

Kansas

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

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Using the most recent IMPLAN data available (2013) adjusted for 2015, 66 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Kansas economy.¹

These 66 sectors have a total direct output of approximately **\$ 46.2 billion** and support **126,652.4 jobs** in Kansas. Running the model for all 66 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Kansas Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	% of Gross Regional Product ⁴	Output ⁵	% of Gross Regional Product
Direct Effect	126,652.4	7%	11,778,767,228.0	8%	46,227,283,403.8	32%
Indirect Effect	53,338.5	3%	5,233,795,881.6	4%	10,164,713,133.0	7%
Induced Effect	49,943.1	3%	3,612,106,737.5	2%	6,397,867,936.1	4%
Total Effect	229,934.1	12%	20,624,669,847.1	14%	62,789,864,472.9	43%

As shown in the above table, agriculture, food, and food processing supports **229,934.1 jobs, or 12%** of the entire workforce in the county. These industries provide a total economic contribution of approximately **\$ 62.8 billion, roughly 43% of Gross Region Product (GRP)**.

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 66 agriculture, food, and food processing sectors is approximately \$ 20.6 billion, or 14% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 14% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² 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.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

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 25,441.2 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	25,441.2	7,772,995,100.7
Grain farming	15,034.7	5,227,528,013.9
Animal, except poultry, slaughtering	15,000.8	9,145,575,401.7
Wholesale trade	11,035.3	2,490,443,828.1
All other crop farming	10,753.3	1,098,793,861.5
Support activities for agriculture and forestry	8,358.9	506,202,612.3
Landscape and horticultural services	7,622.6	535,717,639.4
Truck transportation	7,465.6	1,125,567,062.2
Animal production, except cattle and poultry and eggs	6,198.6	638,407,469.3
Real estate	6,108.5	982,999,980.6

The Animal, except poultry, slaughtering industry directly contributes approximately \$ 9.15 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
Animal, except poultry, slaughtering	15,000.8	9,145,575,401.7
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	25,441.2	7,772,995,100.7
Grain farming	15,034.7	5,227,528,013.9
Farm machinery and equipment manufacturing	5,443.5	3,382,287,221.6
Dog and cat food manufacturing	1,987.6	2,533,357,413.8
Wholesale trade	11,035.3	2,490,443,828.1
Other animal food manufacturing	1,265.7	1,898,629,388.4
Oilseed farming	1,076.2	1,618,008,112.9
Meat processed from carcasses	3,355.1	1,616,635,778.7
Flour milling	801.6	1,235,386,814.0

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to the Kansas economy.

Description	Employment	Output
Oilseed farming	1,090.99	1,618,008,056.64
Grain farming	15,241.89	5,227,527,832.03
Vegetable and melon farming	118.44	17,112,375.26
Tree nut farming	53.41	9,828,842.16
Greenhouse, nursery, and floriculture production	664.64	59,028,629.30
Cotton farming	69.78	18,014,005.66
All other crop farming	10,901.54	1,098,793,823.24
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	25,112.39	7,772,995,117.19
Dairy cattle and milk production	3,458.73	592,263,977.05
Poultry and egg production	193.36	67,267,784.12
Animal production, except cattle and poultry and eggs	6,118.51	638,407,470.70
Commercial logging	160.39	10,346,955.30
Commercial hunting and trapping	329.48	15,063,951.49
Other chemical and fertilizer mineral mining	130.93	42,958,221.44
Dog and cat food manufacturing	2,020.50	2,533,357,421.88
Other animal food manufacturing	1,286.62	1,898,629,394.53
Flour milling	823.77	1,235,386,840.82
Malt manufacturing	11.46	19,028,564.45
Wet corn milling	28.15	61,801,460.27
Soybean and other oilseed processing	181.44	915,912,170.41
Fats and oils refining and blending	275.09	553,899,658.20
Breakfast cereal manufacturing	73.38	63,147,583.01
Nonchocolate confectionery manufacturing	2.86	1,729,911.57
Chocolate and confectionery manufacturing from cacao beans	2.62	2,783,461.81
Confectionery manufacturing from purchased chocolate	1,316.64	437,031,707.76
Frozen fruits, juices and vegetables manufacturing	15.54	6,797,537.33
Frozen specialties manufacturing	1,553.53	495,896,026.61
Canned fruits and vegetables manufacturing	135.62	65,912,231.45
Canned specialties	26.12	19,543,615.34
Dehydrated food products manufacturing	28.39	11,863,769.53
Fluid milk manufacturing	327.21	244,853,317.26
Dry, condensed, and evaporated dairy product manufacturing	7.17	10,404,884.34
Animal, except poultry, slaughtering	15,362.94	9,145,575,195.31
Meat processed from carcasses	3,436.10	1,616,635,742.19
Rendering and meat byproduct processing	120.29	73,536,170.96
Poultry processing	16.80	4,262,400.15
Bread and bakery product, except frozen, manufacturing	2,748.49	309,600,524.90
Frozen cakes and other pastries manufacturing	124.25	17,202,930.45
Cookie and cracker manufacturing	308.74	110,379,943.85
Dry pasta, mixes, and dough manufacturing	232.46	149,482,849.12
Tortilla manufacturing	153.06	31,097,562.79
Roasted nuts and peanut butter manufacturing	28.55	18,121,215.82
Other snack food manufacturing	668.48	458,800,018.31

