

Mitchell 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 Mitchell County, Kansas, economy. For the estimated current year (2023), 24 agriculture and agriculture-related sectors directly contribute \$406 million in output and 937 jobs to the Mitchell County economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$511 million in output, 1,500 jobs and 43% of the total Gross Regional Product (GRP).

Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

Results

In this model, the 24 agriculture and agriculture-related sectors have a total direct output of \$406 million and account for 937 jobs in Mitchell County, as shown in the following table:

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	938	20%	\$121,090,000	31%	\$406,910,000
Indirect Effect	344	7%	\$30,175,000	8%	\$71,022,000
Induced Effect	219	5%	\$17,977,000	5%	\$33,584,000
Total Effect	1,500	33%	\$169,243,000	43%	\$511,517,000

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

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

The agriculture and agriculture-related sectors provide a total estimated impact of \$511 million in output. These sectors also support a total of 1,500 jobs, or 33% 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 24 agriculture and agriculture-related sectors is \$169 million, or 43% of the Gross Regional Product.

Top Ten Sectors by Output

The table below shows Mitchell County's top ten sectors by output, including direct, indirect and induced effects. The *farm machinery and equipment manufacturing* sector is the top contributor in output to the Mitchell County economy, with \$137 million in total output.

Table 2: Top Ten Sectors by Output, Mitchell County

Sector	Total Output
Farm machinery and equipment manufacturing	\$137,077,000
Grain farming	\$51,586,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$32,300,000
Support activities for agriculture and forestry	\$29,261,000
Meat processed from carcasses	\$28,814,000
Oilseed farming	\$14,739,000
Other animal food manufacturing	\$13,425,000
Wholesale - Other nondurable goods merchant wholesalers	\$10,003,000
Wholesale - Machinery, equipment, and supplies	\$7,813,000
Other real estate	\$7,813,000

Top Ten Sectors by Employment

Of the agriculture and agriculture-related sectors, *farm machinery and equipment manufacturing* supports the most jobs in the county with 255 jobs. Table 3 illustrates the top ten sectors by total employment, including direct, indirect, and induced effects in Mitchell County.

Table 3: Top Ten Sectors by Employment, Mitchell County

Sector	Total Employment
Farm machinery and equipment manufacturing	255.75
Grain farming	183.46
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	179.01
Support activities for agriculture and forestry	77.25
Meat processed from carcasses	58.38
Other real estate	53.84
All other crop farming	50.58
Wholesale - Other nondurable goods merchant wholesalers	45.18
Truck transportation	39.42
Commercial hunting and trapping	37.83

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 Mitchell 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, Mitchell County

Sector	Total Output	Total Employment
Farm machinery and equipment manufacturing	\$137,077,000	255.75
Grain farming	\$93,202,000	183.46
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$51,586,000	179.01
Support activities for agriculture and forestry	\$32,300,000	77.25
Meat processed from carcasses	\$29,261,000	58.38
Oilseed farming	\$28,814,000	13.42
Other animal food manufacturing	\$14,739,000	13.37
Animal production, except cattle and poultry and eggs	\$6,140,000	25.55
Commercial hunting and trapping	\$3,864,000	37.83
All other crop farming	\$3,735,000	50.58
Veterinary services	\$994,000	12.22
Greenhouse, nursery, and floriculture production	\$920,000	4.53
Landscape and horticultural services	\$894,000	11.60
Bread and bakery product, except frozen, manufacturing	\$843,000	5.42
Poultry and egg production	\$661,000	0.53
Frozen cakes and other pastries manufacturing	\$518,000	5.42
Commercial logging	\$487,000	1.15
Other snack food manufacturing	\$265,000	0.43
Bottled and canned soft drinks & water	\$228,000	0.46
Roasted nuts and peanut butter manufacturing	\$184,000	0.42
Vegetable and melon farming	\$117,000	0.44
Fruit farming	\$39,000	0.18
Forestry, forest products, and timber tract production	\$30,000	0.41
Tree nut farming	\$2,000	0.01

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

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