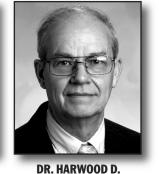


△ Contact Dr. Daryll E. Ray or Dr. Harwood D. Schaffer at the UT's Agricultural Policy Analysis Center by calling (865) 974-7407, faxing (865) 974-7298, or emailing dray@utk.edu or hdschaffer@utk.edu For more info, visit: www.agpolicy.org

## **Corn Exports: A Case Of Unrealized Expectations And Farm Policies That Did Not Deliver**



**DR. DARYLL E. RAY** Agricultural Economist University of Tennessee



SCHAFFER Research Assistant Professor at APAC, University of Tennessee

**C** orn is, without a doubt, the most important crop grown by US farmers and yet for the 2012 crop year US corn exports are projected to be a paltry 715 million bushels, the lowest level since 1970. In addition, for the first time since 1970, wheat exports exceeded corn exports.

The short explanation for this situation lays blame on a severe drought in the major corn production areas in the US. The longer explanation is a bit more complicated than that. The drought is just part of a larger story that has played out over the last half-century.

In 1960, US corn production was just under 4 billion bushels, nearly the same as non-US corn production (all years are harmonized to a standard crop year that that begins in what closely corresponds to the US fall harvest in the named year and ends at the beginning of the next crop year). By 2010, US corn production had tripled to 12.5 billion bushels before falling to 10.8 billion bushels in 2012. During that same period, non-US corn production increased to 20.3 billion bushels.

While both US and non-US yields tripled between 1960 and 2010, US harvested acres increased by 25 percent. At the same time, non-US corn harvested acres increased by 90 percent, accounting for all of the gain in production, relative to the US.

World corn exports as a percent of domestic consumption was 7.2 percent in 1960. By 1975 world exports had jumped to over 16 percent of domestic consumption and remained above that level until 1982 when it fell to 14 percent. In the years since 1982, corn exports relative to domestic consumption have remained below 16 percent, falling to 10.7 percent in 2012.

At 275 million bushels in 1960, US exports were an almost half of world corn exports. In

1972 US corn exports jumped to 77.9 percent of world corn exports and remained above 70 percent for sixteen of the next twenty-three years. In five of those years, the US share of world corn exports exceeded 80 percent, including 1995. With the drought in 2012, it was the non-US exports that stood at 80 percent, a level unseen in the preceding 52 years.

The 1970s was a time of unprecedented growth in US corn exports. Growth continued into in the early 1980s, but fell sharply in the mid-1980s. While the US share of world corn exports was relatively high off-and-on over part of the period after the mid-1980s, there has been no upward trend in US corn exports during the last 28 years.

Non-US corn exports on the other hand have expanded greatly, reaching 1 billion bushels in 1999 and hitting 3 billion bushels in both 2011 and 2012. In 2012, for the first time, the US was not the world's largest exporter of corn, falling to third behind Brazil and Argentina. As recently as 1998, Brazil exported just 315 thousand bushels, compared to 965 million bushels in 2012.

Clearly, corn production and exports are subject to long-term trends. For production, the trend has been decidedly upward in the US and elsewhere in the world. Increases in technology and the rate of adoption of new technologies have the potential to keep this trend going

So what does all this tell us?

Beginning with the 1985 Farm Bill, the US has pursued policies thought to be consistent with getting grain exports – corn exports specifically – back on an upward trend similar to the 1970s. Those efforts have been doomed to failure in large measure by the steady increase in corn acreage in the rest of the world. Furthermore, additional future increases in worldwide corn acreages will be coming from places like Brazil, not the US. Also, the rate of increase in non-US corn yields may well accelerate in the future.

The US will continue to be an important player in the corn export market. But declarations and farm policies predicated on the expectation that corn exports will be the primary driver for a prosperous US agriculture are no more likely to deliver in the future than they have over the last nearly three decades.  $\Delta$ 

DR. DARYLL E. RAY: Blasingame Chair of Excellence in Agricultural Policy, Institute of Agriculture, University of Tennessee

DR. HARWOOD D. SCHAFFER: Research Assistant Professor at APAC, University of Tennessee

