

# Doniphan 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 Doniphan County, Kansas, economy. For the estimated current year (2023), 24 agriculture and agriculture-related sectors directly contribute \$220 million in output and 498 jobs to the Doniphan County economy. Including indirect and induced effects, agriculture and agriculture-related sectors for the estimated current and agriculture-related sectors have a total impact of \$256 million in output, 689 jobs and 23% 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 \$220 million and account for 498 jobs in Doniphan County, as shown in the following table:

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	498	14%	\$55,668,000	18%	\$220,364,000
Indirect Effect	138	4%	\$10,777,000	4%	\$26,984,000
Induced Effect	53	1%	\$5,281,000	2%	\$9,222,000
Total Effect	689	19%	\$71,726,000	23%	\$256,570,000

Table 1: Agriculture and Agriculture-Related Sectors' Contribution to Doniphan 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 \$256 million in output. These sectors also support a total of 689 jobs, or 19% 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 \$71 million, or 23% of the Gross Regional Product.

## Top Ten Sectors by Output

The table below shows Doniphan 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 Doniphan County economy, with \$78 million in total output.

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

Sector	Total Output
Grain farming	\$78,536,000
Other animal food manufacturing	\$48,080,000
Oilseed farming	\$14,799,000
Bottled and canned soft drinks & water	\$11,873,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$7,193,000
Other real estate	\$4,447,000
Truck transportation	\$3,560,000
Fertilizer mixing	\$3,499,000
All other crop farming	\$2,842,000
Owner-occupied dwellings	\$2,842,000

## Top Ten Sectors by Employment

Of the agriculture and agriculture-related sectors, *grain farming* supports the most jobs in the county with 204 jobs. Table 3 illustrates the top ten sectors by total employment, including direct, indirect, and induced effects in Doniphan County.

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

Sector	Total Employment
Grain farming	204.53
All other crop farming	68.40
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	67.67
Other animal food manufacturing	48.47
Other real estate	47.24
Oilseed farming	36.47
Truck transportation	21.03
Bottled and canned soft drinks & water	19.74
Commercial logging	18.85
Full-service restaurants	9.33

## 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 Doniphan 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, Doniphan County

Sector	Total Output	Total Employment
Grain farming	\$78,536,000	204.53
Other animal food manufacturing	\$55,217,000	68.40
Oilseed farming	\$48,080,000	67.67
Bottled and canned soft drinks & water	\$14,799,000	48.47
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$11,873,000	36.47
Fertilizer mixing	\$3,560,000	19.74
All other crop farming	\$3,499,000	18.85
Commercial logging	\$883,000	7.06
Dairy cattle and milk production	\$616,000	6.86
Landscape and horticultural services	\$576,000	6.81
Greenhouse, nursery, and floriculture production	\$460,000	2.18
Sawmills	\$395,000	2.02
Animal production, except cattle and poultry and eggs	\$354,000	2.00
Other snack food manufacturing	\$284,000	1.53
Vegetable and melon farming	\$234,000	1.52
Support activities for agriculture and forestry	\$230,000	1.21
Roasted nuts and peanut butter manufacturing	\$206,000	0.96
Bread and bakery product, except frozen, manufacturing	\$201,000	0.49
Poultry and egg production	\$180,000	0.48
Frozen cakes and other pastries manufacturing	\$123,000	0.46
Forestry, forest products, and timber tract production	\$31,000	0.23
Fruit farming	\$11,000	0.17
Other leather and allied product manufacturing	\$4,000	0.06
Tree nut farming	\$1,000	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

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