



Cowley 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 Cowley County, Kansas, economy. For the estimated current year (2023), 30 agriculture and agriculture-related sectors directly contribute \$1.13 billion in output and 2,821 jobs to the Cowley County economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$1.30 billion in output, 3,861 jobs and 22% 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 \$1.13 billion and account for 2,821 jobs in Cowley County, as shown in the following table:

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

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	2,821	15%	\$240,743,000	17%	\$1,130,589,000
Indirect Effect	542	3%	\$48,231,000	3%	\$109,058,000
Induced Effect	499	3%	\$35,847,000	2%	\$66,391,000
Total Effect	3,862	21%	\$324,823,000	22%	\$1,306,039,000

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

The agriculture and agriculture-related sectors provide a total estimated impact of \$1.30 billion in output. These sectors also support a total of 3,861 jobs, or 21% 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 \$324 million, or 22% of the Gross Regional Product.

Top Ten Sectors by Output

The table below shows Cowley County's top ten sectors by output, including direct, indirect and induced effects. The *meat processed from carcasses* sector is the top contributor in output to the Cowley County economy, with \$417 million in total output.

Table 2: Top Ten Sectors by Output, Cowley County

Sector	Total Output
Meat processed from carcasses	\$417,316,000
Animal, except poultry, slaughtering	\$156,547,000
Confectionery manufacturing from purchased chocolate	\$113,414,000
Flour milling	\$84,030,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$38,664,000
Grain farming	\$38,608,000
Oilseed farming	\$25,426,000
Wholesale - Other nondurable goods merchant wholesalers	\$23,904,000
Ice cream and frozen dessert manufacturing	\$13,664,000
Other real estate	\$13,664,000

Top Ten Sectors by Employment

Of the agriculture and agriculture-related sectors, *meat processed from carcasses* supports the most jobs in the county with 818 jobs. Table 3 illustrates the top ten sectors by total employment, including direct, indirect, and induced effects in Cowley County.

Table 3: Top Ten Sectors by Employment, Cowley County

Sector	Total Employment
Meat processed from carcasses	818.88
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	648.90
Confectionery manufacturing from purchased chocolate	348.72
Animal, except poultry, slaughtering	336.95
Grain farming	130.15
Flour milling	90.66
Other real estate	88.24
Wholesale - Other nondurable goods merchant wholesalers	83.59
Cotton farming	70.76
Truck transportation	67.46

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 Cowley 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, Cowley County

Sector	Total Output	Total Employment
Meat processed from carcasses	\$417,316,000	818.88
Animal, except poultry, slaughtering	\$217,073,000	648.90
Confectionery manufacturing from purchased chocolate	\$156,547,000	348.72
Flour milling	\$113,414,000	336.95
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$84,030,000	130.15
Grain farming	\$38,664,000	90.66
Oilseed farming	\$38,608,000	70.76
Ice cream and frozen dessert manufacturing	\$23,904,000	57.62
Cotton farming	\$9,803,000	55.70
Cheese manufacturing	\$5,776,000	54.02
Landscape and horticultural services	\$4,668,000	53.94
Wineries	\$4,107,000	39.62
Veterinary services	\$2,389,000	36.70
Bread and bakery product, except frozen, manufacturing	\$2,235,000	14.14
All other crop farming	\$2,234,000	14.13
Support activities for agriculture and forestry	\$1,742,000	14.03
Other animal food manufacturing	\$1,528,000	8.73
Frozen cakes and other pastries manufacturing	\$1,383,000	6.03
Other snack food manufacturing	\$1,261,000	4.53
Animal production, except cattle and poultry and eggs	\$1,176,000	4.42
Roasted nuts and peanut butter manufacturing	\$835,000	2.00
Commercial logging	\$364,000	1.90
Vegetable and melon farming	\$293,000	1.86
Dairy cattle and milk production	\$285,000	1.79
Poultry and egg production	\$258,000	1.46
Greenhouse, nursery, and floriculture production	\$192,000	1.45
Commercial hunting and trapping	\$181,000	1.07
Forestry, forest products, and timber tract production	\$155,000	0.81
Tree nut farming	\$130,000	0.29
Fruit farming	\$25,000	0.15

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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