Coffee and tea manufacturing	45.85	32,811,382.29
Flavoring syrup and concentrate manufacturing	401.73	1,065,095,214.84
Mayonnaise, dressing, and sauce manufacturing	56.58	40,518,459.32
Spice and extract manufacturing	583.71	344,503,723.14
All other food manufacturing	1,673.11	566,949,523.93
Bottled and canned soft drinks & water	529.33	418,382,385.25
Breweries	19.19	17,119,314.19
Wineries	54.62	16,336,128.23
Distilleries	17.94	22,519,010.54
Fiber, yarn, and thread mills	8.23	2,348,739.62
Sawmills	40.71	9,452,235.22
Paper mills	15.34	9,781,665.80
Paperboard mills	180.35	118,569,282.53
Nitrogenous fertilizer manufacturing	156.55	296,403,808.59
Phosphatic fertilizer manufacturing	6.08	12,294,816.97
Fertilizer mixing	86.26	61,369,575.50
Pesticide and other agricultural chemical manufacturing	54.61	80,340,385.44
Farm machinery and equipment manufacturing	5,645.47	3,382,287,353.52
Lawn and garden equipment manufacturing	698.31	329,078,186.04
Food product machinery manufacturing	537.39	144,219,833.37
All other industrial machinery manufacturing	986.81	249,451,339.72
Veterinary services	5,365.15	326,609,008.79
Landscape and horticultural services	7,973.05	535,717,651.37

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 what production agricultural and processing contributes to Kansas, the retail sector was omitted.

****Calculations Including Food Retail and Restaurants****

Estimated Impact of Agriculture, Food, Food Processing, and Food Retail Sectors on the Kansas Economy

The agriculture industry makes up a substantial part of Kansas’s overall economy. 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 what production agricultural and processing contributes to Kansas, the retail sector was omitted. If we were to include the food retail sector our contribution to agriculture increase to **72.8 billion**, represent **20% of the jobs**, and increase total value added to **\$ 26.2 billion** in Kansas.

Agriculture, Food, Food Processing, and Food Retail Sectors Contribution to Overall Kansas Economy							
Impact Type ⁶	Employment	% Total Employment	Labor Income	Total Value Added ⁷	% of Gross Regional Product ⁸	Output ⁹	% of Gross Regional Product
Direct Effect	245,283.5	13%	8,662,892,464	15,567,260,763	11%	53,096,644,486	36%
Indirect Effect	64,062.2	3%	3,689,128,723	6,230,221,683	4%	11,932,407,557	8%
Induced Effect	55,457.5	3%	2,437,825,871	4,399,940,150	3%	7,778,960,165	5%
Total Effect	364,803.2	20%	14,789,847,058	26,197,422,596	18%	72,808,012,208	50%

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