Mike Beam, Secretary



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Laura Kelly, Governor

Agriculture in Kansas: Testimony for the Senate Committee on Agriculture and Natural Resources by Kansas Secretary of Agriculture Mike Beam *Thursday, January 19, 2023*

Agriculture's Contribution to Kansas Economy

Agriculture continues to be Kansas' largest industry and economic driver, with 73 agriculture, food and food processing sectors combining for \$53.4 billion in direct output in the Kansas economy. The top sectors are listed on page 9 of the attached pages. If you include the indirect and induced economic factors, Kansas agriculture has a total economic contribution of \$76 billion and supports over 256,000 jobs across the state (14% of the workforce). In addition to the statewide agriculture contribution document, KDA has generated county-by-county reports demonstrating the economic contribution of agriculture, which are available on the KDA website or by request.

Not only do Kansas farmers, ranchers and agribusinesses drive the state's economy, but a significant portion of the U.S. ag marketing value is from our state. You'll see on the *Total Value of Agricultural Production by Location* heat map (page 13) that Kansas, especially western Kansas, is one of our nation's leading agricultural and food production regions.

Economics of Agriculture in 2022

Overall, the grain, oil seed, and livestock markets were strong in 2022, as depicted on the attached graphs (page 14). There were certainly opportunities last spring to contract wheat, soybeans, and corn at or above historically high prices. Hog prices and fed cattle prices were significantly above the five-year average for all of 2022. These strong price levels, however, do not tell the whole economic story for our agricultural producers. According to USDA's recent Farm Sector Income and Finances report, farm production expenses for 2022 are expected to increase by 17.8%, representing the largest year-to-year dollar increase on record. USDA forecasts expect all expense categories to move upward, including an increase in interest expenses by more than 39%.

Kansas Ag Exports

International agriculture trade remains a vital component to the overall economic health and vitality of our state. Kansas commodity exports totaled \$5.35 billion in 2021, the first time that Kansas agriculture exports exceeded \$5 billion in at least a decade. It was a notable increase to

the prior year despite major commodity flow and market supply chain disruptions. The top three export categories make up 80 percent of our total exports: meat, edible offal; cereals; and oilseed. Top export destinations included Mexico, Japan, China, South Korea, and Taiwan, making up 75% of our total exports (Euromonitor; 2022 agriculture trade data will be available later this spring).

Key Issues in Kansas Agriculture

One of the best ways that KDA stays in communication with producers and stakeholders from across the agriculture industry is through the Ag Growth Summit every summer. The annual event includes individual sessions for each of 18 agricultural sectors, in which we focus on priorities for that individual sector and how we can work together to overcome barriers that may exist and seek growth opportunities. This year, there were several issues that rose to the top of the list of priorities for many sectors across the Kansas agriculture industry.

The critical importance of education is clear, and it makes itself seen in many forms. We need effective postsecondary opportunities to train today's students for the modern agricultural landscape and we need those postsecondary institutions to have a strong relationship with the agribusiness world which will be employing those graduates. We need industry outreach and expertise in the form of Extension personnel in several specializations that would enrich those industries. In addition, we need funding for increased research to keep Kansas agriculture on the cutting edge of the world's agriculture needs.

Another need expressed through nearly all of agriculture sectors at this year's Ag Summit is the desire for a wide scope of support for innovative business development opportunities, from business incubators to collaboration space to economic development incentives. Many sectors see a need for expanded value-added opportunities and public/private partnerships that can expand opportunities for small enterprises.

Finally, it has been clear for many years that the future of the agriculture industry depends greatly on a reliable workforce, and this was repeated throughout the Ag Summit sector sessions as well as during the workforce panel in the afternoon's full group session.

Workforce

One of the most frequently mentioned concerns from the ag industry is workforce availability. It's seen as a barrier to growth for Kansas agriculture. A shortage of workers, both trained and entry level, has been mentioned as a significant concern in Ag Summit discussions across many sectors, including the beef, pet food, poultry, pork, ag equipment manufacturing, ag technology, and meat processing. In addition, stakeholders in several agriculture industries sectors have frequently stressed the need for federal immigration reform with a focus on long-term visas for agricultural workers. The prospects for meaningful immigration reform that provides solutions to some of these workforce challenges were addressed in the federal Farm Workforce Modernization Act that passed the U.S. House on a bipartisan vote. There are many agricultural interests who want the Senate to take this up in 2023.

Last year, KDA conducted a workforce survey final report and summary documents have been posted to the KDA website and shared in the attached packet. Findings from the survey have been shared across the ag industry, and are helping lead employers, educators, ag organizations and state agencies to work together to find or develop programs to support education and training to strengthen the future workforce.

Drought and Water

Drought has had a significant impact on the state of Kansas over the last couple of years, and the drought conditions have been particularly severe over the past year. By September 2022, all 105 Kansas counties were in some level of drought status, with 67 in emergency status. These extreme drought conditions have had an impact on crop production and have elevated the risk of wildfire, especially in the western half of the state. While the drought is not unique to Kansas (about a third of the country is suffering from drought) we are seeing the effects more directly due to the critical role that agriculture plays in so many communities. Agriculture sustains the economy and provides employment for much of the state, and drought threatens that viability.

