July 2015

Kearny County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 12 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Kearny County economy.[1] These 12 sectors have a total direct output of approximately $215 million and support 494.4 jobs in Kearny County. Running the model for all 12 sectors simultaneously produces the following results:

Agriculture Contribution in Kearny County

Impact Type[2]	Employment	% of Total Employment	Total Value Added[3]	% of Gross Regional Product[4]	Output[5]	% of Gross Regional Product
Direct Effect	494.4	22%	$69,768,053	42%	$214,945,068	128%
Indirect Effect	279.6	12%	$13,449,405	8%	$21,304,513	13%
Induced Effect	63.9	3%	$4,894,411	3%	$8,336,798	5%
Total Effect	837.8	37%	$88,111,869	53%	$244,586,379	146%

As shown in the above table, agriculture, food, and food processing supports 837.8 jobs, or 37% of the entire workforce in the county. These industries provide a total economic contribution of approximately $245 million, roughly 146% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

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 12 agriculture, food, and food processing sectors is approximately $88 million, or 53% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 53% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and 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:
https://implan.com/index.php?option=com_content&view=category&id=19

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 by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 222.6 employees. This table also shows the amount of jobs that are created by the agriculture industry in Kearny County.

Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	222.6	$110,249,246
Support activities for agriculture and forestry	204.6	$10,714,160
Grain farming	97.9	$65,524,452
All other crop farming	93.0	$22,552,070
Veterinary services	35.7	$1,643,845
Animal production, except cattle and poultry and eggs	27.1	$5,242,176
Truck transportation	18.3	$2,204,612
Monetary authorities and depository credit intermediation	16.3	$2,723,148
Real estate	10.5	$1,691,695
Wholesale trade	9.4	$1,717,793

The Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming industry directly contributes approximately $110 million to Kearny County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	222.6	$110,249,246
Grain farming	97.9	$65,524,452
All other crop farming	93.0	$22,552,070
Support activities for agriculture and forestry	204.6	$10,714,160
Animal production, except cattle and poultry and eggs	27.1	$5,242,176
Owner-occupied dwellings	0.0	$3,505,292
Meat processed from carcasses	7.0	$3,480,869
Dairy cattle and milk production	8.5	$3,030,254
Monetary authorities and depository credit intermediation	16.3	$2,723,148
Oilseed farming	0.6	$2,461,984

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 sector and the output they contributed to Kearny County's economy.

Sector Description:	Employment	Output
Oilseed farming	0.6	$2,461,984
Grain farming	97.9	$65,524,452
Vegetable and melon farming	0.3	$109,123
Cotton farming	0.5	$247,136
All other crop farming	93.0	$22,552,070
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	222.6	$110,249,246
Dairy cattle and milk production	8.5	$3,030,254
Poultry and egg production	0.3	$316,474
Animal production, except cattle and poultry and eggs	27.1	$5,242,176
Meat processed from carcasses	7.0	$3,480,869
Bread and bakery product, except frozen, manufacturing	0.8	$87,440
Veterinary services	35.7	$1,643,845
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All 105 counties in Kansas have IMPLAN models with an agriculture 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 Kansas, the retail sector was omitted.