

## 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 Reno County, Kansas, economy. For the estimated current year (2023), 39 agriculture and agriculture-related sectors directly contribute \$1.53 billion in output and 4,007 jobs to the Reno County economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$1.92 billion in output, 6,110 jobs and 18% of the total Gross Regional Product (GRP).

## Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

### Results

In this model, the 39 agriculture and agriculture-related sectors have a total direct output of \$1.53 billion and account for 4,007 jobs in Reno County, as shown in the following table:

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

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	4,008	11%	\$365,683,000	12%	\$1,534,898,000
Indirect Effect	1,217	3%	\$118,860,000	4%	\$252,656,000
Induced Effect	885	3%	\$74,349,000	2%	\$134,746,000
<b>Total Effect</b>	<b>6,110</b>	<b>17%</b>	<b>\$558,893,000</b>	<b>18%</b>	<b>\$1,922,301,000</b>

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

The agriculture and agriculture-related sectors provide a total estimated impact of \$1.92 billion in output. These sectors also support a total of 6,110 jobs, or 17% 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 39 agriculture and agriculture-related sectors is \$558 million, or 18% of the Gross Regional Product.

### Top Ten Sectors by Output

The table below shows Reno 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 Reno County economy, with \$273 million in total output.

Table 2: Top Ten Sectors by Output, Reno County

Sector	Total Output
Meat processed from carcasses	\$273,918,000
Farm machinery and equipment manufacturing	\$161,575,000
Soybean and other oilseed processing	\$139,123,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$132,464,000
Grain farming	\$92,696,000
Fluid milk manufacturing	\$80,870,000
Spice and extract manufacturing	\$79,562,000
Frozen specialties manufacturing	\$63,110,000
Flour milling	\$55,545,000
Oilseed farming	\$55,545,000

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

Table 3: Top Ten Sectors by Employment, Reno County

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	832.66
Meat processed from carcasses	544.95
Farm machinery and equipment manufacturing	484.51
Grain farming	416.45
Landscape and horticultural services	234.63
Support activities for agriculture and forestry	233.33
Frozen specialties manufacturing	215.47
All other crop farming	189.09
Other real estate	161.28
Wholesale - Other nondurable goods merchant wholesalers	131.88

## 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 Reno 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, Reno County

Sector	Total Output	Total Employment
Meat processed from carcasses	\$273,918,000	832.66
Farm machinery and equipment manufacturing	\$251,835,000	544.95
Soybean and other oilseed processing	\$161,575,000	484.51
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$139,123,000	416.45
Grain farming	\$132,464,000	234.63
Fluid milk manufacturing	\$92,696,000	233.33
Spice and extract manufacturing	\$80,870,000	215.47
Frozen specialties manufacturing	\$79,562,000	189.09
Flour milling	\$63,110,000	117.78
Oilseed farming	\$55,545,000	115.66
Paperboard mills	\$43,607,000	74.39
Landscape and horticultural services	\$24,916,000	66.15
Other animal food manufacturing	\$19,185,000	54.28
Other chemical and fertilizer mineral mining	\$18,012,000	51.86
Cheese manufacturing	\$15,129,000	49.38
Bread and bakery product, except frozen, manufacturing	\$14,784,000	44.47
Food product machinery manufacturing	\$13,290,000	42.40
Animal production, except cattle and poultry and eggs	\$9,842,000	41.92
All other crop farming	\$8,487,000	37.38
Breweries	\$5,394,000	32.17
Support activities for agriculture and forestry	\$5,032,000	23.06
Dairy cattle and milk production	\$3,974,000	17.49
Fiber, yarn, and thread mills	\$3,897,000	17.43
Veterinary services	\$3,662,000	15.41
Greenhouse, nursery, and floriculture production	\$3,221,000	13.22
Frozen cakes and other pastries manufacturing	\$3,168,000	12.97
Other snack food manufacturing	\$2,359,000	5.66
Cotton farming	\$1,901,000	5.07
Roasted nuts and peanut butter manufacturing	\$1,555,000	3.53
Vegetable and melon farming	\$997,000	3.51
Poultry and egg production	\$679,000	3.46
Commercial logging	\$374,000	3.33
Forestry, forest products, and timber tract production	\$293,000	2.94
Animal, except poultry, slaughtering	\$147,000	0.83
Commercial hunting and trapping	\$119,000	0.32

RENO COUNTY, KANSAS  
2023 ECONOMIC CONTRIBUTION REPORT

Sector	Total Output	Total Employment
Rendering and meat byproduct processing	\$95,000	0.25
Fruit farming	\$47,000	0.24
Other leather and allied product manufacturing	\$15,000	0.23
Tree Nut Farming	\$864	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

*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*