

# Kansas

## Estimated Economic Contribution of Agriculture and Agriculture Related Sectors

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Using the most recent IMPLAN data available (2017) adjusted for 2019, 68 agriculture and agriculture related sectors were analyzed to determine their overall contribution to the Kansas economy.<sup>1</sup>

These 68 sectors have a total direct output of approximately **\$ 46.9 billion** and support **134,057 jobs** in Kansas.

Running the model for all 68 sectors simultaneously produces the following results:

2019 Adjusted Agriculture, Food, and Food Processing Sector Contribution to Overall Kansas Economy					
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	% of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>
Direct Effect	134,057	7.0%	11,460,174,958	7.1%	46,384,549,519
Indirect Effect	56,598	2.9%	6,098,781,727	3.8%	12,080,816,993
Induced Effect	54,884	2.8%	4,221,207,037	2.6%	7,266,713,167
<b>Total Effect</b>	<b>245,539</b>	<b>12.7%</b>	<b>21,780,163,722</b>	<b>13.4%</b>	<b>65,732,079,679</b>

As shown in the above table, agriculture and agriculture related industries support **245,539 jobs, or 12.7%** of the entire workforce in the state. The total final sales of all products in these sectors is approximately **\$ 65.7 billion**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 68 sectors is approximately **\$ 21.8 billion, or 13.4% of the GRP**.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales

<sup>5</sup> Output = intermediate inputs + value added

The following tables document top industries affected by employment and output, as well as a listing of all industries that were analyzed.

### Top 10 Sectors by Employment

In the top ten by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 42,801 employees. This table also shows the amount of jobs that are created by the agriculture industry in Kansas.

Description	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	42,801.6	8,281,329,288.4
Wholesale trade	11,413.2	2,604,521,402.0
Animal, except poultry, slaughtering	11,151.7	7,832,767,277.6
Landscape and horticultural services	10,974.1	712,975,467.4
Grain farming	9,041.7	4,202,572,254.9
Support activities for agriculture and forestry	8,863.6	489,190,182.1
Truck transportation	7,707.9	1,287,383,768.6
Meat processed from carcasses	6,900.4	3,611,849,226.7
Real estate	6,611.4	1,189,425,039.3
Farm machinery and equipment manufacturing	4,431.3	1,753,688,715.1

### Top 10 Sectors by Output

The Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming industry directly contributes approximately \$ 8.3 billion to the Kansas economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Description	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	42,801.6	8,281,329,288.4
Animal, except poultry, slaughtering	11,151.7	7,832,767,277.6
Grain farming	9,041.7	4,202,572,254.9
Meat processed from carcasses	6,900.4	3,611,849,226.7
Dog and cat food manufacturing	2,443.9	3,419,976,618.5
Wholesale trade	11,413.2	2,604,521,402.0
Other animal food manufacturing	1,363.7	1,799,894,926.9
Farm machinery and equipment manufacturing	4,431.3	1,753,688,715.1
Oilseed farming	1,796.4	1,713,614,375.5
Flavoring syrup and concentrate manufacturing	490.2	1,424,062,987.8

Below is a summary of all sectors included in this analysis with employment levels and output level. These values can tell how many jobs are represented by each sector and the amount of final sales they contributed to the Kansas economy.