This threat becomes even more critical in the region that is supported by the Ogallala Aquifer as a principal water source for agriculture, public water supply, and other industry. In times of drought, water users in this region need to pump more water for irrigation to maintain their production of food and fiber resources. Although we don't have annual water use data yet, other factors indicate that pumping certainly increased in 2022. Many water right holders have applied for multi-year flex accounts (MYFA) to provide more flexibility in their water use, as a possible tool to stay in compliance regarding over pumping.

Annual well measurements are currently underway in the aquifer region. This is an annual project in cooperation with the Kansas Geological Survey. The data from those measurements will be available soon, but it is likely they will indicate a drop in the Ogallala due to this need for pumping brought about due to the drought.

As noted earlier, our state's robust agricultural economy is significantly bolstered in the region overlaying the Ogallala Aquifer. It's difficult to imagine how this region and our entire state might have fared without the availability of this resource and the investments and risks taken by multiple generations of farm and ranch families and agribusinesses. Now, perhaps more than anytime, there's considerable attention being given to the overall trend showing continued

depletion of this invaluable resource. The economic viability of Kansas agriculture and our rural communities depend on prolonging the life of the groundwater resources of the state, especially in the western third of the state. I believe in Kansans and remain hopeful that all of us working together can make meaningful changes to chart a more promising outcome for future generations.

Highly Pathogenic Avian Influenza

Throughout 2022, the U.S. poultry industry has been struggling through the biggest outbreak of highly pathogenic avian influenza we have ever seen. Since February of 2022 all but 3 states have had positive cases and more than 57 million domestic birds have been affected, along with countless wild birds. HPAI is a highly contagious disease that is deadly for poultry, and the industry has taken significant action to attempt to slow the ongoing spread of this disease to protect the rest of the nation's flock.

Kansas first confirmed HPAI in domestic birds in April 2022, and though we have had 11 counties affected, we are fortunate that the total number of birds affected remains just over 20,000, which is dramatically fewer than what many of our neighbor states have dealt with. We have only had two commercial operations affected, and they were both relatively small compared to some of the operations in other states; however, we know that the impact has been heavy to those poultry owners and the impact of the outbreak has also been felt by consumers in the prices they've seen, especially the price of eggs. Many of the large flocks that have been lost nationwide have been layer operations.

Although this has been a devastating outbreak, it has been clear that it would have been considerably worse if the industry had not improved its biosecurity systems that have been implemented following the outbreak in 2014–2015. Commercial facilities especially have improved their vigilance in biosecurity, and even backyard flocks have implemented steps to protect their flocks. Testing has shown that the vast majority of the disease has spread from point source infection: spread by wild birds migrating across the country, rather than by infections caused by spread from one facility to another

Emergency Preparedness

Improvements like those seen in HPAI response come about due to efforts by the animal health community not just in real incidents, but in the exercises and other work that is done to prepare for animal disease outbreaks, and then to implement lessons learned that can mitigate the effect in future outbreaks. Kansas has long been a leader in foreign animal disease preparation, stemming from our regular functional exercise that have been a priority for the Kansas Department of Agriculture for nearly 10 years.

This year once again KDA conducted a multi-day functional exercise simulation of an outbreak of foot-and-mouth disease. This year's event, named Genesis, exercised the state's response plan if faced with a case of foot-and-mouth disease in an agricultural operation in Kansas. The KDA incident management team was activated and played out the scenario involving positive FMD tests and developing response plans for the infected premises as well as a tracing system to identify other possible exposures.

More than 150 players and observers participated in the exercise, representing agriculture organizations; private industry; federal, state and local public agencies; and even animal health agencies from Nebraska, Oklahoma and Texas. Responding to a foreign animal disease will require cooperation among all of these entities in order to stop the spread of the disease and enable the industry to get back to business as quickly as possible.

Each year KDA spends the months after the exercise developing tools, training, and other preparedness activities to improve the response. These annual exercises have been instrumental in expanding the state's response plan and honing details based on new challenges and experiences each year. This continual improvement of the animal disease response plan supports the investment Kansas has made in sustaining the rigorous practice via the full-scale exercise.

Wildfire Task Force

It has been a privilege to chair the Governor's Wildfire Task Force since its formation in July. The task force members represent many state and local agencies and organizations which are directly involved in wildfire mitigation, response and recovery, as well as private citizens who have experienced wildfire events in recent years. Discussion topics at the meetings included mitigation projects, weather monitoring, response plans, mapping, and challenges to local firefighting entities. The task force has narrowed the issues to a number of possible recommendations and will finalize these recommendations soon in a final report.

