



# PORK

## EXECUTIVE SUMMARY

The pork industry is an important component of the Kansas economy, providing pork products locally, nationally and internationally. As swine production has become more specialized, and environmental impacts have played an increasingly larger role in operational decisions, the pork industry in Kansas has seen adjustments in size and location of hog operations. Growth in the pork industry can result from an increasingly concentrated supply chain, and the readily available supply of feed in Kansas assists that effort. Leaders in the pork industry in Kansas are dedicated to support of swine farmers and to advancement of the industry. Swine producers strive to minimize production costs while optimizing productivity and product quality all while reducing environmental impact and avoiding social impacts on their communities. Modern swine production has become very specialized and farm sizes have grown as economies of scale are sought.

Several challenges face the pork industry, which pose potential barriers to success in Kansas in the future. A variety of policies at the local, state and federal level can slow the growth of individual operations, and public support for hog operations is lacking in some communities. Attracting a skilled workforce is a continual concern, as well as managing the challenges of an immigrant workforce. The lack of a large-scale processing facility raises transportation costs, and acquiring sufficient water supply is difficult in some areas of the state. Environmental regulations have put pressure on some producers to relocate.

Growth in the pork industry will require the collaborative effort of public and private stakeholders across the state. Investigation into expansion of the processing options would open up new opportunities for growth of existing and new operations. Additional efforts to maximize efficient water use will benefit hog operations in the short term and protect the industry's long-term future as well. Continued communication with policy makers and the public to improve understanding of the pork industry is critical. A great deal of potential exists for growth in this sector, as key leaders work together to identify strategies for future development.

# STATUS

Kansas ranks 10th nationwide in hog inventory, producing about 2.8 percent of the nation’s total. There are about 1,000 hog farms in Kansas. Of these operations, 150 produce over 99 percent of the state’s pork. In 2015, Kansas producers sold 3,298,673 market hogs, feeder pigs and seedstock with a gross market value of \$494.3 million. These hogs produced more than 600 million pounds of pork which helps feed millions of people in the United States and abroad through exports (KPA Kansas Pork Industry Facts, 2016).

The pork industry is important to the Kansas economy. Kansas pork farms consume more than 30 million bushels of grain. Primarily, these operations utilize Kansas-grown grain sorghum and corn. At January 2016 prices, the pork industry will spend over \$90 million on grain sorghum and corn this year. Kansas pork farms also consume the equivalent of more than eight million bushels of soybeans through soybean products. At January 2016 prices, the pork industry will spend over \$64 million on soybean meal this year (KPA Kansas Pork Industry Facts, 2016).

According to estimates prepared by the Kansas Department of Agriculture and based on the Implan economic data model, the pork industry in Kansas has a direct output of over \$467.3 million and creates 2,860 jobs in the state. Through indirect and induced impacts, the industry supports a total of 4,583.6 jobs and creates a total economic contribution of over \$716.6 million.

In general, the swine industry is moving to the north central part of the United States and to the central and western half of Kansas. It is important to remember that industry shifts can occur suddenly. Oklahoma increased its breeding herd by almost 500 percent in a little over five years. The relative mobility of the pork industry means that regulations could result in significant changes in the location of hog production facilities, with ripple effects in local economies. Modern swine production has become very specialized and farm sizes have grown as economies of scale are sought. The trend toward fewer, larger and more productive hog operations will likely continue into the foreseeable future.

# OPPORTUNITIES

In order to develop a strategic growth plan for the pork industry, it is important to understand the areas where Kansas has a comparative advantage and the best opportunities for growth or expansion.

