



Bourbon 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 Bourbon County, Kansas, economy. For the estimated current year (2023), 28 agriculture and agriculture-related sectors directly contribute \$498 million in output and 1,473 jobs to the Bourbon County economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$587 million in output, 1,978 jobs and 28% 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 \$498 million and account for 1,473 jobs in Bourbon County, as shown in the following table:

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

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	1,474	18%	\$138,825,000	21%	\$498,583,000
Indirect Effect	318	4%	\$26,885,000	4%	\$63,108,000
Induced Effect	187	2%	\$14,589,000	2%	\$26,172,000
Total Effect	1,979	24%	\$180,301,000	28%	\$587,864,000

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

The agriculture and agriculture-related sectors provide a total estimated impact of \$587 million in output. These sectors also support a total of 1,978 jobs, or 24% 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 \$180 million, or 28% of the Gross Regional Product.

Top Ten Sectors by Output

The table below shows Bourbon County's top ten sectors by output, including direct, indirect and induced effects. The *other snack food manufacturing* sector is the top contributor in output to the Bourbon County economy, with \$170 million in total output.

Table 2: Top Ten Sectors by Output, Bourbon County

Sector	Total Output
Other snack food manufacturing	\$170,009,000
Animal, except poultry, slaughtering	\$113,683,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$21,608,000
Oilseed farming	\$19,712,000
Wholesale - Other nondurable goods merchant wholesalers	\$13,309,000
Grain farming	\$10,946,000
Wholesale - Grocery and related product wholesalers	\$8,993,000
Food product machinery manufacturing	\$7,632,000
Other real estate	\$4,788,000
Owner-occupied dwellings	\$4,788,000

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

Table 3: Top Ten Sectors by Employment, Bourbon County

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	695.50
Other snack food manufacturing	256.56
Animal, except poultry, slaughtering	245.34
Wholesale - Other nondurable goods merchant wholesalers	68.58
All other crop farming	65.26
Wholesale - Grocery and related product wholesalers	49.04
Other real estate	48.37
Grain farming	37.35
Veterinary services	33.99
Food product machinery manufacturing	31.31

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 Bourbon 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, Bourbon County

Sector	Total Output	Total Employment
Other snack food manufacturing	\$170,009,000	695.50
Animal, except poultry, slaughtering	\$150,833,000	256.56
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$113,683,000	245.34
Oilseed farming	\$21,608,000	65.26
Grain farming	\$13,309,000	37.35
Food product machinery manufacturing	\$8,993,000	33.99
Breweries	\$3,695,000	31.31
All other crop farming	\$3,103,000	17.60
Veterinary services	\$1,844,000	17.38
Support activities for agriculture and forestry	\$1,666,000	17.21
Other animal food manufacturing	\$1,602,000	12.01
Animal production, except cattle and poultry and eggs	\$1,576,000	10.67
Commercial hunting and trapping	\$1,101,000	9.67
Landscape and horticultural services	\$1,003,000	4.91
Greenhouse, nursery, and floriculture production	\$920,000	4.91
Bread and bakery product, except frozen, manufacturing	\$738,000	4.74
Dairy cattle and milk production	\$700,000	2.00
Frozen cakes and other pastries manufacturing	\$453,000	1.54
Poultry and egg production	\$414,000	1.51
Meat processed from carcasses	\$395,000	0.80
Rendering and meat byproduct processing	\$318,000	0.79
Roasted nuts and peanut butter manufacturing	\$236,000	0.71
Tree nut farming	\$129,000	0.54
Commercial logging	\$90,000	0.52
Vegetable and melon farming	\$65,000	0.41
Forestry, forest products, and timber tract production	\$38,000	0.29
Fruit farming	\$32,000	0.23
Other leather and allied product manufacturing	\$16,000	0.17

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