Miami County, Kansas

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 Miami County, Kansas, economy. For the estimated current year (2023), 27 agriculture and agriculture-related sectors directly contribute $207 million in output and 1,644 jobs to the Miami County economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of $252 million in output, 1,898 jobs and 8% of the total Gross Regional Product (GRP).

Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

Results

In this model, the 27 agriculture and agriculture-related sectors have a total direct output of $207 million and account for 1,644 jobs in Miami County, as shown in the following table:

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

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	1,644	12%	$66,096,000	6%	$207,618,000
Indirect Effect	189	1%	$12,804,000	1%	$34,799,000
Induced Effect	65	0%	$5,580,000	1%	$10,095,000
Total Effect	1,898	13%	$84,480,000	8%	$252,512,000

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

The agriculture and agriculture-related sectors provide a total estimated impact of $252 million in output. These sectors also support a total of 1,898 jobs, or 13% 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 27 agriculture and agriculture-related sectors is $84 million, or 8% of the Gross Regional Product.

Top Ten Sectors by Output

The table below shows Miami 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 Miami County economy, with $64 million in total output.

Table 2: Top Ten Sectors by Output, Miami County

Sector	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	$64,015,000
Grain farming	$36,314,000
Oilseed farming	$17,256,000
Landscape and horticultural services	$15,271,000
Other real estate	$8,890,000
Farm machinery and equipment manufacturing	$8,508,000
All other food manufacturing	$5,465,000
Veterinary services	$4,618,000
Canned fruits and vegetables manufacturing	$4,345,000
All other crop farming	$4,345,000

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

Table 3: Top Ten Sectors by Employment, Miami County

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	744.97
Grain farming	186.87
All other crop farming	165.67
Landscape and horticultural services	165.29
Support activities for agriculture and forestry	99.16
Other real estate	88.80
Veterinary services	72.98
Oilseed farming	56.10
Animal production, except cattle and poultry and eggs	30.23
Greenhouse, nursery, and floriculture production	27.69

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 Miami 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, Miami County

Sector	Total Output	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	$64,015,000	744.97
Grain farming	$38,123,000	186.87
Oilseed farming	$36,314,000	165.67
Landscape and horticultural services	$17,256,000	165.29
Farm machinery and equipment manufacturing	$8,890,000	99.16
All other food manufacturing	$8,508,000	72.98
Veterinary services	$5,465,000	56.10
Canned fruits and vegetables manufacturing	$4,618,000	30.23
All other crop farming	$4,345,000	27.69
Greenhouse, nursery, and floriculture production	$3,702,000	17.24
Support activities for agriculture and forestry	$2,795,000	16.40
Animal production, except cattle and poultry and eggs	$2,780,000	12.19
Bread and bakery product, except frozen, manufacturing	$2,245,000	12.18
Other animal food manufacturing	$1,699,000	8.11
Frozen cakes and other pastries manufacturing	$1,499,000	7.83
Vegetable and melon farming	$1,173,000	3.48
Wineries	$1,015,000	3.40
Poultry and egg production	$872,000	2.61
Other snack food manufacturing	$611,000	2.22
Roasted nuts and peanut butter manufacturing	$401,000	2.00
Tree nut farming	$389,000	1.76
Fruit farming	$323,000	1.44
Dairy cattle and milk production	$245,000	1.40
Commercial logging	$149,000	0.91
Forestry, forest products, and timber tract production	$76,000	0.89
Commercial hunting and trapping	$57,000	0.86
Other leather and allied product manufacturing	$38,000	0.23

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)

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