Several of the tentative recommendations that are under consideration include the expansion of Mesonet and statewide use of the fire danger index, efforts to improve wildfire data with increased reporting, strengthening of mutual aid systems, incentives to support the volunteer fire fighter workforce, improved oversight of degraded power lines and poles, expanded access to grant funds for local entities, expanded support for prescribed burn associations, and increased funding for mitigation and response programs through the Kansas Forest Service.

I've been impressed and grateful for the candid, yet cordial, exchange of concerns and suggestions amongst the task force members. It's obvious to me that these entities have enhanced their collaborations in recent years in response to multiple large-scale wildfires since 2016. I look forward to sharing the final report with the legislature.

Local Food

The last few years have seen a growing interest in local foods, as consumers have shown enthusiasm for locally sourced produce, meat, eggs, wine, and a wide variety of other food items that are grown or made in their own communities. This interest has led to a number of collaborative efforts between state agencies, community organizations, producers, food banks, and other entities which all share this desire to expand opportunities for the local food market.

One notable example is the cooperative agreement awarded to Kansas under the USDA Agricultural Marketing Service's Local Food Purchase Assistance Cooperative Agreement Program, which provided \$2.5 million that will be used to purchase and distribute Kansas grown and processed foods to underserved communities and families across Kansas through the state's existing distribution network of food banks. This program will begin its work in early 2023 to strengthen the state's local food system by increasing access of locally sourced food to those impacted by food insecurity.

Pet Food

Kansas has a significant presence in the pet food manufacturing industry. The industry adds value to agriculture and food production and provides a significant employment base in communities across the state. In 2022, there were expansions as well as acquisitions within the pet food sector. Simmons Pet Food expanded operations in two Kansas communities, investing a total of \$115 million and creating more than 170 new jobs. Additionally, J.M. Smucker Co. sold its private-label dry dog food business for \$33 million to Diamond Pet Foods, Inc., which included the sale of its manufacturing facility in Frontenac, Kansas. Hill's Pet Nutrition has planned expansions in its manufacturing footprint in Kansas. The company is constructing a new \$250 million pet food manufacturing facility in Leavenworth County, which will create at least 80 new jobs and is expected to open in 2023. Mars Pet Nutrition announced plans for an \$82 million expansion in its Kansas plant to support increased production capacity for Greenies, adding 95 jobs. Icelandic-based Marel acquired Wenger Manufacturing LLC, a Sabetha-based pet food equipment manufacturer. More than 80% of the pet food manufactured worldwide is manufactured on Kansas-made Wenger equipment.

Sustainability in Kansas

Sustainability is a significant focus across the agriculture industry, as ag entities large and small continue to focus on the importance of the state's natural resources for their long-term viability. In particular, there has been a lot of focus on climate-smart initiatives, and the USDA has invested in projects nationwide via a grant program for Climate-Smart Commodities. Although KDA is not a lead partner on any Climate-Smart Commodity awards we are a listed partner on numerous awards. We are in contact with most of the 20 awardees that have implementation in Kansas and will help coordinate with different awardees and provide information to farmers and ranchers about the opportunities that are available to them. Two

exciting projects that we were heavily involved in were a \$40 million award to the DeLong Company and a \$65 million award to the National Sorghum Producers.

In addition, almost all major ag companies now have sustainability goals due to environmental, social and governance (ESG) accounting and reporting. Two examples we see in Kansas are General Mills and Archer Daniels Midland. The GM pilot project in south central Kansas aims to increase acres implementing regenerative ag principles included soil health consulting and community building efforts, including a soil health academy event. ADM worked with the National Fish and Wildlife Foundation to provide a grant to the Kansas Association of Conservation Districts, KDA, and the Kansas Soil Health Alliance to provide soil health education events, create farmer to farmer peer groups, and cost-share for planting cover crops.

Commercial Industrial Hemp Program

In the fourth year of hemp production in Kansas, KDA has observed continued interest for fiber and grain types of hemp, with approximately 55% and 24% of the planted acreage being declared for these end-uses, respectively, as compared to 5% for cannabinoid production. Licensed acreage has decreased 33% from 2021 to 2022, but planted acres increased by approximately 68%. Harvested acreage from 2021 to 2022 increased by 101% and the ratio between planted to harvested increased by 20%. Most of the failed acreage occurred due to the constraints surrounding production such as poor emergence/germination, adverse weather such as drought conditions, and lack of adequate irrigation.

For the 2022 season, KDA licensed 61 individuals as hemp producers. Kansas is one of 43 states with state hemp programs. States without a program are regulated through the USDA. The Office of the State Fire Marshal registers hemp processors in Kansas on an annual basis.



