## Trends and an Update to Grain Storage of Kansas Farmer Cooperatives

**ACCC Fact Sheet Series – Paper #16** 

January 28, 2021

Brian Briggeman, Ph.D.
Professor and Arthur Capper Cooperative Center (ACCC), Director
Department of Agricultural Economics
Kansas State University

Ciara Hodgkinson Graduate and CoBank Intern Department of Agricultural Economics Kansas State University Grain and farm supply cooperatives of Kansas are part of an ever-evolving industry that has seen dramatic changes in recent years. Technologies are continuing to improve, commodity production is rising and different types of storage are being introduced. With these external environment changes, Kansas farmer cooperatives are also changing to match the demands of their customers. The purpose of this fact sheet is to examine these changes through an updated 2020 grain storage survey of Kansas farmer cooperatives.

Starting in 2016, the ACCC created an online interactive map of all the cooperative and non-cooperative grain locations in the state of Kansas. This map incorporated upright storage capacity for each location. These data were collected from surveys sent to each cooperative verifying the exact upright grain storage capacity for each elevator.

Findings from the previous survey showed Kansas farmer cooperatives had experienced a significant amount of consolidation and changes in complexity. According to USDA data in 1950, there were approximately 350 grain marketing and farm supply cooperatives in Kansas. This number dropped to 81 in 2016. The recent decline in cooperatives numbers is largely due to consolidation within the industry, which matches declines in number of farmers in Kansas. Just as there are fewer coops, there are fewer farmers, and those farmers that remain continue to grow in size and complexity. The surveys found that through consolidation, cooperatives have grown in size and complexity as well, with an all-time upright grain storage capacity high of more than 500 million bushels. For more on the 2016 survey, please refer to the ACCC fact sheet here: <a href="https://accc.k-state.edu/research/factsheets/FS9\_Map.pdf">https://accc.k-state.edu/research/factsheets/FS9\_Map.pdf</a>

## **Updated 2020 Grain Storage Survey of Kansas Farmer Cooperatives**

Over time, grain storage in Kansas has vastly expanded to more than just upright storage. Many locations have had to increase their storage by adding bunkers and flat storage. The 2016 survey only focused on upright grain storage so the 2020 survey is expanded to include the storage capacity of upright, flat, and bunker storage of each Kansas cooperative grain location.

Updating the survey to include the 2020 data involved multiple steps. First, the location list was confirmed and updated. This involved checking the previous grain location addresses and making sure they still existed, as well as updating any co-op mergers. The next step was researching and recording bushels using each cooperative's website, Kansas Feed and Grain Association, Kansas Department of Agriculture, and USDA Licensed Warehouse information. After that, the 2016 survey was reformatted to include the different types of storage (upright, bunker, and flat). Finally, once the surveys had the updated bushel and picture information, they were mailed out to each cooperative manager. A total of 62 surveys were mailed and every survey was completed and returned.

The 2020 surveys reflect responses from 62 Kansas cooperatives and are current as of December 2020. Compared to the 2016 survey, there are 19 fewer Kansas farmer cooperatives. Since 2016, 20 cooperatives increased their total number of grain location, mainly through mergers and/or



acquisitions. Cooperatives with the most grain locations in the 2020 survey are: MKC with the most grain locations (41); followed by Skyland Grain (36); Frontier Ag and CVA (each has 31); Ag Partners Co-op (27); and Garden City Co-op (20). Interestingly, our 2016 grain location survey reported 15 Kansas farmer cooperatives with a single grain location while today there are 11 cooperatives with a single location. Finally, there are 2 Kansas farmer cooperatives with 0 grain locations (Leavenworth County Cooperative Association and Healy Cooperative Elevator Co.). The map below shows all grain locations of farmer cooperatives operating in Kansas.