Factor	Implications for Growth and Development Opportunities
<p><b>Biosecurity and Foreign Animal Disease Traceability</b></p>	<p>KDA Division of Animal Health is working with veterinarians and swine industry partners to best develop protocols to address disease concerns.</p> <p>The U.S. Department of Agriculture issued a federal order requiring producers to report any new detections of PEDv and other swine enteric coronavirus diseases to state or federal animal health officials.</p>
<p><b>Contract Production and Nutrient Utilization</b></p>	<p>Contract production is believed to have aided the expansion of hog operations by facilitating the accumulation of capital necessary for operations to adopt new technologies and achieve economies of size.</p> <p>Some farmers have opted to contract grow hogs which allows them to not only diversify their operation, but it also allows them access to manure to use on their crops. Manure management and the nutrient utilization capacity of crops grown on large Kansas farms fit well into the business model for Kansas farmers.</p>

# OPPORTUNITIES (cont'd)

Factor	Implications for Growth and Development Opportunities
<b>Environment</b>	<p>Although most hog production is indoors, and hogs can adapt to some degree to different thermal environments, there is a cost to production associated with keeping them outside their comfort zones. The semi-arid climate and mild ambient temperatures make Kansas well-suited for hog production.</p> <p>Kansas is taking significant proactive steps to preserve and extend the usable life of water supplies in Kansas. In recent years, voluntary, flexible and producer-driven water conservation tools have been implemented to help farmers and livestock producers manage their water rights while continuing to raise crops and livestock. Kansas has developed a <i>Vision for the Future of Water Supply in Kansas</i> with goals and specific action items to help ensure a reliable water supply while continuing to grow the economy.</p> <p>The Kansas Pork Association has its own environmental firm, Kansas GOLD™. The Kansas GOLD™ program is designed to help pork farmers ensure they are prepared for an inspection by the state's regulatory agencies. Kansas GOLD™ also offers nutrient management planning as well as soil and manure sampling.</p>
<b>Human Capital</b>	<p>Kansas is home to world-renowned leaders in animal agriculture. Industry consultants, veterinarians and research leaders at Kansas State University are continually working to improve the swine industry and are looked at as leaders in their field.</p>
<b>Industry Value</b>	<p>Kansas currently has value-added processing for pork brought in from processing plants in other states.</p>
<b>Policy Environment</b>	<p>Recent changes to the Kansas tax code have reduced state tax burdens on the Kansas agricultural community. Some of the key changes include a state income tax exemption for partnerships, LLCs, Limited Liability Partnerships, Sole Proprietorships and Subchapter -S Corporations; a sales tax exemption on the construction, reconstruction, and remodeling of livestock facilities for projects greater than \$50,000; a sales tax exemption for farm machinery and equipment and various ag-based inputs; and reinstatement of the ability to offset capital gains from the sale of breeding livestock with schedule C, E and F ordinary income losses. These state tax code provisions make Kansas a more attractive state for growth or expansion.</p>
<b>Public Outreach</b>	<p>Kansas Pork Association staff work on marketing and outreach both online via social media platforms and at events around the state.</p>

## OPPORTUNITIES (cont'd)

Factor	Implications for Growth and Development Opportunities
<b>Supply Chain</b>	Rapid growth and concentration of the swine industry has been attributed to the development of supply chains more closely linking producers, packers and consumers. Kansas benefits from a readily available supply of grain and readily available transportation to get hogs to processing facilities located across state lines.
<b>Supporting Institutional Infrastructure</b>	Kansas is recognized as one of the best exercised states in foreign animal disease. The construction of the National Bio and Agro-Defense Facility and the existing Biosecurity Research Institute enhance the research capabilities for animal health and biosecurity for the state, U.S. and global swine industry.

## SUCCESS STORIES

- Expansion of a large pork operation in north central Kansas is expanding economic growth of that region.
- Changes in the tax code in 2012 and 2014 make Kansas more attractive for new business growth or expansion of existing businesses.
- Several national meat processing companies are importing meat to Kansas for value-added processing.
- A large hog operation in southwest Kansas expanded its business.

## CHALLENGES

While Kansas is poised for major expansion in the pork sector, the following factors represent challenges serving as barriers to achieving the objective of the strategic growth plan.

