



Jefferson County, Kansas

2023 ECONOMIC CONTRIBUTION REPORT
NOVEMBER 15, 2023

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 Jefferson County, Kansas, economy. For the estimated current year (2023), 25 agriculture and agriculture-related sectors directly contribute \$250 million in output and 1,453 jobs to the Jefferson County economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$289 million in output, 1,692 jobs and 18% of the total Gross Regional Product (GRP).

Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

Results

In this model, the 25 agriculture and agriculture-related sectors have a total direct output of \$250 million and account for 1,453 jobs in Jefferson County, as shown in the following table:

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

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	1,453	21%	\$71,708,000	15%	\$250,884,000
Indirect Effect	158	2%	\$8,261,000	2%	\$25,952,000
Induced Effect	81	1%	\$6,780,000	1%	\$13,031,000
Total Effect	1,692	25%	\$86,749,000	18%	\$289,868,000

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

The agriculture and agriculture-related sectors provide a total estimated impact of \$289 million in output. These sectors also support a total of 1,692 jobs, or 25% 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 25 agriculture and agriculture-related sectors is \$86 million, or 18% of the Gross Regional Product.

Top Ten Sectors by Output

The table below shows Jefferson County’s top ten sectors by output, including direct, indirect and induced effects. The *beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming* sector is the top contributor in output to the Jefferson County economy, with \$62 million in total output.

Table 2: Top Ten Sectors by Output, Jefferson County

Sector	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$62,486,000
Animal, except poultry, slaughtering	\$35,847,000
Landscape and horticultural services	\$34,924,000
Grain farming	\$31,809,000
Oilseed farming	\$22,092,000
Dairy cattle and milk production	\$6,734,000
Other real estate	\$5,657,000
Pesticide and other agricultural chemical manufacturing	\$4,832,000
Support activities for agriculture and forestry	\$4,286,000
Truck transportation	\$4,286,000

Top Ten Sectors by Employment

Of the agriculture and agriculture-related sectors, *beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming* supports the most jobs in the county with 595 jobs. Table 3 illustrates the top ten sectors by total employment, including direct, indirect, and induced effects in Jefferson County.

Table 3: Top Ten Sectors by Employment, Jefferson County

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	595.36
Landscape and horticultural services	304.66
Grain farming	129.96
Support activities for agriculture and forestry	116.14
All other crop farming	98.62
Animal, except poultry, slaughtering	62.73
Other real estate	49.53
Oilseed farming	40.14
Veterinary services	28.86
Truck transportation	26.29

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 Jefferson 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, Jefferson County

Sector	Total Output	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$62,486,000	595.36
Animal, except poultry, slaughtering	\$38,659,000	62.73
Landscape and horticultural services	\$35,847,000	304.66
Grain farming	\$34,924,000	129.96
Oilseed farming	\$31,809,000	40.14
Dairy cattle and milk production	\$22,092,000	24.83
Pesticide and other agricultural chemical manufacturing	\$5,657,000	4.60
Support activities for agriculture and forestry	\$4,832,000	116.14
All other crop farming	\$3,291,000	98.62
Greenhouse, nursery, and floriculture production	\$2,310,000	10.56
Farm machinery and equipment manufacturing	\$1,862,000	4.37
Vegetable and melon farming	\$1,584,000	7.39
Veterinary services	\$1,538,000	28.86
Animal production, except cattle and poultry and eggs	\$852,000	7.14
Bread and bakery product, except frozen, manufacturing	\$693,000	4.89
Poultry and egg production	\$541,000	0.61
Frozen cakes and other pastries manufacturing	\$440,000	4.89
Other snack food manufacturing	\$342,000	0.54
Bottled and canned soft drinks & water	\$325,000	0.66
Fruit farming	\$255,000	1.37
Roasted nuts and peanut butter manufacturing	\$232,000	0.53
Tree nut farming	\$107,000	0.65
Commercial logging	\$104,000	1.73
Commercial hunting and trapping	\$50,000	1.31
Forestry, forest products, and timber tract production	\$40,000	0.51

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 (2021), adjusted for 2023 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 72 agricultural sectors, total gross regional product is the sum of the value added of all industries across the state, 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 county
- *Induced effect*: the contribution from employees of farms, agricultural businesses, and supporting industries spending their wages on goods and services within the county
- *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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