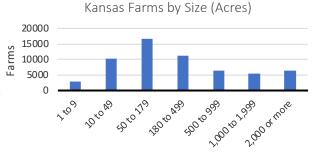
State of Kansas

2022 ECONOMIC CONTRIBUTION REPORT AUGUST 15, 2022

Farm Statistics, Kansas Number of Farms: 58,569

Average Farm Size: 781 acres Land in Farms: 45,759,319 acres Average Value of Products Sold Per Farm: \$320,964 Average Net Cash Farm Income Per Farm: \$49,291

Source: USDA 2017 Census of Agriculture



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 State of Kansas. For the estimated current year (2022), 73 agriculture and agriculture-related sectors directly contribute \$53.4 billion in output and 136,227 jobs to the Kansas economy. Including indirect and induced effects, agriculture and agriculture-related sectors have a total impact of \$76 billion in output, 256,080 jobs and 14% of the total Gross Regional Product (GRP).

Estimated Economic Contribution of Agriculture

Methodology and Glossary on final page

Results

In this model, the 73 agriculture and agriculture-related sectors have a total direct output of \$53.4 billion and account for 136,227 jobs in Kansas, as shown in the following table:

Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	136,227	7%	\$13,151,184,000	7%	\$53,403,011,000
Indirect Effect	67,042	4%	\$7,316,507,000	4%	\$14,381,300,000
Induced Effect	52,811	3%	\$4,754,655,000	3%	\$8,353,985,000
Total Effect	256,080	14%	\$25,222,346,000	14%	\$76,138,296,000

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

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

The agriculture and agriculture-related sectors provide a total estimated impact of \$76 billion in output. These sectors also support a total of 256,080 jobs, or 14% of the state's entire workforce. Another metric used to calculate the importance of sectors in the economy is their value added as a percentage of GRP. Total value added by the 73 agriculture and agriculture-related sectors is \$25.2 billion, or 14% of the GRP.

Top Ten Sectors by Output

The table below shows Kansas' 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 Kansas economy, with \$8.9 billion in total output.

Table 2: Top Ten Sectors by Output, Kansas

Sector	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$8,942,248,000
Animal, except poultry, slaughtering	\$8,826,822,000
Grain farming	\$6,151,579,000
Meat processed from carcasses	\$3,911,181,000
Dog and cat food manufacturing	\$3,672,293,000
Farm machinery and equipment manufacturing	\$2,862,900,000
Other real estate	\$2,376,100,000
Oilseed farming	\$2,254,180,000
Wholesale - Other nondurable goods merchant wholesalers	\$2,029,582,000
Flour milling	\$1,807,090,000

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 35,191 jobs. Table 3 illustrates the top ten sectors by total employment, including direct, indirect and induced effects in Kansas.

Table 3: Top Ten Sectors by Employment, Kansas

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	35,191.92
Grain farming	14,695.15
Other real estate	12,834.17
Animal, except poultry, slaughtering	11,714.92
Support activities for agriculture and forestry	11,075.06
Landscape and horticultural services	9,525.42
Truck transportation	9,438.09
Meat processed from carcasses	7,569.14
Wholesale - Other nondurable goods merchant wholesalers	6,980.52
All other crop farming	6,493.15

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 Kansas 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, Kansas

Sector	Total Output	Total Employment
Beef cattle ranching and farming, including feedlots and		
dual-purpose ranching and farming, including feedlots and	\$8,942,248,000	35,191.92
Animal, except poultry, slaughtering	\$8,826,822,000	11,714.92
Grain farming	\$6,151,579,000	14,695.15
Meat processed from carcasses	\$3,911,181,000	7,569.14
Dog and cat food manufacturing	\$3,672,293,000	2,899.55
Farm machinery and equipment manufacturing	\$2,862,900,000	5,277.94
Oilseed farming	\$2,254,180,000	1,833.16
Flour milling	\$1,807,090,000	1,473.97
Other animal food manufacturing	\$1,699,653,000	1,390.87
All other food manufacturing	\$990,319,000	2,090.98
Fats and oils refining and blending	\$941,648,000	567.22
Landscape and horticultural services	\$936,296,000	9,525.42
Other snack food manufacturing	\$919,920,000	1,080.56
Dairy cattle and milk production	\$738,957,000	1,031.75
Confectionery manufacturing from purchased chocolate	\$579,968,000	1,371.21
Bottled and canned soft drinks & water	\$575,213,000	724.78
Frozen specialties manufacturing	\$569,893,000	1,341.47
Bread and bakery product, except frozen, manufacturing	\$569,040,000	2,968.65
Spice and extract manufacturing	\$559,087,000	647.52
Animal production, except cattle and poultry and eggs	\$529,489,000	2,721.71
Support activities for agriculture and forestry	\$494,780,000	11,075.06
Soybean and other oilseed processing	\$416,857,000	100.38
Lawn and garden equipment manufacturing	\$361,156,000	609.44
Fluid milk manufacturing	\$323,976,000	389.27
Veterinary services	\$313,051,000	3,661.41
All other crop farming	\$296,844,000	6,493.15
Cookie and cracker manufacturing	\$267,183,000	466.86
Nitrogenous fertilizer manufacturing	\$231,664,000	177.74
Food product machinery manufacturing	\$207,834,000	684.71
Dry, condensed, and evaporated dairy product manufacturing	\$177,060,000	130.65
Dry pasta, mixes, and dough manufacturing	\$176,486,000	215.82
Pesticide and other agricultural chemical manufacturing	\$154,089,000	105.02
Frozen cakes and other pastries manufacturing	\$151,065,000	1,488.46
Cheese manufacturing	\$145,819,000	139.90

