

Kansas

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

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Using the most recent IMPLAN data available (2014) adjusted for 2016, 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 **\$ 47.3 billion** and support **126,012 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	126,012.8	6.69%	13,904,354,139	9.22%	47,310,727,295	31.38%
Indirect Effect	52,676.9	2.80%	5,153,474,269	3.42%	9,705,412,677	6.44%
Induced Effect	56,036.7	2.97%	4,209,789,613	2.79%	7,553,638,396	5.01%
Total Effect	234,726.4	12.46%	23,267,618,021	15.43%	64,569,778,638	42.83%

As shown in the above table, agriculture, food, and food processing supports **234,726 jobs, or 12.46%** of the entire workforce in the state. These industries provide a total economic contribution of approximately **\$ 64.6 billion, roughly 42.8% of the total economy.**

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 **\$ 23.3 billion, or 15.43% of the GRP.** This indicates that personal income, business income, and taxes generated by these sectors account for **15.43% 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 47,968.8 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	47,968.8	10,735,266,579
Landscape and horticultural services	10,810.5	611,837,450
Animal, except poultry, slaughtering	10,611.3	6,535,696,925
Wholesale trade	10,485.7	2,458,539,149
Meat processed from carcasses	7,487.6	3,646,345,785
Grain farming	7,304.9	4,017,579,485
Farm machinery and equipment manufacturing	6,180.2	3,656,413,676
Truck transportation	5,802.9	983,888,370
Support activities for agriculture and forestry	5,673.3	475,313,121
Real estate	4,804.7	907,414,623

The Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming industry directly contributes approximately \$ 10.74 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	47,968.8	10,735,266,579
Animal, except poultry, slaughtering	10,611.3	6,535,696,925
Grain farming	7,304.9	4,017,579,485
Farm machinery and equipment manufacturing	6,180.2	3,656,413,676
Meat processed from carcasses	7,487.6	3,646,345,785
Dog and cat food manufacturing	2,132.1	2,819,482,413
Wholesale trade	10,485.7	2,458,539,149
Other animal food manufacturing	1,401.7	2,053,350,091
Soybean and other oilseed processing	246.2	1,320,504,854
Oilseed farming	1,083.9	1,287,414,107

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	1,083.9	1,287,414,107
Grain farming	7,304.9	4,017,579,485
Vegetable and melon farming	54.1	13,619,926
Fruit farming	83.8	8,768,421
Tree nut farming	6.4	1,370,658
Greenhouse, nursery, and floriculture production	241.3	42,191,991
Cotton farming	65.4	20,700,297
All other crop farming	4,024.5	390,712,799.07
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	47,968.8	10,735,266,579
Dairy cattle and milk production	1,331.3	743,084,837
Poultry and egg production	79.5	73,418,487
Animal production, except cattle and poultry and eggs	4,798.5	784,064,940
Commercial logging	214.9	12,865,205
Commercial hunting and trapping	447.0	10,373,332
Other chemical and fertilizer mineral mining	121.0	26,531,577
Dog and cat food manufacturing	2,132.1	2,819,482,413
Other animal food manufacturing	1,401.7	2,053,350,091
Flour milling	799.0	1,225,967,381
Malt manufacturing	33.3	61,413,939
Wet corn milling	27.4	69,419,417
Soybean and other oilseed processing	246.2	1,320,504,854
Fats and oils refining and blending	263.9	537,698,658
Breakfast cereal manufacturing	88.2	67,830,550
Nonchocolate confectionery manufacturing	6.5	3,055,661
Chocolate and confectionery manufacturing from cacao beans	114.8	99,786,373
Confectionery manufacturing from purchased chocolate	1,462.8	448,605,212
Frozen fruits, juices and vegetables manufacturing	36.1	17,966,044
Frozen specialties manufacturing	1,348.4	453,086,919
Canned fruits and vegetables manufacturing	183.9	95,390,009
Dehydrated food products manufacturing	84.8	39,498,068
Fluid milk manufacturing	321.2	250,183,519
Dry, condensed, and evaporated dairy product manufacturing	9.6	16,452,493
Animal, except poultry, slaughtering	10,611.3	6,535,696,925
Meat processed from carcasses	7,487.6	3,646,345,785
Rendering and meat byproduct processing	127.7	75,740,381
Poultry processing	16.7	5,059,800
Bread and bakery product, except frozen, manufacturing	3,056.9	403,378,737
Frozen cakes and other pastries manufacturing	125.9	19,821,660
Cookie and cracker manufacturing	339.8	117,845,019
Dry pasta, mixes, and dough manufacturing	252.9	159,693,948
Tortilla manufacturing	133.2	29,806,914
Roasted nuts and peanut butter manufacturing	43.0	24,683,134
Other snack food manufacturing	878.0	587,987,602

Coffee and tea manufacturing	82.0	49,272,582
Flavoring syrup and concentrate manufacturing	248.5	674,914,847
Mayonnaise, dressing, and sauce manufacturing	88.5	58,381,438
Spice and extract manufacturing	567.8	335,128,719
All other food manufacturing	1,780.5	589,787,773
Bottled and canned soft drinks & water	527.7	423,939,988
Breweries	39.9	32,516,416
Wineries	90.7	21,603,194
Distilleries	39.6	42,018,263
Fiber, yarn, and thread mills	5.3	1,627,712
Sawmills	53.5	14,222,551
Paper mills	26.1	20,605,312.35
Paperboard mills	127.3	106,182,385
Nitrogenous fertilizer manufacturing	124.4	213,913,583
Phosphatic fertilizer manufacturing	2.7	9,813,766
Fertilizer mixing	96.72	79,143,575
Pesticide and other agricultural chemical manufacturing	93.2	182,044,535
Farm machinery and equipment manufacturing	6,180.2	3,656,413,676
Lawn and garden equipment manufacturing	70.8	37,413,603
Food product machinery manufacturing	499.1	148,534,614
All other industrial machinery manufacturing	1,025.6	278,620,132
Veterinary services	3,978.9	369,077,017
Landscape and horticultural services	10,810.5	611,837,450

All 105 counties in Kansas have Implan models and agriculture contribution summary. 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. Furthermore, animal health pharmaceuticals were not included in the model due to the lack of availability of data.