Cloud County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors
6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 18 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Cloud County economy.[1]

These 18 sectors have a total direct output of approximately **$136.4 million** and support **556 jobs** in Cloud County. Running the model for all 18 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Cloud County Economy						
Impact Type[2]	Employment	% Employment	Total Value Added[3]	Total Value Added % of Gross Regional Product[4]	Output[5]	Output % of Gross Regional Product
Direct Effect	555.5	10.76%	$34,331,658	11.87%	$136,442,353	47.18%
Indirect Effect	186.0	3.60%	$11,558,158	4.00%	$23,825,735	8.24%
Induced Effect	114.6	2.22%	$6,319,936	2.19%	$12,101,398	4.18%
Total Effect	856.1	16.58%	$52,209,752	18.05%	$172,369,486	59.61%

As shown in the above table, agriculture, food, and food processing sectors support **856 jobs**, or **16.58%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **$172.4 million, roughly 59.61% of the economy.**

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 18 agriculture, food, and food processing sectors is approximately **$52.2 million**, or **18.05% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **18.05% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

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1 Article on building a contribution analysis in IMPLAN that avoids double counting:
http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value added = labor income + indirect business taxes + other property type income.

4 GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

5 Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **276 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Cloud County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	276.4	$40,845,243
Grain farming	79.6	$36,660,664
Wholesale trade	43.9	$8,947,436
All other industrial machinery manufacturing	42.5	$11,356,725
Animal production, except cattle and poultry and eggs	35.7	$5,526,085
All other crop farming	33.2	$3,148,277
Landscape and horticultural services	30.6	$1,389,770
Support activities for agriculture and forestry	25.7	$876,200
Truck transportation	23.1	$3,265,107
Oilseed farming	20.9	$27,085,257

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **$40.8 million** to the Cloud County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	276.4	$40,845,243
Grain farming	79.6	$36,660,664
Oilseed farming	20.9	$27,085,257
All other industrial machinery manufacturing	42.5	$11,356,725
Wholesale trade	43.9	$8,947,436
Animal, except poultry, slaughtering	7.7	$5,641,009
Animal production, except cattle and poultry and eggs	35.7	$5,526,085
Truck transportation	23.1	$3,265,107
All other crop farming	33.2	$3,148,277
Dairy cattle and milk production	5.6	$2,760,722

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Cloud County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	20.9	$27,085,257.03
Grain farming	79.6	$36,660,664.21
Vegetable and melon farming	0.4	$100,383.25
Fruit farming	0.3	$30,830.24
Greenhouse, nursery, and floriculture production	0.5	$80,326.63
All other crop farming	33.2	$3,148,276.86
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	276.4	$40,845,243.44
Dairy cattle and milk production	5.6	$2,760,722.29
Poultry and egg production	0.0	$44,940.94
Animal production, except cattle and poultry and eggs	35.7	$5,526,084.68
Commercial logging	2.2	$95,570.93
Commercial hunting and trapping	4.4	$90,024.59
Animal, except poultry, slaughtering	7.7	$5,641,009.43
Bread and bakery product, except frozen, manufacturing	4.7	$547,476.53
Frozen cakes and other pastries manufacturing	0.3	$44,916.10
All other industrial machinery manufacturing	42.5	$11,356,724.82
Veterinary services	10.4	$994,131.14
Landscape and horticultural services	30.6	$1,389,770.31

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Cloud County, the retail sector was omitted.