Challenge	Details of Challenge
<b>Biosecurity and Foreign Animal Disease Traceability</b>	<p>Premises ID systems are not required in Kansas. Some states are transitioning or have already transitioned to a premises ID system. A system with proper trace back and trace forward capabilities provides timely response to minimize the economic impact in the event of an animal disease outbreak.</p> <p>Indiana is a state model to evaluate if/when premises ID consideration is evaluated in Kansas.</p>
<b>Critical Infrastructure</b>	<p>Swine production is often located in rural communities, many of which have an inadequate supply of affordable housing for the workforce needed to expand or grow businesses.</p> <p>Marketing hogs in parts of Kansas can be challenging. There are no large-scale processors in Kansas which means hogs must be hauled out of state. Two-lane roads can make transporting hogs challenging at times.</p>

# CHALLENGES (cont'd)

Challenge	Details of Challenge
<b>Industry Support</b>	At permit hearings, there is a greater voice in opposition of hog farms than in support.
<b>International Trade</b>	A key area for growth will result from increasing global demand for pork. With Kansas' partnerships in U.S. Meat Export Federation and commodity groups, the state can increase global demand for red meat. In 2015, exports added more than \$48.61 to the value of each hog marketed. Kansas must work with elected officials to keep export markets open and accessible for producers.
<b>Policy</b>	<p>County regulations vary across the state. In some counties, the board of county commissioners may submit a vote to allow corporate-owned hog facilities to relocate to their counties.</p> <p>Environmental regulations (minimum setbacks, maximum farm sizes as defined by animal unit capacity, Kansas Statute 65-171d), corporate ownership, and processor ownership of hogs could be perceived as inhibitors to industry growth.</p> <p>Due to lack of staff, the Kansas Department of Health and Environment permit process can take a long time. Many producers acknowledge the lack of agricultural engineers contributes to the problem.</p>
<b>Public Outreach</b>	Many Kansans may have misperceptions about how hogs are grown and raised. In order for a swine operation to be welcome in the community, the public must be educated on modern hog production.
<b>Supply Chain</b>	Kansas currently lacks a large-scale processing facility in the state. Although transportation is readily available, transportation costs to processing facilities out of state can become cost prohibitive for producers. Pork is currently imported and processed into value-added products in Kansas.
<b>Water</b>	Critical to growing any livestock operation is access to an abundant and reliable water supply. This can prove challenging in many areas of western Kansas that are closed to new water appropriations. New or expanding swine operations in these regions will have to purchase land with sufficient water rights. Consumptive use laws can be costly and burdensome to convert from irrigation to stock water use.

## CHALLENGES (cont'd)

Challenge	Details of Challenge
<b>Workforce Development</b>	<p>Growth in the swine industry will require a skilled workforce, which continues to be a significant challenge through the entire agricultural industry. Local communities need to have an interest in the type of jobs that will become available at a hog facility. The education and skill sets needed to operate technically advanced facilities now require individuals who have different education levels and work experiences than employees working on the ground inside sow facilities and finishing barns.</p> <p>Immigration and visa challenges will continue to be a problem. A better system would help eliminate the professional migrators, or employees that move from farm to farm once their paperwork catches up with them. When recruiting and processing non-citizens to relocate and work in the Kansas pork industry, producers would have less of a problem going through the process of hiring foreign workers if they knew the visa programs had stability.</p> <p>A lack of adequate housing in rural areas compounds the issue of a shortage of agricultural workers.</p> <p>The demand for agricultural engineers and consultants is strong in Kansas, especially in the swine industry.</p>

## NEXT STEPS IN STRATEGIC DEVELOPMENT

The development of a long-term growth strategy will require input and discussion among key partners. The following strategies have been identified as the next steps in developing a strategic growth plan for the pork industry.

Focus Area	Solution
<b>Expanding Industry</b>	<p>Work with renowned K-State swine group to identify ways to enhance and expand the Kansas pork industry. Targeted recruitment of swine producers and processors, including genetic companies, is a desired outcome.</p> <p>Attend K-State Swine Profitability conference and Swine Day to fully understand the state of the industry in Kansas.</p> <p>Attend World Pork Expo and begin conversations with attendees regarding interest in growing Kansas pork business.</p> <p>Consider U.S. Livestock Genetic Export trade mission for swine genetics by focusing on developing new relationships and opening global distribution outlets for Kansas swine genetics.</p>
<b>Infrastructure Improvements</b>	<p>Establish proactive outreach with major pork processors to evaluate future plans for expansion including value-added processing and live hog production.</p> <p>Understand how feed mill capacity/proximity blends with industry growth needs.</p> <p>Housing for workforce is a critical piece for industry growth.</p>

