

# Cherokee County, Kansas

2024 ECONOMIC CONTRIBUTION REPORT AUGUST 2024

## 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 Cherokee County, Kansas, economy. For the estimated current year (2024), 27 agriculture and agriculture-related sectors directly contribute \$381 million in output and 929 jobs to the Cherokee County, Kansas, economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$481 million in output, 1,376 jobs and 16% of the total Gross Regional Product (GRP).

# Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

#### Results

In this model, the 27 agriculture and agriculture-related sectors have a total direct output of \$381 million and account for 929 jobs in Cherokee County, as shown in the following table:

Table 1: Agriculture and Agriculture-Related Sectors' Contribution to the Cherokee County Economy

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	929	11%	\$87,393,000	10%	\$381,355,000
Indirect Effect	317	4%	\$36,230,000	4%	\$77,383,000
Induced Effect	130	2%	\$12,794,000	1%	\$22,297,000
Total Effect	1,376	17%	\$136,417,000	16%	\$481,036,000

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

The agriculture and agriculture-related sectors provide a total estimated impact of \$481 million in output. These sectors also support a total of 1,376 jobs, or 17% 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 27 agriculture and agriculture-related sectors is \$136 million, or 16% of the Gross Regional Product.

#### Top Ten Sectors by Output

The table below shows Cherokee County's top ten sectors by output, including direct, indirect and induced effects. The *grain farming* sector is the top contributor in output to the Cherokee County economy, with \$70 million in total output.

Table 2: Top Ten Sectors by Output, Cherokee County

Sector	Total Output
Grain farming	\$70,246,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$56,066,000
Pesticide and other agricultural chemical manufacturing	\$54,693,000
Poultry and egg production	\$49,531,000
Oilseed farming	\$42,686,000
Wholesale - Other nondurable goods merchant wholesalers	\$24,637,000
Food product machinery manufacturing	\$23,910,000
Animal production, except cattle and poultry and eggs	\$21,741,000
Other animal food manufacturing	\$21,286,000
Flour milling	\$20,588,000

#### 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 308 jobs. Table 3 illustrates the top ten sectors by total employment, including direct, indirect, and induced effects in Cherokee County.

Table 3: Top Ten Sectors by Employment, Cherokee County

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	308.44
Grain farming	182.77
Animal production, except cattle and poultry and eggs	123.73
Other real estate	88.50
Food product machinery manufacturing	78.09
Wholesale - Other nondurable goods merchant wholesalers	64.72
Poultry and egg production	49.97
Pesticide and other agricultural chemical manufacturing	35.15
Oilseed farming	30.94
All other crop farming	25.49

## 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 Cherokee 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, Cherokee County

Sector	Total Output	Total Employment
Grain farming	\$70,246,000	182.77
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$56,066,000	308.44
Pesticide and other agricultural chemical manufacturing	\$54,693,000	35.15
Poultry and egg production	\$49,531,000	49.97
Oilseed farming	\$42,686,000	30.94
Food product machinery manufacturing	\$23,910,000	78.09
Animal production, except cattle and poultry and eggs	\$21,741,000	123.73
Other animal food manufacturing	\$21,286,000	16.27
Flour milling	\$20,588,000	16.07
Animal, except poultry, slaughtering	\$11,725,000	14.36
Support activities for agriculture and forestry	\$1,964,000	12.11
Other chemical and fertilizer mineral mining	\$1,368,000	4.70
All other crop farming	\$1,330,000	25.49
Landscape and horticultural services	\$689,000	9.73
Veterinary services	\$624,000	8.25
Bread and bakery product, except frozen, manufacturing	\$576,000	3.16
Tree nut farming	\$445,000	2.06
Frozen cakes and other pastries manufacturing	\$412,000	3.17
Distilleries	\$395,000	0.55
Other snack food manufacturing	\$349,000	0.56
Roasted nuts and peanut butter manufacturing	\$269,000	0.55
Vegetable and melon farming	\$121,000	0.48
Greenhouse, nursery, and floriculture production	\$108,000	0.52
Fruit farming	\$88,000	0.40
Commercial logging	\$75,000	0.89
Forestry, forest products, and timber tract production	\$41,000	0.53
Commercial hunting and trapping	\$17,000	0.22

# 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 27 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.

#### Contact

Agency Economist
AgEconomist@ks.gov
785-564-6726
Kansas Department of Agriculture
1320 Research Park Drive, Manhattan, Kansas 66502
agriculture.ks.gov