

Corn Production Cost Index - 2/22/23

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Introduction

Kansas State University provides two resources that can help producers examine the cost of production to grow various crops; crop budgets and the KFMA (Kansas Farm Management Association) enterprise studies. These resources serve very different purposes as crop budgets are a prediction of what may occur in the coming year while enterprise summaries are a report of what did occur in the past year.

Crop budgets

These can be found on AgManager (agmanager.info/farm-budgets) for the upcoming year only. Budgets reflect K-State's estimate of expected prices and expenses for the upcoming year at the time the budget was published. These are forward looking tools. What actually occurs may be greatly different than the budget estimate. Thus, historical budgets have little use and are not published on AgManager. Anyone wanting to examine the historical cost of production in Kansas should use the KFMA enterprise studies as these do accurately reflect what happened in past years.

KFMA enterprise reports

These can be found on AgManager (agmanager.info/kfma-enterprise-reports) too. Because these are actual reported numbers, there is some delay between the current date and the last report. As of the date of this publication, the most recent enterprise report is for 2021. The KFMA enterprise report complements the crop budgets. While budgets are forward looking, enterprise reports are backward looking. Enterprise reports provide no guidance about future profitability. There are KFMA enterprise reports going back to 1995.

Differences between crop budgets and enterprise reports

The projection of yields and prices versus the actual report of yields and prices is the biggest difference. However there are other factors to be aware of as well. Budgets are based on a machinery set that the largest and most efficient farms might use. Any equipment is assumed to be fully utilized. Enterprise reports, by contrast, are based on the average KFMA farm. Budgets nearly always assume average yields while enterprise reports can capture the good and bad years as they occur. Because budgets are assuming normal yields, crop insurance will not be an income source on a budget. Enterprise reports will often have crop insurance revenue. Finally, the K-State crop budgets provide three levels of detail with the most detailed version showing specific chemicals,

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machinery operations, and machinery sizes. This level of detail is simply not possible in an enterprise report that is an average of KFMA farms.

Keeping the enterprise reports up-to-date

With the rapidly changing input costs that have happened over the last two years, there is more interest in knowing the inflation rate to grow a specific crop. Neither the enterprise reports nor the crop budgets handle this specific use. Enterprise reports can show the year to year change in production expenses but these reports naturally lag and are only computed yearly. Crop budgets are forward looking and are not very useful for historical analysis. NASS (National Agricultural Statistics Service) tracks, on a monthly basis, the increase in specific expenses but doesn't combine expenses into a cost of crop production. This article introduces a crop cost of production index that shows the inflation present in a specific crop cost.

The index shown here is for corn since 2019. Because the 2022 KFMA corn enterprise report is still being compiled, the 2022 number is produced by taking the 2021 report and updating the specific costs by the NASS index for those specific costs.

CORN Cost of Production	2019	2020	2021	2022
Index	100.0	99.6	114.0	130.6
Increase from prev yr		-0.4%	14.5%	14.5%

As this table shows, the cost to grow corn the last two years has increased much more than the inflation rate. These indexes will be developed for the other major Kansas crops and updated as NASS updates their cost indexes.