STATE OF KANSAS 2022 ECONOMIC CONTRIBUTION REPORT

Sector	Total Output	Total Employment
Paper mills	\$114,470,000	132.31
Sugar cane mills and refining	\$113,829,000	84.84
Cotton farming	\$109,374,000	700.83
Wet corn milling	\$96,476,000	54.37
Poultry and egg production	\$89,156,000	100.63
Canned fruits and vegetables manufacturing	\$87,548,000	146.91
Breweries	\$79,845,000	220.53
Greenhouse, nursery, and floriculture production	\$74,680,000	513.77
Fertilizer mixing	\$71,110,000	128.15
Paperboard mills	\$63,409,000	69.79
Roasted nuts and peanut butter manufacturing	\$62,988,000	125.88
Phosphatic fertilizer manufacturing	\$56,446,000	63.99
Tobacco product manufacturing	\$53,420,000	14.81
Chocolate and confectionery manufacturing from cacao beans	\$49,477,000	71.84
Nonchocolate confectionery manufacturing	\$48,409,000	81.30
Tortilla manufacturing	\$45,723,000	163.09
Wineries	\$44,292,000	136.26
Poultry processing	\$43,515,000	123.72
Distilleries	\$43,408,000	45.41
Other chemical and fertilizer mineral mining	\$39,866,000	125.70
Coffee and tea manufacturing	\$33,162,000	52.01
Flavoring syrup and concentrate manufacturing	\$30,764,000	8.00
Vegetable and melon farming	\$27,244,000	147.37
Ice cream and frozen dessert manufacturing	\$25,133,000	57.98
Rendering and meat byproduct processing	\$24,842,000	57.92
Commercial logging	\$20,827,000	297.06
Dehydrated food products manufacturing	\$18,680,000	32.62
Frozen fruits, juices and vegetables manufacturing	\$17,188,000	24.75
Forestry, forest products, and timber tract production	\$11,659,000	121.85
Fiber, yarn, and thread mills	\$11,388,000	40.76
Commercial hunting and trapping	\$7,328,000	210.59
Other leather and allied product manufacturing	\$6,762,000	81.29
Sawmill, woodworking, and paper machinery	\$5,743,000	21.20
Sawmills	\$5,317,000	21.30
Tree nut farming	\$3,408,000	27.27
Fruit farming	\$3,140,000	25.66
Knit fabric mills	\$2,988,000	15.68
Leather and hide tanning and finishing	\$2,442,000	12.46
Narrow fabric mills and schiffli machine embroidery	\$1,915,000	11.26

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 (2020), adjusted for 2022 dollars.

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 may 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.

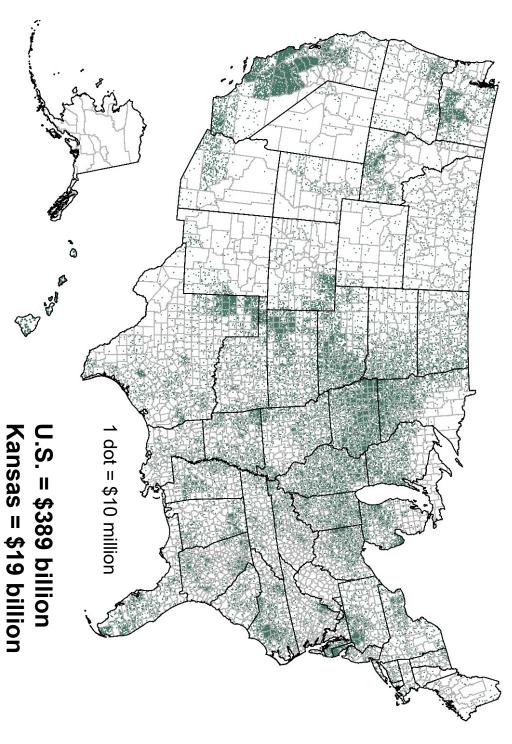
The following terms are used throughout this report:

- 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 state
- *Induced effect:* the contribution from employees of farms, agricultural businesses, and supporting industries spending their wages on goods and services within the state
- 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.