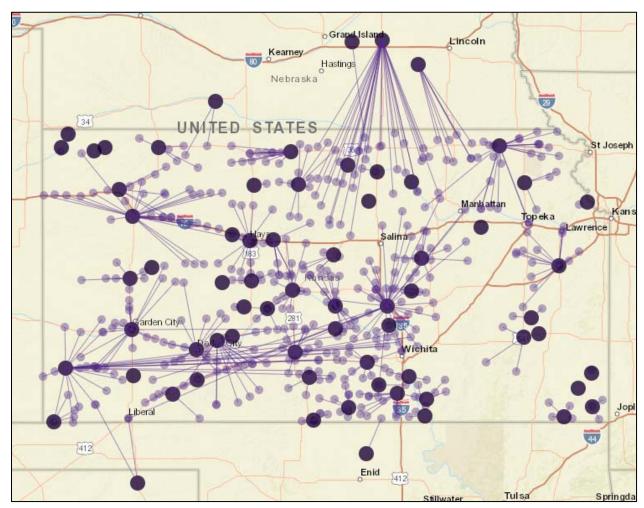


Figure 1. Map of Farmer Cooperative Grain Locations Operating in Kansas

From 2016 to 2020, there was a slight decline in grain storage locations. In 2016, there were 552 total grain locations connected to a farmer cooperative operating in Kansas. In 2020, there are 543 locations. There is a similar decline when looking only at grain locations located in Kansas (2016 there were 532 locations and in 2020 there are 514).

Even though the number of grain locations has declined, the total amount of upright grain storage has increased. In 2016, there was over 513 million bushels of upright grain storage tied to a farmer cooperative. In 2020, that number rose to over 574 million bushels.

Furthermore, the 2020 survey also included other types of storage (bunker and flat). According to the survey, there is over 157 million bushels of bunker storage and over 42 million of flat storage. Taken together with upright grain storage, total amount of grain storage capacity for Kansas farmer cooperatives exceeds 773 million bushels.

The 2020 survey shows growth in cooperative grain storage capacity across the state, but this trend is not specific to only grain and farm supply cooperatives. There has also been an increase in both on-farm grain storage and non-cooperative grain storage the past four years. On-farm has grown from 353 million bushels in 2016 to 380 million bushels in 2020. Non-cooperative storage has grown from 382 million bushels in 2016 to 432 million bushels in 2020. Based on these 2020 numbers, Kansas farmer cooperatives account for 48% of total grain storage capacity with non-cooperatives at 28% and on-farm storage at 24%.

The growth in storage is likely in response to the needs created by commodity production trends in Kansas. Wheat and sorghum acres over the past four years has declined, and there has been an increase in both corn and soybean. The change in commodity types adds to the increase in bushel production. There is also the continued increase in production capability per acre as technology continues to advance. In the past 19 years, there has been an increase in production for these four commodities by over 530 million bushels, according to the National Agricultural Statistics Service.

The change in production bushels corresponds directly with the change in cooperative storage capacity. Looking at data arranged by NASS districts, three of the four districts with the biggest growth correspond when looking at district corn production vs district cooperative capacity. These districts are the north central, northwest, and southwest. Cooperatives are meeting the storage needs of their districts and maintaining their relevance with farmers in the area as the cooperative grows with the farmer.

In summary, the growth of cooperatives in response to the needs of producers in their area is something that will likely continue into the future and contribute to the evolution of grain storage trends in Kansas. There will continue to be an increased need for grain storage capacity across the state and cooperatives will have to look for solutions for this problem. Just as we saw from 2016 to 2020, there will likely continue to be more consolidation across the state, both among cooperatives and among farmers. Outdated elevators will continue to close and be replaced with new storage, either upright, bunker, and/or flat. In summary, grain and farm supply cooperatives of Kansas will continue to efficiently evolve and seek out ways to deliver value to their farmerowners.

ACCC Mapping Project: <a href="https://accc.k-state.edu/map.html">https://accc.k-state.edu/map.html</a>

