

Overview

The Kansas Department of Agriculture’s Economist creates annual economic contribution reports to estimate the impact of agriculture on the Kansas economy. The purpose of these reports is to provide information to stakeholders, policymakers, and the general public. In this report, the model analyzes the effects of agriculture on the Lyon County, Kansas, economy. For the estimated current year (2024), 30 agriculture and agriculture-related sectors directly contribute \$2.87 billion in output and 4,634 jobs to the Lyon County, Kansas, economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$3.26 billion in output, 6,695 jobs and 43% of the total Gross Regional Product (GRP).

Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

Results

In this model, the 30 agriculture and agriculture-related sectors have a total direct output of \$2.87 billion and account for 4,634 jobs in Lyon County, as shown in the following table:

Table 1: Agriculture and Agriculture-Related Sectors’ Contribution to the Lyon County Economy

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	4,634	22%	\$673,956,000	34%	\$2,866,749,000
Indirect Effect	1,100	5%	\$111,417,000	6%	\$251,055,000
Induced Effect	961	5%	\$80,759,000	4%	\$145,021,000
Total Effect	6,695	31%	\$866,133,000	43%	\$3,262,827,000

Note: Individual effects may not equal the total effect due to rounding.

The agriculture and agriculture-related sectors provide a total estimated impact of \$3.26 billion in output. These sectors also support a total of 6,695 jobs, or 31% of the county’s entire workforce. Another metric used to calculate the importance of sectors in the economy is their value added as a percentage of the Gross Regional Product. Total value added by the 30 agriculture and agriculture-related sectors is \$866 million, or 43% of the Gross Regional Product.

Top Ten Sectors by Output

The table below shows Lyon County’s top ten sectors by output, including direct, indirect and induced effects. The *dog and cat food manufacturing* sector is the top contributor in output to the Lyon County economy, with \$1.44 billion in total output.

Table 2: Top Ten Sectors by Output, Lyon County

Sector	Total Output
Dog and cat food manufacturing	\$1,440,634,000
Meat processed from carcasses	\$757,736,000
Soybean and other oilseed processing	\$238,085,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$111,804,000
Other animal food manufacturing	\$75,553,000
Confectionery manufacturing from purchased chocolate	\$71,312,000
Oilseed farming	\$44,469,000
Distilleries	\$43,790,000
Wholesale - Other nondurable goods merchant wholesalers	\$36,433,000
Truck transportation	\$32,573,000

Top Ten Sectors by Employment

Of the agriculture and agriculture-related sectors, *dog and cat food manufacturing* supports the most jobs in the county with 1,477 jobs. Table 3 illustrates the top ten sectors by total employment, including direct, indirect, and induced effects in Lyon County.

Table 3: Top Ten Sectors by Employment, Lyon County

Sector	Total Employment
Dog and cat food manufacturing	1,477.51
Meat processed from carcasses	1,353.70
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	701.78
Support activities for agriculture and forestry	256.00
Confectionery manufacturing from purchased chocolate	170.61
Truck transportation	142.21
All other crop farming	117.92
Grain farming	111.72
Bread and bakery product, except frozen, manufacturing	107.58
Wholesale - Other nondurable goods merchant wholesalers	105.67

All Direct Agriculture Sectors

Table 4 is a summary of agriculture sectors represented with output and employment levels. These values estimate the value of output and the jobs these agriculture sectors support in the Lyon County economy. Generally, this analysis includes three categories: production, manufacturing or processing, and services. Note, the model does not include ethanol production nor wholesale and retail sales of final products.

Table 4: All Direct Agriculture Sectors, Lyon County

Sector	Total Output	Total Employment
Dog and cat food manufacturing	\$1,440,634,000	1,477.51
Meat processed from carcasses	\$757,736,000	1,353.70
Soybean and other oilseed processing	\$238,085,000	38.06
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$111,804,000	701.78
Other animal food manufacturing	\$75,553,000	55.69
Confectionery manufacturing from purchased chocolate	\$71,312,000	170.61
Oilseed farming	\$44,469,000	37.30
Distilleries	\$43,790,000	36.43
Grain farming	\$27,945,000	111.72
Bread and bakery product, except frozen, manufacturing	\$23,143,000	107.58
Landscape and horticultural services	\$7,223,000	73.41
Support activities for agriculture and forestry	\$6,226,000	256.00
All other crop farming	\$4,507,000	117.92
Veterinary services	\$3,584,000	48.44
Wineries	\$3,150,000	9.41
Frozen cakes and other pastries manufacturing	\$1,345,000	13.69
Sawmills	\$1,201,000	2.46
Animal production, except cattle and poultry and eggs	\$1,107,000	9.31
Other snack food manufacturing	\$1,054,000	1.66
Roasted nuts and peanut butter manufacturing	\$804,000	1.63
Animal, except poultry, slaughtering	\$576,000	0.79
Poultry and egg production	\$418,000	0.79
Rendering and meat byproduct processing	\$414,000	0.80
Commercial logging	\$225,000	2.94
Forestry, forest products, and timber tract production	\$127,000	1.56
Greenhouse, nursery, and floriculture production	\$93,000	0.98
Fruit farming	\$71,000	0.65
Tree nut farming	\$60,000	0.53
Commercial hunting and trapping	\$50,000	1.06
Vegetable and melon farming	\$30,000	0.24

Methodology

Using the economic software IMPLAN, the equilibrium displacement model calculates the estimated output and employment of all 546 different economic sectors if the current economy experiences no shocks within the agriculture and agriculture-related industries. IMPLAN sectors are based on North American Industry Classification System (NAICS) codes. The results of this model are broken down into direct, indirect and induced effects, and the IMPLAN framework avoids double counting. All agriculture and agriculture-related sectors represented in this model use the most recent IMPLAN data available (2022), adjusted for 2024 dollars. For this model, key statistics are defined as follows: total employment refers to the annual average of the sum of full and part time jobs held attributed to the 30 agricultural sectors, total gross regional product is the sum of the value added of all industries across the region, and total output is the total annual value of production for an industry or area.

Notes and Glossary

These results are based on estimated production and employment numbers, along with estimated potential sector-, industry- and economy-wide effects. Therefore, these results will differ from actual events.

Due to confidentiality policies that exist within several agencies from which IMPLAN collects their data, some sectors in some regions may not have all data available.

The model provides results in relation to the agriculture and agriculture-related sectors. These results are not equal to the total effects of all 546 sectors but rather the total effects relative to agriculture.

The following terms are used throughout this report:

- *Direct effect*: the contribution from agricultural and food products
- *Indirect effect*: the contribution from farms and agricultural businesses purchasing inputs and services from supporting industries within the region.
- *Induced effect*: the contribution from employees of farms, agricultural businesses, and supporting industries spending their wages on goods and services within the region.
- *Value added* = labor income + indirect business taxes + other property type income
- *Gross Regional Product* = final demand of households + government expenditures + capital + exports – imports – institutional sales
- *Output* = intermediate inputs + value added
- *Employment*: full-time/part-time annual average, i.e., 1 job lasting 12 months = 2 jobs lasting 6 months each = 3 jobs lasting 4 months each. A job is neither full-time nor part-time.

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