

USDA's ten-year projections for wheat

The recently released "USDA Baseline Projections to 2026" (<http://tinyurl.com/jzi8g8v>) augmented by fixed costs that are not included in the baseline shows a ten-year (2017-2026) loss for corn producers of \$699 per planted acre (<http://tinyurl.com/zf8uwfp>). For soybean producers, the total loss for that same period is \$314 per planted acre according to our calculations using historic USDA costs and returns data (<http://tinyurl.com/zgsz2r2>)—these numbers do not include insurance claims or government payments.

In this column, we are examining USDA's projections for wheat over the next decade.

The USDA reports that US farmers planted 50.2 million acres to wheat in 2016. This number will decline to 48.5 million acres in 2017, and then slowly increase to 49.5 million acres in 2026. Wheat harvested acres make an initial decline from 2016's 43.9 million acres to 41.1 million acres in 2017, followed by an increase to 42 million acres in 2019. Harvested acres remain at 42.0 million acres for the remainder of the study period ending in 2026.

The yield per harvested acre was 52.6 bushels per acre in 2016. In 2017 the USDA projects a yield of 47.1 bushels per acre, increasing to 50.7 in 2026 which is in line with trendline yields. The resulting production declines from 2.3 billion bushels in 2016 to 1.94 billion bushels in 2017 and then increases to 2.13 billion bushels in 2026.

On the demand side, total utilization of the wheat crop was 2.27 billion bushels in 2016. The projection for 2017 falls to 2.20 billion bushels, increasing to 2.28 billion bushels by 2026.

The lower forecast for production coupled with nearly flat utilization results in a decrease in crop-year ending-stocks from 993 million bushels in 2017 to 656 million bushels in 2026. The resulting stocks-to-use ratio declines from 45.0 percent to 28.8 percent over the same period.

It is that decline in the stocks-to-use ratio that allows the USDA to project an increase in the price of a bushel of wheat from \$4.00 in 2017 (an increase of 30¢ over 2016) to \$5.00 in 2024, 2025, and 2026.

Including grain, silage, straw, and grazing, the revenue per planted acre declines from \$204.11 per acre in 2016 to 197.99 in 2017. By 2026, the total revenue per planted acre increases to \$263.99 in 2026. The average annual revenue per acre over the 2007-2016 period was \$257.82 per planted acre of wheat. The projections for the next decade (2017-2026) show aggregate revenue per planted acre declining to \$239.72.

Variable costs which were \$116 per acre in 2016 are projected to decline to \$115 per planted acre in 2017 and then slowly increase to \$131 per acre, an increase of just under 1.5 percent per year.

Fixed costs are not included in the USDA projections, but we can use USDA published information on US wheat production costs and returns per planted acre for prior years as a basis for projecting fixed costs in the future. Increasing USDA's latest (2015) fixed cost estimate by 1 percent per year results in \$198 per acre estimate for the 2017 increasing to \$217 in 2026.

Thus, the total cost of production per planted acre increases from \$312 per acre in 2016 to \$313 in 2017 and \$348 in 2026.

Comparing the market revenue per planted acre numbers to the cost of production per planted acre, the resulting losses increase from \$108 per acre in 2016 to \$115 in 2017 and then slowly decline to a loss per acre of \$84 in 2026. The cumulative loss over the decade is \$980 per planted acre.

Next week we will look at the revenue numbers for cotton, sorghum, and rice and then discuss appropriate farm bill policies.

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