# NEXT STEPS IN STRATEGIC DEVELOPMENT (cont'd)

Focus Area	Solution
<b>International Trade</b>	Kansas has the opportunity to increase live hog exports to countries wanting to expand their own herds. Kansas has seen an increase in export certificates for hogs going to both Mexico and Canada over the past year.
<b>Public Outreach</b>	<p>Work with Pork Checkoff to improve public information and outreach (see National Pork Board 2015-2020 Strategic Plan).</p> <p>Put together a tour of modern hog production for county commissioners to improve their knowledge and understanding of the hog industry and its economic impact.</p>
<b>Water</b>	<p>Continue to implement the action items identified in the Kansas Water Vision related to livestock production including continued outreach to increased adoption of voluntary, flexible water conservation tools like Water Conservation Areas and Local Enhanced Management Areas.</p> <p>Communicate facts about water use. For example, water can be used twice: once to water hogs, once to apply on crops. The amount of water used in hog production is much less in comparison to a center pivot irrigating crops. The gal/min needed for a hog farm is much less than needed for an irrigation pump (50 gal/min versus 2000 gal/min), which may allow hog farms to relocate in areas where irrigating crops is no longer a viable option.</p>

## OPPORTUNITIES TO EXPAND PRESENCE

Initial list of potential opportunities:

- Explore opportunities to increase value-added processing in the state.
- Partner with industry to enhance consumer education efforts related to swine production practices.
- Expand opportunities for niche/local marketing of pork from Kansas farms.

## OBJECTIVE

Based on feedback and information gathered from stakeholders and key partners at the Agricultural Growth Summit in August 2016, specific growth objectives for the Kansas pork industry will be developed.

# Kansas AG SUMMIT

GROW SMARTER. GROW STRONGER. GROW KANSAS.

## KANSAS STRATEGIC AGRICULTURAL GROWTH PORK — NOTES

### MEETING SUMMARY

From April to July 2016, Kansas Department of Agriculture executive and agricultural marketing team members met with pork producers and industry members. Pork producers identified for one-on-one conversations represented both small and large operations and ranged in geography throughout the state. Many expressed that the state's natural biosecurity makes Kansas a good place to grow. Common themes of challenges impacting the growth of the pork industry included the KDHE permitting process, corporate farming laws and water rights.

### Consumer

- Industry receives a lot of complaints about dust and odor
  - People don't understand that is how you add value (biggest problem in rural areas)
  - Educating those who don't understand would be helpful (help alleviate bad reaction to hog facilities)
- An industry piece focused on marketing and consumer education (referring to industry growth) would be useful if housed on a 3<sup>rd</sup> party site (like KDA)
- Local pushback, even from the county, for expansion is a challenge
- International markets are essential to a healthy domestic pork industry. Keeping animals healthy and free from disease is the best way to keep trade relationships healthy.

### Finance and Capital

- Access to financing can be an issue (most bankers require 40% down on hog barns)

### Research

- Shortage of environmental consultants in Kansas specifically focused on swine could inhibit growth of the industry
- Budget cuts to secondary education and research will really hurt businesses
  - Professor salaries have not kept up with the industry, making recruitment difficult
  - Recruitment can be difficult because of the perception of the Kansas economy
- Research done on K-State campus is the best in the world (many swine operations run their research programs as an extension of what is happening in Manhattan)
- In regard to research projects, scale of research is a missing link (ex. modern day pork production)
  - Need studies to be more representative in nature