Contact

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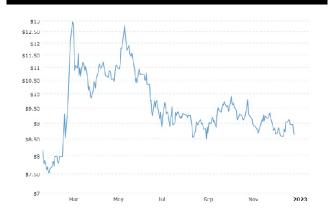
TVP by County



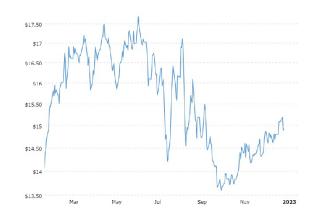
Sheridan	Barton	Seward	Ford	Wichita	Grant	Finney	Gray	Scott	Haskell	Top 10 Counties
349	366	425	515	559	814	82 133	991	1,135	1,159	TVP (\$ millions)

KS

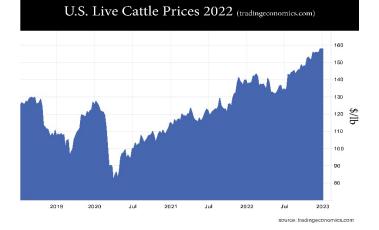
U.S. Wheat Prices 2022 (macrotrends.net)

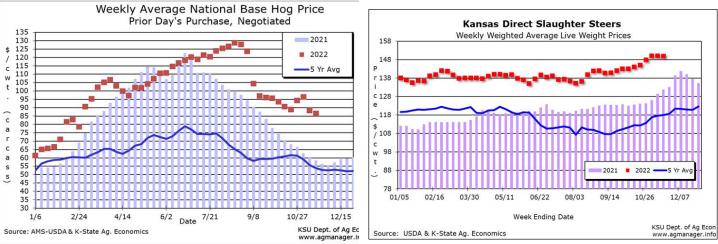


U.S. Soybean Prices 2022 (macrotrends.net)



U.S. Corn Prices 2022 (Macrotrends.net) \$8.20 \$8 \$7.80 \$7.60 \$7.40 \$7.20 \$/ \$6.80 \$6.60 \$6.40 \$6.20 \$6 \$5.80 \$5.60 \$5.10 ма Мау Jul Sep Nor 2023







2021 Kansas Agricultural Exports

INTERNATIONAL MARKETING AND TRADE STATISTICS MARCH 21, 2022

The Kansas Department of Agriculture Division of Agricultural Marketing, Advocacy and Outreach offers a variety of programs and services to assist Kansas farmers, ranchers and agribusinesses as they market their products and services overseas. On average, agricultural exports account for one-third of total exports leaving Kansas.

Kansas Department of Agriculture international marketing services include: assisting with overall international marketing strategies and plans; assisting with market research and basic understanding of export/import protocols and regulations; hosting foreign buying teams; leading industry-specific trade missions; and membership in national and international trade associations that give Kansas farmers, ranchers and agribusinesses access to a variety of programs and services. Memberships include:

- Food Export Association of the Midwest
- U.S. Grains Council

- U.S. Livestock Genetics Export, Inc.
- U.S. Meat Export Federation

In the past five years, organized inbound and outbound trade missions and meetings promoting the Kansas agriculture industry have been held with representatives from the following countries: Argentina, Australia, Azerbaijan, Bulgaria, Brazil, Canada, China, Colombia, Costa Rica, Croatia, Cuba, Ethiopia, France, Ghana, Guatemala, Indonesia, Israel, Japan, Kazakhstan, Korea, Kyrgyzstan, Madagascar, Mexico, Moldova, Mozambique, Nepal, Nigeria, Pakistan, Panama, Paraguay, Peru, Philippines, Russia, Rwanda, Serbia, South Africa, Spain, Taiwan, Tajikistan, Tanzania, Thailand, Turkey, Ukraine, Uruguay and Zambia.

Calendar Year 2021 Kansas Ag Exports, By Product

Rank	Product	2021 Exports	Percent
1	Meat, Edible Offal	\$2,061,583,767	38.51%
2	Cereals	\$1,515,687,180	28.31%
3	Oil Seed	\$626,717,741	11.71%
4	Residues, Wastes	\$371,924,779	6.95%
5	Beverages, Vinegar	\$280,901,240	5.25%
6	Fats, Animal, Vegetable	\$130,821,422	2.44%
7	Dairy Products	\$113,119,186	2.11%
8	Milling Products	\$57,980,059	1.08%
9	Misc Edible Preps	\$57,959,963	1.08%
10	Animal products	\$32,547,105	0.61%
	Other	\$97,358,741	1.82%
	Total	\$5,353,740,850	

Calendar Year 2021 Kansas Ag Exports, By Country

Rank	Country	2021 Exports	Percent
1	Mexico	\$1,912,397,221	35.72%
2	Japan	\$822,787,627	15.37%
3	China	\$701,304,962	13.10%
4	South Korea	\$332,660,498	6.21%
5	Taiwan	\$224,679,788	4.20%
6	Canada	\$134,421,818	2.51%
7	Hong Kong	\$92,211,727	1.72%
8	Malaysia	\$45,380,910	0.85%
9	Vietnam	\$37,186,470	0.69%
10	Brazil	\$11,213,101	0.21%

Kansas exported to 93 foreign markets in 2021.