<b>Description</b>	<b>Employment</b>	<b>Output</b>
Oilseed farming	1,834.99	1,713,614,379.88
Grain farming	9,236.06	4,202,572,265.63
Vegetable and melon farming	112.31	19,204,000.47
Fruit farming	152.94	10,361,904.14
Tree nut farming	61.40	8,789,097.79
Greenhouse, nursery, and floriculture production	618.32	73,087,585.45
Cotton farming	323.27	68,689,002.99
All other crop farming	3,826.49	280,982,055.66
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	43,843.96	8,281,329,101.56
Dairy cattle and milk production	1,441.68	590,823,974.61
Poultry and egg production	104.89	73,559,524.54
Animal production, except cattle and poultry and eggs	4,474.00	610,004,089.36
Commercial logging	236.59	6,735,587.60
Commercial hunting and trapping	387.56	4,571,575.64
Support activities for agriculture and forestry	8,954.38	489,190,185.55
Dog and cat food manufacturing	2,548.84	3,419,976,562.50
Other animal food manufacturing	1,422.32	1,799,894,897.46
Flour milling	953.34	1,172,115,234.38
Wet corn milling	30.01	56,026,794.43
Soybean and other oilseed processing	194.75	899,698,730.47
Fats and oils refining and blending	319.22	488,700,500.49
Breakfast cereal manufacturing	123.49	97,269,454.96
Nonchocolate confectionery manufacturing	73.97	29,882,860.18
Chocolate and confectionery manufacturing from cacao beans	163.33	110,634,918.21
Confectionery manufacturing from purchased chocolate	1,381.32	470,717,956.54
Frozen fruits, juices and vegetables manufacturing	61.59	25,983,922.96
Frozen specialties manufacturing	1,218.45	445,477,203.37
Canned fruits and vegetables manufacturing	185.49	86,402,442.93
Dehydrated food products manufacturing	67.85	28,862,894.06
Fluid milk manufacturing	302.80	220,740,875.24
Dry, condensed, and evaporated dairy product manufacturing	370.39	518,272,583.01
Animal, except poultry, slaughtering	11,399.42	7,832,767,578.13
Meat processed from carcasses	7,053.66	3,611,849,365.23
Rendering and meat byproduct processing	124.83	59,668,003.08
Poultry processing	29.76	8,403,494.83
Bread and bakery product, except frozen, manufacturing	3,425.92	456,826,721.19
Frozen cakes and other pastries manufacturing	117.31	18,853,767.40
Cookie and cracker manufacturing	417.42	156,085,586.55
Dry pasta, mixes, and dough manufacturing	252.55	159,828,475.95
Tortilla manufacturing	154.49	31,854,000.09
Roasted nuts and peanut butter manufacturing	50.82	31,153,623.58
Other snack food manufacturing	783.51	407,030,303.96

Coffee and tea manufacturing	80.64	46,470,478.06
Flavoring syrup and concentrate manufacturing	499.59	1,424,062,988.28
Spice and extract manufacturing	695.72	409,811,950.68
All other food manufacturing	1,965.21	680,617,126.46
Bottled and canned soft drinks & water	669.02	484,871,215.82
Breweries	171.62	69,989,433.29
Wineries	125.07	36,340,259.55
Distilleries	31.84	27,554,668.43
Fiber, yarn, and thread mills	12.48	3,560,869.46
Narrow fabric mills and schiffli machine embroidery	41.86	6,167,049.41
Knit fabric mills	10.65	1,653,205.28
Leather and hide tanning and finishing	67.23	21,315,490.72
Other leather and allied product manufacturing	62.71	5,930,542.47
Sawmills	49.31	12,882,715.23
Paper mills	29.90	23,103,450.78
Paperboard mills	147.01	121,418,174.74
Nitrogenous fertilizer manufacturing	245.18	264,405,487.06
Fertilizer mixing	113.84	62,811,698.91
Pesticide and other agricultural chemical manufacturing	67.94	84,450,569.15
Farm machinery and equipment manufacturing	4,480.27	1,753,688,720.70
Lawn and garden equipment manufacturing	1,293.78	604,300,964.36
Food product machinery manufacturing	640.11	198,067,306.52
Sawmill, woodworking, and paper machinery	26.45	6,501,211.17
All other industrial machinery manufacturing	1,002.71	261,998,718.26
Veterinary services	4,385.81	455,110,473.63
Landscape and horticultural services	11,099.09	712,975,463.87

All 105 counties in Kansas have IMPLAN models and an agricultural contribution summary report. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of the contribution of production agriculture and processing to Kansas, the retail sector was omitted. Furthermore, animal health pharmaceuticals were not included in the model due to the lack of availability of data.