
White oak
Red oak
Hickory
Yellow poplar
Maple

**Predominant Softwood
Species in TN**
Loblolly pine
Virginia pine
Red cedar
Shortleaf pine

**Composition of Tennessee
forests is 89% hardwoods.**

52%
of TN
is covered
in forest.

More than
120
tree species
exist in
Tennessee.

**Tennessee is one of the top 3
hardwood lumber-producing states in the
U.S.**

14 MILLION ACRES
in forest.

OF THAT 14 MILLION ACRES,
83.3% privately owned
10.1% federal
6.6% state/local.

**Oak-hickory dominate forested TN acres at
9.9 MILLION.**

Average Annual Removals of Sawtimber Trees by Species Group & Owner Class, 2014

Tree Species Group	Other Federal	State	Private	Total ^a
Board Feet (international 1/4-inch rule)				
Loblolly & shortleaf pines			134,657,311 ^b	135,960,929 ^b
Other yellow pines	715,314 ^d		16,077,356 ^c	17,752,108 ^c
Eastern white & red pines		13,778,149 ^d		20,269,695 ^d
Cypress				9,094,378 ^d
Other eastern softwoods			6,188,204 ^d	6,188,204 ^d
Select white oaks	1,394,766 ^d	3,701,948 ^d	237,342,666 ^b	255,466,046 ^b
Select red oaks	914,276 ^d		66,499,605 ^b	67,413,880 ^b
Other white oaks	1,560,646 ^d	2,605,413 ^d	93,532,781 ^b	99,325,206 ^b
Other red oaks	11,403,532 ^d		183,371,737 ^b	241,875,105 ^b
Hickory	2,682,890 ^d		122,067,976 ^b	129,369,875 ^b
Hard maple			12,838,040 ^c	15,220,846 ^c
Soft maple	698,416 ^d		17,454,101 ^c	21,797,873 ^c
Beech			14,085,733 ^c	14,085,733 ^c
Sweetgum			51,200,023 ^c	56,976,263 ^c
Tupelo & blackgum	935,734 ^d		4,316,497 ^c	7,165,591 ^c
Ash			45,550,515 ^c	48,808,036 ^c
Basswood			9,840,946 ^c	9,840,946 ^c
Yellow poplar	9,430,404 ^d		178,827,098 ^b	212,281,242 ^b
Black walnut			5,803,656 ^c	7,693,315 ^c
Other eastern soft hardwoods			34,015,161 ^c	39,782,866 ^c
Other eastern hard hardwoods			573,788 ^d	1,032,582 ^d
TOTAL	15,273,220^d	20,770,119^c	1,248,021,342^b	1,417,400,718^b

FORESTRY

accounted for

3.8%

of the state's economy,
employed more than 101,337
Tennesseans,
and generated \$24.3 billion in output.

Tennessee's average annual sawtimber
removals on timberland were estimated at

**1.4 billion
board feet.**

88.1%

of the timber removals came from private
landowners.

^aTotals do not sum across columns.

^bPercent sampling error ≤ 25 percent.

^cPercent sampling error > 25 percent and ≤ to 50 percent.

^dPercent sampling error > 50 percent.

Source: USDA Forest Service, 2014



Nursery Operations

Tennessee ranked **6th** in number of nursery operations.

331
nursery
operations

\$128.7
million
in nursery stock
sold.

Major nursery categories include broadleaf and coniferous evergreens, deciduous shade and flowering trees, deciduous shrubs, fruit and nut plants and ornamental grasses.



Majority of nursery stock sold

Container grown at \$66.4 million
Balled & burlapped at \$43.6 million
Bare root at \$18.3 million
Other nursery products at \$0.4 million

7th in the U.S.
for total nursery sales.

Largest total sales:
Deciduous flowering at \$35.9 million
Shade trees at \$32.8 million

Tennessee's Wine Industry

Economic Activity of Wineries for Selected Southern States, 2015

State	Value
	(Million \$)
Virginia	\$630.8
North Carolina	\$364.8
Missouri	\$251.3
TENNESSEE	\$124.3
Georgia	\$68.1
Kentucky	\$67.4
South Carolina	\$22.6
Arkansas	\$13.6
Alabama	\$11.4
Mississippi	\$1.5

Source: IMPLAN Group, LLC, 2015

In addition to selling wine, many wineries may provide additional agritourism services to enhance revenues such as hosting weddings, festivals, meetings and other events.