Source: Euromonitor International

Contact

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Agency Economist Tori Laird ageconomist@ks.gov The mission of the KDA Agricultural Marketing, Advocacy and Outreach Team is to serve all Kansans through innovative programming and delivering solutions designed to create an environment that facilitates growth and expansion in agriculture while increasing pride in and awareness of the state's largest industry – agriculture

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Kansas Ag Exports,	2017-2021
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Year	Agricultural Exports
2021	\$5,353,740,850
2020	\$4,023,347,596
2019	\$3,840,472,378
2018	\$3,799,178,988
2017	\$3,636,185,417



2022 Kansas Agriculture Workforce Survey Overview

A lack of a skilled agriculture workforce is a top inhibitor of growth and expansion for many Kansas agriculture entities. To help support growth in agriculture, the Kansas Department of Agriculture seeks to help the industry better understand workforce needs among agricultural employers in the state. To link the supply of human capital to the needs of Kansas agribusiness enterprises, KDA conducted the first Kansas Agriculture Workforce Needs Assessment Survey in 2015 with the results released in 2016. As needs change over time, a second survey was conducted in 2022. The survey was analyzed by the Agricultural Land Use Survey Center at Kansas State University.



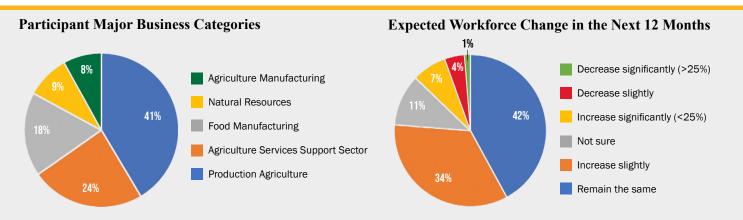
The survey was emailed to over 25,000 businesses with 1,192 choosing to participate. Businesses participating employ 27,466 individuals in Kansas and 9,244 outside of Kansas. Respondents were asked to self-select the major category that applied to their business.

According to estimates prepared by KDA and based on the IMPLAN economic data model, the agriculture, food and food processing sector has a total direct output of \$53.4 billion and supports 136,227 jobs in Kansas. Overall, these industries and their ag-related businesses support 256,080 jobs, or 14% of the entire workforce in the state of Kansas. They provide a total economic contribution of \$76 billion, roughly 14% of Gross Regional Product.

Key Questions

The 2022 survey focused on two overarching questions:

- What is the likely source of future employment demand from the agriculture industry for workers?
- What programs and strategies can be developed and marketed within the state to respond to the needs of the agriculture sector so that the knowledge and skills acquired by potential employees match future employment opportunities?

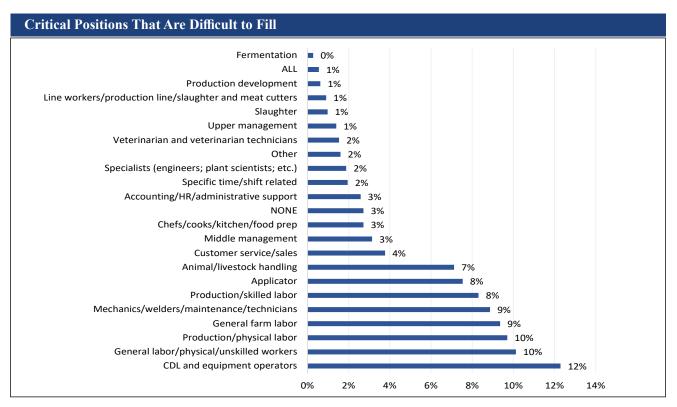


Workforce Changes

When asked about future workforce, 42% of respondents expect the size of their workforce to remain the same over the next 12 months. Thirty-four percent of respondents expect the workforce to increase slightly, defined as less than 25%, over the next 12 months.

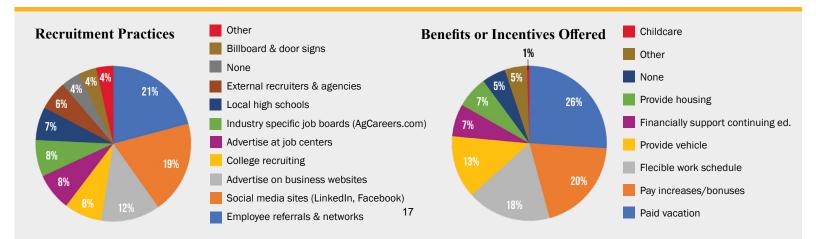
Of the critical positions that respondents said were difficult to fill, CDL and equipment operators were selected by over 12% of the respondents. Around 8–10% of respondents selected each of the labor categories, which included general unskilled labor, production physical labor, general farm labor and production skilled labor. Kansas agriculture remains a physically demanding industry with nearly two-thirds of respondents stating the average job, in their place of business, was moderately to intensely physically demanding.

Eighty-four percent of respondents indicated their hourly pay rates increased over the past two years. Nearly 40% provided increases of \$3-5/hour.



Recruitment and Retention

With low unemployment numbers in the state, respondents noted a variety of recruitment practices and future opportunities for hires. Slightly over 20% of respondents used employee referrals and networks, while 19% used social media sites as a major component of their recruitment strategy. The top employee benefits and incentives include paid vacation, performance pay/bonuses and a flexible work schedule.



