

# Butler 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 Butler County, Kansas, economy. For the estimated current year (2023), 28 agriculture and agriculture-related sectors directly contribute \$554 million in output and 2,549 jobs to the Butler County economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$681 million in output, 3,221 jobs and 8% of the total Gross Regional Product (GRP).

# Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

#### Results

In this model, the 28 agriculture and agriculture-related sectors have a total direct output of \$554 million and account for 2,549 jobs in Butler County, as shown in the following table:

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

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	2,550	9%	\$154,391,000	6%	\$554,133,000
Indirect Effect	419	1%	\$29,762,000	1%	\$86,099,000
Induced Effect	253	1%	\$21,531,000	1%	\$40,767,000
Total Effect	3,221	11%	\$205,686,000	8%	\$681,001,000

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

The agriculture and agriculture-related sectors provide a total estimated impact of \$681 million in output. These sectors also support a total of 3,221 jobs, or 11% 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 28 agriculture and agriculture-related sectors is \$205 million, or 8% of the Gross Regional Product.

#### Top Ten Sectors by Output

The table below shows Butler 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 Butler County economy, with \$192 million in total output.

Table 2: Top Ten Sectors by Output, Butler County

Sector	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$192,598,000
Animal, except poultry, slaughtering	\$79,644,000
Grain farming	\$45,948,000
Oilseed farming	\$31,495,000
Landscape and horticultural services	\$29,160,000
Animal production, except cattle and poultry and eggs	\$24,413,000
Other real estate	\$21,515,000
Veterinary services	\$11,789,000
Wholesale - Other nondurable goods merchant wholesalers	\$10,789,000
Fertilizer mixing	\$10,789,000

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

Table 3: Top Ten Sectors by Employment, Butler County

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	859.63
Support activities for agriculture and forestry	421.52
Landscape and horticultural services	342.89
Grain farming	184.82
Veterinary services	183.21
Animal, except poultry, slaughtering	181.57
Other real estate	155.51
Animal production, except cattle and poultry and eggs	144.90
All other crop farming	86.27
Truck transportation	57.32

## 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 Butler 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, Butler County

Sector	Total Output	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$192,598,000	859.63
Animal, except poultry, slaughtering	\$117,158,000	421.52
Grain farming	\$79,644,000	342.89
Oilseed farming	\$45,948,000	184.82
Landscape and horticultural services	\$31,495,000	183.21
Animal production, except cattle and poultry and eggs	\$29,160,000	181.57
Veterinary services	\$21,515,000	144.90
Fertilizer mixing	\$10,789,000	86.27
All other crop farming	\$5,224,000	27.42
Bread and bakery product, except frozen, manufacturing	\$4,179,000	26.41
Breweries	\$3,264,000	26.41
Frozen cakes and other pastries manufacturing	\$2,606,000	21.36
Other snack food manufacturing	\$1,893,000	8.59
Support activities for agriculture and forestry	\$1,690,000	8.56
Other animal food manufacturing	\$1,282,000	5.41
Roasted nuts and peanut butter manufacturing	\$1,223,000	3.41
Vegetable and melon farming	\$821,000	2.75
Cotton farming	\$807,000	2.73
Poultry and egg production	\$686,000	2.69
Other leather and allied product manufacturing	\$645,000	2.59
Fruit farming	\$329,000	1.62
Commercial logging	\$305,000	1.28
Greenhouse, nursery, and floriculture production	\$245,000	1.19
Forestry, forest products, and timber tract production	\$241,000	1.00
Tree nut farming	\$142,000	0.72
Meat processed from carcasses	\$88,000	0.62
Cheese manufacturing	\$71,000	0.18
Rendering and meat byproduct processing	\$71,000	0.18

# 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)

#### Contact

Tori Laird
Agency Economist
AgEconomist@ks.gov
785-564-6726
Division of Agricultural Marketing, Advocacy, and Outreach
Kansas Department of Agriculture
1320 Research Park Drive, Manhattan, Kansas 66502
agriculture.ks.gov