While the Tennessee wine industry is experiencing significant growth, it is comprised of many small producers that are relatively new to the industry.

51%

of grapes must come from Tennessee vineyards to be considered in-state, local wine.

Tennessee ranked **4th** in wine economic activity, compared to other Southern states.

67

bonded wineries

Because of the tourism market, there is a major concentration of wineries in Sevier County.

TN's wine industry is valued at

\$124.4 MILLION.



Exports



FORESTRY EXPORTS

2015 exports of Tennessee forest products and furniture and related products outside the U.S. totaled

\$334.6 million.

\$115.1 million

export value of furniture & related products.

\$219.5 million

export value of wood products.

2015 Tennessee exports of forestry products totaled

\$64.5 million.

Tennessee's agricultural commodity exports totaled **\$1.5 billion.**

\$9.8 million
value of TN's exported livestock products.

\$772.5 million
value of TN's exported crop products.

Top 10 Commodities Exported, 2015

Commodity	Value
	(Million \$)
Soybeans	\$382.1
Other plant products	\$219.7
Cotton	\$109.4
Feeds & other grains	\$101.5
Soybean meal	\$97.1
Tobacco	\$83.0
Wheat	\$77.1
Corn	\$73.5
Vegetable oils	\$59.6
Beef & veal	\$56.7

Agricultural & Forestry Manufacturing Industries

TN National Market Share

	(Percent)
Food manufacturing	2.6
Beverage & tobacco	3.6
Textile mills	2.9
Textile product mills	2.0
Wood product manufacturing	2.7
Paper manufacturing	3.0
Furniture & related products	2.7

AGRICULTURAL INPUT SUPPLYING INDUSTRIES—
agricultural machinery and chemical products—
generated nearly

\$2.6 billion
in cash receipts annually.

Of the value-added agri-forestry sectors,
FOOD MANUFACTURING EMPLOYED
the largest share at

35,500.

**\$1.7
billion**

TN TEXTILE MILL PRODUCTS
SHIPPED
(includes product mills &
apparel)

\$10.2 billion

TN FOREST PRODUCTS SHIPPED
(includes manufacturing of wood
products, paper, furniture &
related products)

Manufacturing Statistics for Tennessee, 2015

Manufacturing Industry/NAICS Code	Employees	Payroll	Establishments	Value of Shipments
	(Number)	(Thousand \$)	(Number)	(Thousand \$)
Food (311)	35,581	\$1,623,641	335	\$20,090,125
Animal slaughtering/ processing (3116)	10,727	\$364,688	63	\$3,484,417
Beverage & tobacco products (312)	3,303	\$201,774	122	\$5,659,612
Textile mills (314)	2,433	\$107,077	47	\$899,006
Textile product mills(314)	1,893	\$68,507	133	\$524,638
Apparel (315)	2,774	\$81,253	91	\$302,149
Leather & allied products (316)	509	\$13,660	28	\$47,703
Wood products (321)	10,745	\$398,773	455	\$2,614,766
Paper (322)	10,471	\$631,979	132	\$5,595,151
Furniture & related products (337)	10,292	\$395,919	308	\$2,012,146
TOTAL*	78,001	\$3,522,583	1,651	\$37,744,996

*Values for animal slaughtering and processing are embedded in food manufacturing (311) values.

78,000

TENNESSEANS WERE EMPLOYED
with a
PAYROLL OF

\$3.5 billion.

In 2015, agricultural and forestry-related industries contributed a total of

\$52.5 billion

or 8.2% of the state's economy.

**DIRECT
TOTAL
VALUE
ADDED**
was
**\$14
BILLION,**
with
\$7.3 billion
in labor.

DIRECT EMPLOYMENT
in agricultural and forestry-
related industries was close
to
**174
THOUSAND**
or 4.6% of the workforce.

EMPLOYMENT

Agriculture

- *55.8% of workforce employed in primary industries* (crop and livestock commodities).
- *44.2% employed in secondary industries* (agricultural input-supplying industries, plus manufacturing).

