



# CORN

The Kansas corn industry fills a significant role in the agriculture economy. Corn is the largest crop grown in Kansas, both in bushels produced and in economic contribution. The corn sector supplies grain and silage to the cattle sector, as well as supplies feedstock for ethanol and, thus, ethanol by-products. Substantial resources have been invested in corn research to increase yield and efficiency of production, including in the areas of seed genetics, irrigation technology and data management. As a leading livestock producer, Kansas is a major customer for corn as a feed source, especially within the beef production chain. Continued advancement in bioscience is creating increased potential for corn to contribute to additional products and bring increased manufacturing options to the state.

A number of challenges face the corn industry and present potential barriers to future growth within this sector. Several policies, both local and federal, are threatening the financial stability of corn farmers and prevent expansion. Expanding the export market will be dependent on improved transportation

infrastructure. Concerns among consumers both domestic and international question the role of genetic technology in corn production and in fuel use, as well as nutritional issues. Ever-depleting groundwater sources for irrigation continue to be a threat to farmers, particularly in certain regions of the state.

A long-term growth strategy for the corn sector will require input and collaboration among many key partners, both public and private. Continuing development of policies and technologies to maximize water use will play a major role in future success. A strong relationship with the ethanol industry will be key in encouraging increased production of ethanol, thus increasing demand for corn. Potential exists to develop new business markets within the state that would involve research, processing or manufacturing corn and corn products.

A strategic growth plan for Kansas corn developed in collaboration among stakeholders could make a significant impact on the corn industry.

## Status

The corn sector of the Kansas agriculture economy includes the production of corn and the first purchaser uses of that corn, such as livestock feeders, ethanol plants and exporters. Kansas corn production was 510.6 million bushels in 2022. The corn sector of the Kansas agriculture economy is built on supplying grain and silage to the cattle feeding sector, as well as serving as feedstock for Kansas ethanol plants, and corn exports totaled nearly \$536.1 million in 2022. Kansas ranks 9th in corn production in the nation. Corn is the leading crop in Kansas in terms of bushels produced and economic contribution.

According to estimates prepared by the Kansas Department of Agriculture and based on the IMPLAN economic data model, the corn industry in Kansas has a total direct output of over \$4.2 billion and creates 9,000 jobs in the state. Through indirect and induced impacts, the industry supports a total of 26,637 jobs and provides a total economic contribution of \$7.5 billion. The ethanol industry, a primary supporter of the corn industry in Kansas, provides an added 4,000 in total jobs, as well as a total economic contribution of over \$2.2 billion.

Not every part of Kansas is well suited to the production of corn, but trait technologies are quickly increasing the number of acres that are suitable. 90% of increased corn production in the past 20 years has occurred on dry land acres. Continual improvements in irrigation technology will work hand in hand with improved genetics to allow corn to be grown in those parts of Kansas where only limited irrigation is available, as well as those parts where water right holders want to stretch the usable lifetimes of their wells. Continued incremental improvements in other areas of the production system such as increased soil health, management to weather patterns, incorporation of additional data in farm management, access to useful crop insurance, and targeted pesticide use and application technologies all will help push up production.

As production continues to increase, more demand will be needed. Traditional outlets for corn including livestock, ethanol and exports are critical and need ongoing attention and effort to sustain and increase demand. Exports can be increased through expanded trade promotion authority and access to additional markets around the world. Further, increased efficiency in the regulatory approval of genetically engineered corn globally would allow new technology to come to market sooner so that corn produced in Kansas from that technology could be shipped around the world. Opportunities for corn exist in emerging technologies as well, such as renewable-based chemical production.

## Successes

- A biofuels infrastructure grant to Kansas for \$1.3 million is being used to improve consumer access to E15 by partnering with gas stations across the state to install pumps that can supply E15. This benefits consumers as well as producers. Over 100 fuel stations sell ethanol fuel blends of at least e15 with 50 of those stations equipped with blender pumps.
- The Kansas Corn Commission provides schoolteachers and other parties with their Seed to STEM learning opportunities, which are being utilized to help educate youth about GMOs. Appropriate labs are currently available related to GMOs and biotechnology for 6th-12th grade teachers, as well as training and funding specifically created to meet state science standards.
- An irrigation efficiency study has been done that looks at combining the principles of center pivot irrigation with drip irrigation to reduce the amount of irrigation water required with a typical center pivot system.
- An intermodal facility is taking advantage of the significantly reduced freight cost of shipping containers returning to China and other Asian markets by shipping distiller's grains from Kansas into those markets in containers.
- There has been significant innovation to allow for production of renewable diesel from corn oil.