Pork



## Rules & Regulations

- Understanding changes in the laws that affect ag are a challenge
- Permitting process with KDHE takes too long
  - Surrounding states are much quicker
  - KDHE approval system is a deal breaker for producers looking to expand
  - Staff shortage has slowed down the approval process
  - Technical review level is the bottleneck
  - Out-of-state producers will always have more trouble trying to build than in-state producers
  - Hearing format and administration needs an overhaul
- Corporate farming laws are a primary concern
  - The biggest inhibitor to growth in this industry
  - Kansas will inadvertently build a wall around the state and not let outsiders in for business
  - Nebraska's change in corporate farming laws will continue to impact decisions on where producers will build if they have a choice
- Animal traceability is vital to growth of the industry
  - Premises IDs are needed
- HB 2950 is one of the strictest in the nation (KDHE certification on all swine operations with greater than 1000 animal units)
- Local property tax and mill levy are a challenge
  - State taxation structure causes local level to increase tax load
  - Fewer communities can absorb the high local level property taxes
- Current agriculture sales tax exemption is important to operations
- Veterinary Feed Directive adaptation is a focus of a lot of operations right now

## Transportation and Infrastructure

- Processing is a challenge
  - There are few processing plants in the nation that have welfare certification through American Humane Certified or Certified Humane
    - This certification is necessary for some niche markets
  - Hard to grow feeder to finish in Kansas without a packing plant — behind neighboring states in this aspect
  - For long-term to work, plants have to be built where the hogs are located
  - When the Arkansas City plant closed, it became very hard to market hogs (now have to go north for processing) for many southern Kansas producers
- The transportation networks across the state are not always the best for transporting finished hogs to out-of-state processors (ex. two-lane roads in southeast Kansas)
- Kansas is suitable for growth, but the Iowa pig business model is not the way to go due to manure runoff on high producing crops
- Kansas has a lack of toll mills (you need feed mills and affordable feed before someone will consider building a hog operation)

## Water and Natural Resources

- Water resources are key to the future of the swine industry in Kansas
  - Kansas needs to communicate facts about water use within the swine industry
- Manure is a hot topic
  - Many areas of the state could benefit from spreading more manure for nutrient management purposes
  - Educating people on the value of manure (educating row crop farmers) would be beneficial
- Kansas has good, well-defined and workable nutrient management plans

## Workforce and Quality of Life

- Attracting employees is a challenge
  - Labor availability is the biggest factor in deciding where to build the next processing plant
  - Technology can help recruit young people into ag — technology can also help businesses increase pay/wage due to an increase in overall efficiencies within the business
- Would like to utilize more H-2A workers, but it is difficult to do it
  - Would be helpful to have advocate to help ag with H-2A/H-2B and other work visa programs
- Immigration will continue to be a problem
  - Work visas for immigrants already here would be beneficial
  - If producers knew the program had stability, they would have less of a problem going through the process of hiring foreign workers
  - Better system would help eliminate professional migrators or employees that move from farm to farm once their paperwork catches up with them
- There is too much focus on high school to college path
  - Need to promote the high school ag certificate within the industry
  - Choosing not to go to college is looked down on by schools, peers and community
- Need for safety education for employees who did not grow up around farming
- Finding the next generation of farm managers for operations is a concern
- Communities have to be willing to recruit people who might be viewed as blue collar
- Kansas lags behind the rest of the nation in terms of internship programs in the swine industry
  - Kansas kids have limited exposure to hogs, so many don't know the opportunities exist
- Need for ag engineers
  - Would be very beneficial to encourage growth of this program at K-State
  - Need for this type of engineer will continue to grow

## Other

- Rural water districts should be helping with economic development
- Biosecurity through the geography of the state makes Kansas a great location for expansion (bluffs, lack of water in some areas will allow producers to create natural radius of biosecurity around their barns)

- Biosecurity is the biggest potential draw for hog production, but many parts of Kansas don't have water to support hog production
- There is concern that few legislators/elected officials understand agriculture
- Livestock voices have to be heard in the sorghum research debate
- Kansas should be thinking and preparing for animal activist activity in the state
- Belief that eastern Kansas is so ag diverse that the region has not done a good job attracting a value-added company for one sector only
- Kansas Gold is doing a good job with helping producers with their plans
- Kansas has a "beef state" image that is hard to overcome (pigs often seen as a nuisance)
- PIC and Abilene Animal Hospital is instrumental in identifying sites
- Helping understand how and where to find incentives would be beneficial
- Having a list of pre-approved sites would be very beneficial
- Having a state-recognized foreign animal disease response plan would be welcomed by producers

#### Potential Action Items

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