



WHEAT

Kansas is the nation's leading wheat producer with records of wheat production predating statehood. Currently, Kansas is the world's best source for hard red winter wheat and is identifying new hard white varieties. Increasing demand for whole grain white bread and other whole grain products by the American consumer is conducive for growth of this wheat class. Kansas' natural resources such as climate, soil and rainfall, along with its central location, make Kansas ideal to grow wheat that can be distributed to the world. Kansas is home to world-renowned leaders in the wheat industry, both in public education entities and in private innovative enterprises. Some of these organizations have been integral to the development of new wheat genetics and advocacy initiatives.

Although the wheat industry has experienced great success, it does still face challenges which can prevent continued growth. Ever-depleting sources of groundwater for irrigation continues to be a threat to farmers, particularly in some regions of the state. A number of policies, both local and federal, could threaten the financial stability of longtime

wheat farmers. Expansion of the wheat sector will depend upon a skilled workforce, particularly in seed technology, irrigation research and technology and flour milling. Growth in wheat production will require improvements to storage and transportation, especially to accommodate export around the world. Access and adaptation to international markets will increase additional global opportunities and spur demand for Kansas wheat. Finally, consumer shifts away from gluten and carbohydrates may decrease demand for wheat products.

Great potential exists in the Kansas wheat industry, and a strategic growth plan developed by key partners from throughout the sector can be a valuable step. Coordinated efforts by private and public stakeholders to fund research and outreach can keep Kansas wheat at the forefront of the industry. Continued focus on state and federal policies that encourage effective use of resources and protect grain development is critical. Adaptation to new markets (like frozen dough) and to new opportunities (like big data) will keep the wheat industry a thriving part of the future of Kansas agriculture.

Status

Kansas has long been known as the Wheat State, and with good reason. There are indications that wheat was produced in the region as early as 1839. In 2022, 7.3 million acres of wheat were planted, and 6.6 million acres were harvested with an average yield of 37 bushels per acre for total production of 244.2 million bushels. This accounts for 10.3% of the state's total agricultural receipts and 18.5% of the nation's total crop. The state also ranks in the top three nationally in flour milling capacity.

According to a Kansas Department of Agriculture IMPLAN economic model, the estimated direct impact of the wheat industry is \$2.4 billion in output and 5,151 jobs. Including indirect and induced effects, the total impact of the industry on the Kansas economy reaches \$4.3 billion in output and 15,245 jobs.

Currently, Kansas is the world's best source for hard red winter wheat and is identifying new hard white varieties. The hard white varieties account for more than 3% of the wheat grown in the state. The overall hard white market appears to be ending its consolidation phase and is now entering a steady growth phase. Increasing demand for whole grain white bread and other whole grain products by the American consumer is conducive for growth of this wheat class. The largest increases are likely to be in contracted acres as domestic and international millers look to guarantee supplies.

Successes

- The Kansas Wheat Innovation Center is a farmer-owned center that brings together all facets of wheat production and research located on the Kansas State University campus. The KWIC expanded in March 2018 and again in September 2020 to increase its capability to house critical wheat research dedicated to cutting-edge wheat genetic improvement for wheat farmers.
- In 2020, Kansas State University received \$1 million to establish the International Wheat Yield Partnership's Winter Wheat Breeding Innovation Hub. The hub partners will seek ways to stack desirable traits into elite winter wheat varieties making the wheat more resistant to pests, disease or drought, thus improving yield potential. The hub is a public-private partnership between national and international wheat breeding programs, government organizations and industry.
- Private investments in unit train facilities in central Kansas have improved the ability to take advantage of lower freight rates for unit trains and move Kansas wheat efficiently across the country.
- In 2019, a Federal State Marketing Improvement Program grant was awarded to the FarmUS Consortium to develop market access to consumers of college campus food service for Kansas-grown sorghum and wheat.
- Kansas Wheat Commission Research Foundation's Fields Forward research fundraising campaign was launched in 2019. Funds raised through the campaign will be used for three different purposes: fields of study, fields of research, and fields of the future.
- The Wheat Genetics Resource Center at the KWIC provides a world-renowned gene bank and completes foundational research regarding wheat genetics. The center is now being privately funded as part of a National Science Foundation Center in which industry has come together to supply funds and provide direction for the work of the WGRC.