

# Hodgeman 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 Hodgeman County, Kansas, economy. For the estimated current year (2023), 22 agriculture and agriculture-related sectors directly contribute \$225 million in output and 545 jobs to the Hodgeman County economy. Including indirect and induced effects, agriculture and agriculture-related sectors for \$247 million in output, 643 jobs and 52% of the total Gross Regional Product (GRP).

# Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

### Results

In this model, the 22 agriculture and agriculture-related sectors have a total direct output of \$225 million and account for 545 jobs in Hodgeman County, as shown in the following table:

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	545	44%	\$43,054,000	44%	\$225,787,000
Indirect Effect	59	5%	\$5,121,000	5%	\$15,553,000
Induced Effect	39	3%	\$3,381,000	3%	\$6,487,000
Total Effect	643	52%	\$51,557,000	52%	\$247,829,000

Table 1: Agriculture and Agriculture-Related Sectors' Contribution to Hodgeman 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 \$247 million in output. These sectors also support a total of 643 jobs, or 52% 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 22 agriculture and agriculture-related sectors is \$51 million, or 52% of the Gross Regional Product.

## Top Ten Sectors by Output

The table below shows Hodgeman 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 Hodgeman County economy, with \$127 million in total output.

#### Table 2: Top Ten Sectors by Output, Hodgeman County

Sector	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$127,444,000
Grain farming	\$12,624,000
Dairy cattle and milk production	\$4,027,000
Fertilizer mixing	\$2,978,000
Wholesale - Other nondurable goods merchant wholesalers	\$2,793,000
Petroleum refineries	\$2,355,000
Other real estate	\$2,161,000
Oilseed farming	\$2,093,000
Owner-occupied dwellings	\$1,807,000
Truck transportation	\$1,807,000

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

#### Table 3: Top Ten Sectors by Employment, Hodgeman County

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	322.00
Grain farming	168.43
Other real estate	17.03
Veterinary services	13.40
Dairy cattle and milk production	12.74
All other crop farming	12.07
Wholesale - Other nondurable goods merchant wholesalers	9.47
Fertilizer mixing	8.42
Truck transportation	7.83
Individual and family services	7.09

## 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 Hodgeman 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, Hodgeman County

Sector	Total Output	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$127,444,000	322.00
Grain farming	\$76,009,000	168.43
Dairy cattle and milk production	\$12,624,000	13.40
Fertilizer mixing	\$4,027,000	12.74
Oilseed farming	\$2,161,000	12.07
All other crop farming	\$913,000	8.42
Animal, except poultry, slaughtering	\$709,000	1.63
Farm machinery and equipment manufacturing	\$516,000	1.30
Veterinary services	\$495,000	1.20
Bottled and canned soft drinks & water	\$228,000	0.88
Support activities for agriculture and forestry	\$131,000	0.75
Other animal food manufacturing	\$128,000	0.51
Other snack food manufacturing	\$92,000	0.51
Bread and bakery product, except frozen, manufacturing	\$77,000	0.46
Roasted nuts and peanut butter manufacturing	\$68,000	0.27
Frozen cakes and other pastries manufacturing	\$47,000	0.23
Commercial logging	\$44,000	0.17
Poultry and egg production	\$24,000	0.16
Other leather and allied product manufacturing	\$15,000	0.16
Forestry, forest products, and timber tract production	\$9,000	0.12
Animal production, except cattle and poultry and eggs	\$9,000	0.04
Commercial hunting and trapping	\$8,000	0.03

# 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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