Forestry

- *68.9% of the workforce was employed in secondary industries* (wood products manufacturing).
- *31.1% employed in primary industries* (commercial logging, pulp, paper and paperboard mills; sawmills; wood preservation; woodworking and paper machinery; and nursery/timber tract production).

Direct Economic Activity in Agriculture & Forestry

Sector	TIO ^a	Employment	Labor Income	TVA ^b
	(Million \$)	(Number)	(Million \$)	(Million \$)
All Sectors (Including Non-Agricultural and Non-Forestry):				
State ^c	638,717	3,813,166	204,751	317,144
Chattanooga	72,538	386,844	20,358	32,159
Knoxville	101,344	659,461	32,810	50,184
Memphis	153,441	941,720	50,397	78,786
Nashville	270,238	1,572,436	90,087	138,629
Tri-Cities	41,157	252,705	11,099	17,350
Agriculture & Forestry				
State ^c	52,455	173,622	7,311	14,063
Chattanooga	6,428	23,048	1,116	1,663
Knoxville	7,316	26,793	1,035	1,800
Memphis	20,408	42,086	2,601	5,318
Nashville	15,475	68,536	2,170	4,642
Tri-Cities	2,828	13,158	389	641

^aTotal Industry Output—annual value of production by industry.

^bTotal Value Added—income to workers paid by employers; self-employed income; interest, rents, royalties, dividends and profit payments; and excise and sales taxes paid by individuals to businesses.

^cState totals may not add due to rounding.

Note: Chattanooga, Knoxville, Memphis, Nashville and Tri-Cities are economic trading regions.

The largest value of output from both agriculture and forestry:

38.9 % from Memphis region
29.5% from Nashville region
13.9% from Knoxville region

Largest value of employment:

39.5% from Nashville region
24.2% from Memphis region
15.4% from Knoxville region

Direct Economic Activity in Agriculture

Sector	TIO	Employment	Labor Income	TVA
	(Million \$)	(Number)	(Million \$)	(Million \$)
Total Agriculture				
State	37,601	131,741	4,291	9,747
Chattanooga	4,156	16,542	694	1,086
Knoxville	5,408	19,816	595	1,242
Memphis	14,156	29,967	1,329	3,293
Nashville	11,986	54,912	1,440	3,712
Tri-Cities	1,895	10,505	232	414
Primary Agriculture^a				
State	4,423	73,557	877	1,622
Chattanooga	440	5,862	96	143
Knoxville	358	10,185	62	141
Memphis	1,478	14,871	323	541
Nashville	1,862	35,242	345	691
Tri-Cities	285	7,397	51	106
Secondary Agriculture^b				
State	33,178	58,184	3,414	8,126
Chattanooga	3,715	10,680	598	943
Knoxville	5,051	9,631	533	1,101
Memphis	12,678	15,096	1,006	2,752
Nashville	10,124	19,670	1,095	3,022
Tri-Cities	1,610	3,108	182	307

^aCrop and livestock commodities.

^bAgricultural input supplying industries, plus manufacturing.

Note: Chattanooga, Knoxville, Memphis, Nashville and Tri-Cities are economic trading regions.

Direct Economic Activity in Forestry

Sector	TIO	Employment	Labor Income	TVA
	(Million \$)	(Number)	(Million \$)	(Million \$)
Total Forestry				
State	14,855	41,881	3,020	4,316
Chattanooga	2,272	6,506	422	577
Knoxville	1,907	6,978	440	557
Memphis	6,252	12,120	1,271	2,024
Nashville	3,489	13,624	730	930
Tri-Cities	933	2,654	156	227
Primary Forestry^a				
State	6,608	13,010	1,291	2,065
Chattanooga	891	1,486	152	247
Knoxville	373	1,064	60	85
Memphis	4,138	5,882	839	1,408
Nashville	920	4,016	196	251
Tri-Cities	285	564	45	74
Secondary Forestry^b				
State	8,246	28,870	1,729	2,251
Chattanooga	1,382	5,020	270	330
Knoxville	1,534	5,914	381	472
Memphis	2,114	6,238	432	617
Nashville	2,569	9,608	535	679
Tri-Cities	648	2,090	112	153

^aCommercial logging; pulp, paper and paperboard mills; sawmills; wood preservation; sawmills, woodworking and paper machinery; and nursery/timber tract production.