To offset the lack of skilled workers, some respondents are currently hiring non-traditional workers to fill the void. Hiring non-traditional workers would expand the hiring pool for ag businesses. It was noted there are a number of barriers to hiring non-traditional workers; 13% cited government paperwork as a barrier.

Businesses are utilizing on-the-job training, in-house training, apprenticeship programs and customized community college/ technical training or education programs to enhance worker skills.

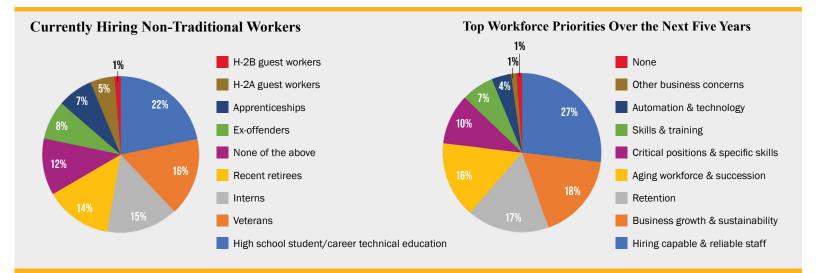
Workforce Priorities

When asked about their top two workforce priorities over the next five years, 27% of respondents selected hiring a capable and reliable staff and 18% selected business growth/sustainability. This is followed closely with 17% focusing on retention and 16% on succession planning. Ten percent of respondents selected hiring for critical positions and specific skills, and 7% said skills and training are priorities while only 4% selected automation and technology as one of the two top priorities for the next five years.

Recommendations

The following are recommendations based on the results of the survey:

- Consider offering current employees a wage enhancement for "successful" employee referrals, defining "successful" as referrals that stay over a specified time period or meet some other merit-based criteria. Over 20% of respondents said they use employee referrals as a recruitment tool; however, only 7% said they offered a wage enhancement for referrals.
- Employers and state agencies need to work together to develop or find programs so that businesses may implement successful on-the-job training. Over 40% of respondents use on-the-job training to increase their workforce's skills.
- Expand marketing of KansasWORKS and Kansas Department of Commerce marketing efforts. Almost 70% of respondents said they were not aware of any of the training programs listed in the survey.
- When promoting careers in agriculture, consider long-term approaches, such as immersion and apprenticeship programs and mentoring opportunities. Establishing relationships with community youth will create lasting impressions and good will well beyond the amount of the initial investment. These long-term relationships will have an exponential impact.

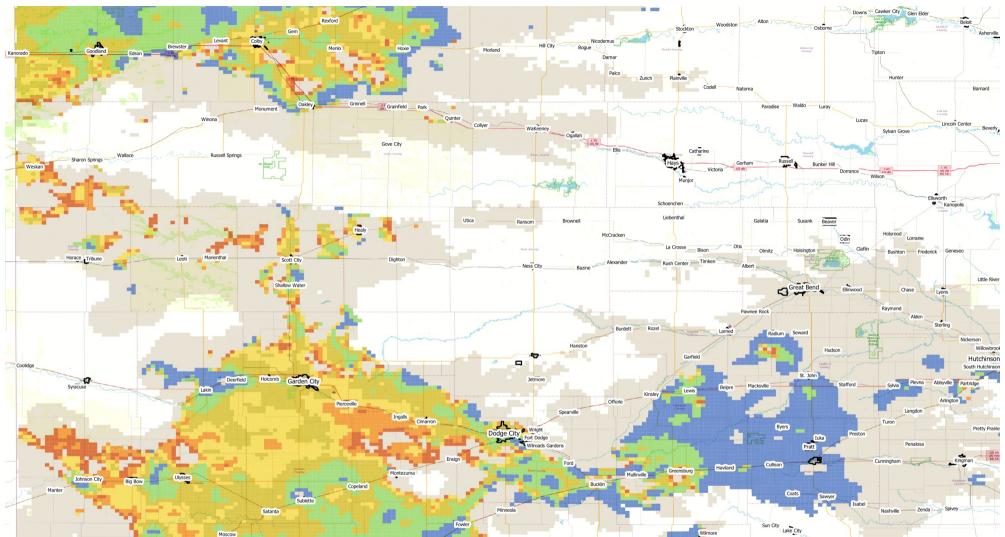




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The survey was conducted by the Agricultural Land Use Survey Center at Kansas State University. It was offered to agribusinesses, manufacturers and producers of agricultural products in Kansas and was open from February 18, 2022, to April 11, 2022. The survey recorded 1,192 responses from across the state.

Estimated usable remaining life of the Ogallalah-High Plains Aquifer Kansas Geological Survey Methodology



Estimated Usable Aquifer Life years remaining pumping 200 gallons per minute (Kansas Geological Survey Methodology)

<0 no aquifer
50 - 100 years
0 - 10 years
100 - 200 years
10 - 25 years
more than 200 years
20 - 50 years

