

Ellsworth 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 Ellsworth County, Kansas, economy. For the estimated current year (2023), 25 agriculture and agriculture-related sectors directly contribute \$234 million in output and 685 jobs to the Ellsworth County economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$269 million in output, 884 jobs and 22% of the total Gross Regional Product (GRP).

Estimated Economic Contribution of Agriculture.

Methodology and Glossary on final page

Results

In this model, the 25 agriculture and agriculture-related sectors have a total direct output of \$234 million and account for 685 jobs in Ellsworth County, as shown in the following table:

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

| Cor | ntribution Type | Employment | % Employment | Total Value Added | % of Gross Regional Product | Output |
|------|--------------------|------------|-----------------|----------------------|-----------------------------------|---------------|
| Dir | ect Effect | 685 | 19% | \$51,949,000 | 17% | \$234,156,000 |
| Indi | rect Effect | 121 | 3% | \$8,920,000 | 3% | \$23,018,000 |
| Indu | uced Effect | 78 | 2% | \$6,856,000 | 2% | \$12,189,000 |
| То | tal Effect | 884 | 25% | \$67,725,000 | 22% | \$269,364,000 |

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

The agriculture and agriculture-related sectors provide a total estimated impact of \$269 million in output. These sectors also support a total of 884 jobs, or 25% 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 25 agriculture and agriculture-related sectors is \$67 million, or 22% of the Gross Regional Product.

Top Ten Sectors by Output

The table below shows Ellsworth County's top ten sectors by output, including direct, indirect and induced effects. The *animal, except poultry, slaughtering* sector is the top contributor in output to the Ellsworth County economy, with \$62 million in total output.

Table 2: Top Ten Sectors by Output, Ellsworth County

| Sector | Total Output |
|--|--------------|
| Animal, except poultry, slaughtering | \$62,278,000 |
| Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming | \$46,205,000 |
| Grain farming | \$36,241,000 |
| Farm machinery and equipment manufacturing | \$17,498,000 |
| Other chemical and fertilizer mineral mining | \$9,226,000 |
| Animal production, except cattle and poultry and eggs | \$4,842,000 |
| Truck transportation | \$4,428,000 |
| Oilseed farming | \$3,457,000 |
| Owner-occupied dwellings | \$3,248,000 |
| Wholesale - Machinery, equipment, and supplies | \$3,248,000 |

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

Table 3: Top Ten Sectors by Employment, Ellsworth County

| Sector | Total Employment |
|--|------------------|
| Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming | 247.10 |
| Grain farming | 104.19 |
| Animal, except poultry, slaughtering | 100.74 |
| Farm machinery and equipment manufacturing | 70.54 |
| Other chemical and fertilizer mineral mining | 60.49 |
| Animal production, except cattle and poultry and eggs | 45.04 |
| Truck transportation | 28.82 |
| All other crop farming | 22.67 |
| Monetary authorities and depository credit intermediation | 14.00 |
| Wholesale - Machinery, equipment, and supplies | 11.67 |

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 Ellsworth 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, Ellsworth County

| Sector | Total Output | Total Employment |
|--|--------------|------------------|
| Animal, except poultry, slaughtering | \$62,278,000 | 247.10 |
| Beef cattle ranching and farming, including feedlots and | \$53,123,000 | 104.19 |
| dual-purpose ranching and farming | | |
| Grain farming | \$46,205,000 | 100.74 |
| Farm machinery and equipment manufacturing | \$36,241,000 | 70.54 |
| Other chemical and fertilizer mineral mining | \$17,498,000 | 60.49 |
| Animal production, except cattle and poultry and eggs | \$9,226,000 | 45.04 |
| Oilseed farming | \$4,428,000 | 22.67 |
| All other crop farming | \$1,373,000 | 10.59 |
| Veterinary services | \$887,000 | 9.71 |
| Other snack food manufacturing | \$582,000 | 2.75 |
| Greenhouse, nursery, and floriculture production | \$460,000 | 2.10 |
| Support activities for agriculture and forestry | \$392,000 | 1.84 |
| Roasted nuts and peanut butter manufacturing | \$385,000 | 1.23 |
| Bottled and canned soft drinks & water | \$228,000 | 1.22 |
| Bread and bakery product, except frozen, manufacturing | \$195,000 | 1.06 |
| Vegetable and melon farming | \$176,000 | 0.88 |
| Commercial logging | \$132,000 | 0.86 |
| Frozen cakes and other pastries manufacturing | \$129,000 | 0.83 |
| Forestry, forest products, and timber tract production | \$72,000 | 0.66 |
| Poultry and egg production | \$56,000 | 0.46 |
| Commercial hunting and trapping | \$41,000 | 0.23 |
| Landscape and horticultural services | \$16,000 | 0.18 |
| Other leather and allied product manufacturing | \$15,000 | 0.05 |
| Fruit farming | \$6,000 | 0.03 |
| 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)

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