^bWood products manufacturing.

Note: Chattanooga, Knoxville, Memphis, Nashville and Tri-Cities are economic trading regions.

State Level: Direct Economic Activity in Farm Production

Rank	Sector	TIO ^a	Employment	Labor Income	TVA ^b
		(Million \$)	(Number)	(Million\$)	(Million \$)
All Farm Production		4,183	68,451	800	1,479
1	Oilseed farming	736	3,452	127	223
2	Beef cattle farming	718	16,861	85	199
3	Poultry & egg production	627	2,231	72	125
4	Grain farming	599	5,592	36	152
5	All other crop farming	471	27,083	136	214
6	Greenhouse, nursery & floriculture production	400	5,338	144	216
7	Agricultural & forestry support activities	213	3,954	97	161
8	Dairy cattle & milk production	191	958	32	72
9	Tobacco farming	115	2,111	38	60
10	Cotton farming	114	872	34	57

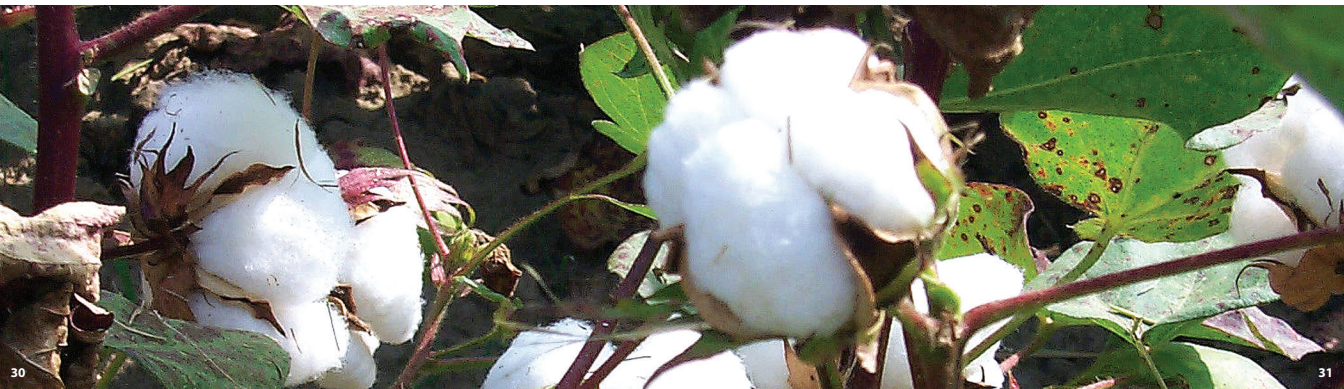
^aTotal Industry Output—annual value of production by industry.

^bTotal Value Added—income to workers paid by employers; self-employed income; interest, rents, royalties, dividends and profit payments; and excise and sales taxes paid by individuals to businesses.

State's Largest Output Value for Top 10 Ag Commodities

	(Percent)
Oilseed farming (primarily soybeans)	17.6
Beef cattle farming	17.2
Poultry & egg production	15.0
Grain farming	14.3
All other crop farming (primarily hay/seed farming)	11.3
Greenhouse, nursery & floriculture production	9.6
Agricultural & forestry support activities ^a	5.1
Dairy cattle & milk production	4.6
Cotton farming	2.7
Tobacco farming	2.7

^aIncludes support activities for crop production (i.e., cotton ginning; soil preparation, planting and cultivating; crop harvesting; and farm management services), animal production (i.e., breeding services, pedigree record services, boarding horses, dairy herd improvement activities, livestock spaying, and sheep dipping and shearing), and forestry (i.e., estimated timber, forest fire-fighting, forest pest control, and consulting on wood attributes and reforestation).



