USDA's ten-year projections for the soybean sector

Last week our examination of the recently released "USDA Agricultural Projections to 2026" (http://tinyurl.com/jzj8g8v) reported that the USDA (United States Department of Agriculture) showed an 8.5-million-acre (9.8 percent) reduction in the planted area for corn between 2016 and 2026. Despite a reduction of that size, the price only increased to $3.70 per bushel, in 2026, a price that is below the 2015 cost of production of $4.04 per bushel.

In this column, we want to turn to the projection for soybeans over the next 10 years. The USDA sees soybean planted acres increasing from last year's 83.7 million acres to 85.5 million acres in 2017. The harvested area for 2017 is projected to be 84.6 million acres.

Over the following 9 years, soybeans planted acres are slated to be 85 million acres with the exception of 2 years where planted acreage is 84.5 million acres. Likewise, 7 years show a harvested area of 84.1 million acres with the remaining 2 projected to be 83.6 million acres.

Given the 8.5 million-acre reduction in in the planted area for corn between 2016 and 2026, it is somewhat surprising to see soybean acreage increase by only 1.3 million acres. Also surprisingly, over that period total planted acres for the 8 major crops declines by 8.9 million acres. We say surprisingly because a reduction in total crop acreage of that magnitude is seldom possible without a public incentive to do so.

If farmers opt to keep much of that 8.9 million acres in production, the USDA projected prices are optimistic.

Operating costs for soybeans in 2015 were $174 per acre and in the projection costs fall to $173 per acre for 2016 and 2017 and then steadily increases to $192 in 2026 for an increase of a little more than 1 percent per year. Over the ten years between 2006 and 2015, operating costs increased by an average of 7.2 percent per year.

Fixed costs are not included in the USDA projections, but we can use USDA published information on US soybean 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 $309 per acre estimate for the 2017 increasing to $338 in 2026

Over the 2006 to 2015 period, fixed costs per acre increased by an average of 5 percent per year. Farmers will have to put a very sharp point on their pencils to keep the annual increase in their operating and fixed costs to 1 percent.

The yield is slated to increase from 47.9 bushels per acre in 2017 to 52.4 bushels per acre in 2026, which is just under the estimated 2016 yield of 52.5 bushels per acre. Any yields above those projected by the USDA will likely result in lower prices.

Over the 10-year projection, soybean crush increases by 200 million bushels while exports increase by 100 million bushels. As a result, total utilization increases by a modest 7.4 percent over the projection period. Over the 2006-2015 period soybean production increased by 730 million bushels or 23 percent. Utilization increased by 485 million bushels or 13 percent over the same period. A comparison of those numbers to the projection indicates that the USDA does not see a surge in utilization of the US soybean crop over the next decade.

In 2015 soybeans lost $69.15 per acre and recovered to a $3.82 per acre profit in 2016. Beginning in 2017, the projected net income per acre, which includes our calculation of fixed costs but no government payments, ranges from a negative $34 in 2017 to a negative $30 per acre in 2026. The total loss for the 10-year period would be $314 per soybean acre. Over the 10-

year 2006-2015 period the total income was $643 per acre. That is a negative change of over $950 per acre of soybeans between the two periods.

Policy Pennings Column 866

Originally published in MidAmerica Farmer Grower, Vol. 37, No. 112, March 10, 2017

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