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 Norton County, Kansas, economy. For the estimated current year (2024), 19 agriculture and agriculture-related sectors directly contribute $223 million in output and 649 jobs to the Norton County, Kansas, economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of $281 million in output, 938 jobs and 27% of the total Gross Regional Product (GRP).

Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

Results

In this model, the 19 agriculture and agriculture-related sectors have a total direct output of $223 million and account for 649 jobs in Norton County, as shown in the following table:

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

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	649	18%	$64,690,000	20%	$222,960,000
Indirect Effect	160	4%	$12,590,000	4%	$36,604,000
Induced Effect	128	4%	$11,268,000	3%	$21,110,000
Total Effect	938	26%	$88,549,000	27%	$280,675,000

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

The agriculture and agriculture-related sectors provide a total estimated impact of $281 million in output. These sectors also support a total of 938 jobs, or 26% 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 19 agriculture and agriculture-related sectors is $89 million, or 27% of the Gross Regional Product.

Top Ten Sectors by Output

The table below shows Norton 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 Norton County economy, with $90 million in total output.

Table 2: Top Ten Sectors by Output, Norton County

Sector	Total Output
Grain farming	$89,854,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	$89,015,000
Animal production, except cattle and poultry and eggs	$16,355,000
Support activities for agriculture and forestry	$14,571,000
Wholesale - Other nondurable goods merchant wholesalers	$8,903,000
Other real estate	$8,843,000
Oilseed farming	$5,555,000
Owner-occupied dwellings	$4,170,000
Monetary authorities and depository credit intermediation	$4,169,000
Truck transportation	$3,001,000

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

Table 3: Top Ten Sectors by Employment, Norton County

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	213.06
Support activities for agriculture and forestry	178.51
Grain farming	151.28
Animal production, except cattle and poultry and eggs	57.20
Other real estate	53.99
Wholesale - Other nondurable goods merchant wholesalers	31.82
All other crop farming	20.69
Full-service restaurants	15.20
Truck transportation	12.95
Monetary authorities and depository credit intermediation	12.35

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 Norton 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, Norton County

Sector	Total Output	Total Employment
Grain farming	$89,854,000	151.28
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	$89,015,000	213.06
Animal production, except cattle and poultry and eggs	$16,355,000	57.20
Support activities for agriculture and forestry	$14,571,000	178.51
Oilseed farming	$5,555,000	1.79
All other crop farming	$1,944,000	20.69
Animal, except poultry, slaughtering	$1,210,000	1.57
Other chemical and fertilizer mineral mining	$812,000	3.21
Landscape and horticultural services	$669,000	7.77
Other snack food manufacturing	$549,000	0.79
Other animal food manufacturing	$510,000	0.42
Roasted nuts and peanut butter manufacturing	$397,000	0.77
Bread and bakery product, except frozen, manufacturing	$388,000	2.64
Poultry and egg production	$344,000	0.29
Veterinary services	$333,000	4.44
Frozen cakes and other pastries manufacturing	$245,000	2.64
Commercial logging	$116,000	1.11
Forestry, forest products, and timber tract production	$74,000	0.74
Commercial hunting and trapping	$9,000	0.16

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 (2022), adjusted for 2024 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 19 agricultural sectors, total gross regional product is the sum of the value added of all industries across the region, 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 region.
- *Induced effect:* the contribution from employees of farms, agricultural businesses, and supporting industries spending their wages on goods and services within the region.
- *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.

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