State's Largest Output Value for Secondary Agricultural Products

	Total Industry Output Value (Million \$)
Food manufacturing	21,810
Beverage manufacturing	4,201
Tobacco products manufacturing	3,014
Textile mills	1,266
Agricultural machinery	943
Agricultural chemicals	860
Textile product mills	505
Apparel manufacturing	458
Leather & allied products manufacturing	120
TOTAL	33,178

OUTPUT VALUES



State's Largest Output Value for Secondary Forest Products

	Total Industry Output Value (Million \$)
Paper manufacturing	4,417
Furniture & related products manufacturing	1,594
Other wood products manufacturing	746
Wood windows & doors & millwork	639
Manufactured homes manufacturing	521
Veneer, plywood & engineered wood products manufacturing	330
TOTAL	8,246

State's Largest Output Value for Primary Forest Products

	Total Industry Output Value (Million \$)
Paper mills	4,400
Sawmills	862
Paperboard mills	772
Commercial logging	294
Pulp mills	151
Wood preservation	61
Sawmills, woodworking & paper machinery	56
Forestry, forest products & timber-tract operations	11
TOTAL	6,608

Regional Impacts

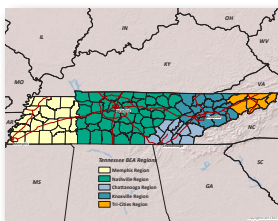
Importance of Agriculture to Regional Economies

Estimated Agri-Forestry Industrial Complex Contributions to the State's Economy

Location	Total Economic Activity	Agriculture	Forestry	Total Ag & Forestry	Proportion*
	(Million \$)	(Million \$)	(Million \$)	(Million \$)	(Ratio)
State	\$638,717	\$57,564	\$24,290	\$81,854	0.13
Chattanooga	\$72,538	\$5,930	\$3,358	\$9,288	0.13
Knoxville	\$101,344	\$8,076	\$3,019	\$11,096	0.11
Memphis	\$153,441	\$21,205	\$9,665	\$30,870	0.20
Nashville	\$270,238	\$18,568	\$5,913	\$24,481	0.09
Tri-Cities	\$41,157	\$2,511	\$1,275	\$3,787	0.09

*Total Economic Activity ÷ Total Ag & Forestry.
Source: IMPLAN Group, LLC, 2015.

From a regional perspective, the agri-forestry complex was more important to the economies of the Memphis and Chattanooga regions, relative to other regions in the state, followed by the Knoxville, Nashville and Tri-Cities regions. The Memphis region contributed the largest amount of economic activity for agriculture and forestry, **\$30.9 billion**, representing 20.1 percent of the total for the region.



Tennessee Agri-Industry Model Analysis Regions

Counties with Highest Levels of Agricultural Economic Activity

Region	(Percent)
Moore Nashville	83.4
Tipton Memphis	46.3
Loudon Knoxville	33.9
Meigs Chattanooga	25.2
Greene Tri-Cities	15.9

Counties with Highest Levels of Forestry Economic Activity

Region	(Percent)
Hardin Memphis	35.2
Grainger Knoxville	21.0
Wayne Nashville	17.0
Rhea Chattanooga	11.3
Greene Tri-Cities	5.7

Counties with Highest Levels of Combined Ag & Forestry Economic Activity

Region	(Percent)
Moore Nashville	83.7
Tipton Memphis	47.4
Loudon Knoxville	34.2
Meigs Chattanooga	26.0
Greene Tri-Cities	21.6

Tax Impacts

\$2.19 billion The estimated 2015 tax impacts at the state and local levels, as a result of direct and multiplier effects for agriculture and forestry.

- Agricultural tax revenues:**
 - \$1.6 billion, state/local
 - \$2.8 billion, federal
- Forestry tax revenues:**
 - \$0.6 billion, state/local
 - \$1.4 billion, federal

\$81.8 billion The estimated value that agriculture and forestry contributed to Tennessee's **\$638.7 billion** economy in 2015.

EMPLOYMENT in both agriculture and forestry totaled more than **351,000** workers.



Of that value, **71.1%** were affiliated with primary and secondary agriculture production, with **28.9%** from primary and secondary forest products production.

70.3% OF TOTAL IMPACTS came from primary and secondary agriculture, while forest operations and forest products contributed **29.7%**.

AIM-AG

Agri-Industry Modeling
& Analysis Group



**AGRICULTURAL &
RESOURCE ECONOMICS**

URIA INSTITUTE OF
AGRICULTURE
THE UNIVERSITY OF TENNESSEE

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