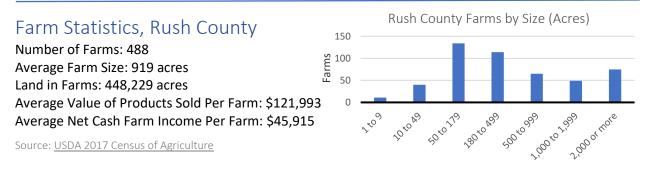


Rush County, Kansas

2022 ECONOMIC CONTRIBUTION REPORT AUGUST 31, 2022



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 for stakeholders, policymakers, and the general public. In this report, the model analyzes the effects of agriculture on the Rush County, Kansas economy. For the estimated current year (2022), 22 agriculture and agriculture-related sectors directly contribute \$152 million in output and 613 jobs to the Rush County economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$176 million in output, 748 jobs and 31% 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 \$152 million and account for 613 jobs in Rush County, as shown in the following table:

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	613	33%	\$19,004,000	20%	\$151,750,000
Indirect Effect	89	5%	\$6,123,000	7%	\$17,002,000
Induced Effect	46	2%	\$3,709,000	4%	\$7,084,000
Total Effect	748	41%	\$28,838,000	31%	\$175,837,000

Table 1: Agriculture and Agriculture-Related Sectors' Contribution to Rush 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 \$176 million in output. These sectors also support a total of 748 jobs, or 41% 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 GRP. Total value added by the 22 agriculture and agriculture-related sectors is 29 million, or 31% of the GRP.

Top Ten Sectors by Output

The table below shows Rush County's top ten sectors by output, including direct, indirect and induced effects. The *grain farming* sector is the top contributor in output to the Rush County economy, with \$54 million in total output.

Table 2: Top Ten Sectors by Output, Rush County

Sector	Total Output
Grain farming	\$53,562,000
Meat processed from carcasses	\$48,729,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$31,830,000
Farm machinery and equipment manufacturing	\$10,947,000
Wholesale - Other nondurable goods merchant wholesalers	\$6,009,000
Owner-occupied dwellings	\$2,296,000
Oilseed farming	\$2,241,000
Truck transportation	\$2,155,000
Other real estate	\$1,996,000
All other crop farming	\$1,273,000

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

Table 3: Top Ten Sectors by Employment, Rush County

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	259.39
Grain farming	178.16
Meat processed from carcasses	95.92
All other crop farming	36.94
Wholesale - Other nondurable goods merchant wholesalers	30.92
Farm machinery and equipment manufacturing	20.78
Other real estate	14.56
Truck transportation	9.56
Limited-service restaurants	6.39
Support activities for agriculture and forestry	6.01

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 Rush County economy. Generally, this analysis includes three categories: production, manufacturing or processing, and services. Note, the model does not include ethanol production or wholesale and retail sales of final products.

Table 4: All Direct Agriculture Sectors, Rush County

Sector	Total Output	Total Employment
Grain farming	\$53,562,000	178.16
Meat processed from carcasses	\$48,729,000	95.92
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$31,830,000	259.39
Farm machinery and equipment manufacturing	\$10,947,000	20.78
Oilseed farming	\$2,241,000	2.31
All other crop farming	\$1,273,000	36.94
Greenhouse, nursery, and floriculture production	\$901,000	4.76
Other animal food manufacturing	\$607,000	0.61
Bottled and canned soft drinks & water	\$310,000	0.58
Poultry and egg production	\$219,000	0.23
Support activities for agriculture and forestry	\$204,000	6.01
Animal production, except cattle and poultry and eggs	\$184,000	1.22
Veterinary services	\$158,000	2.66
Bread and bakery product, except frozen, manufacturing	\$143,000	0.94
Other snack food manufacturing	\$121,000	0.17
Vegetable and melon farming	\$115,000	0.59
Frozen cakes and other pastries manufacturing	\$92,000	0.94
Roasted nuts and peanut butter manufacturing	\$81,000	0.17
Commercial logging	\$15,000	0.17
Forestry, forest products, and timber tract production	\$12,000	0.16
Fruit farming	\$5,000	0.03
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 (2020), adjusted for 2022 dollars.

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 may 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 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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