Feeding the hungry in developing countries: A growth market for US grain agriculture?

We recently ran across a belt buckle from the 1980s that read, “The American Farmer Feeds the World.” For many producers, that statement underlies much of what they do from their on-farm decision making to the policies they support.

As the 1996 Farm Bill was being debated, we remember talking to farmers who wanted to “get the government out of agriculture.” When asked why, they argued that government policies had shut them off from the export market. With the government out of the way they believed that world markets for grains were theirs for the taking because, as they said, “we are the most efficient farmers in the world. Let us loose and we can outcompete everyone.”

In the first decade of this century, some of the major farm and commodity groups pressured their legislators and trade representatives for trade deals that would reduce tariffs on agricultural products. The belief was that with a “level playing field” the exports of US agricultural products would boom.

When prices began to surge a few years back, there was also a resurgence in the belief that the key to feeding the hungry world was the application of advanced technologies to the production of grains in the developed nations, primarily the US. Much less was said about the potential for developing nations to increase their production of staples to better feed the hungry they already have and to provide for population growth in the future.

Based on those expectations, one would expect to see US grain exports to steadily increase over time or at least as fast as or faster than other exporters. Certainly, given the dominant narrative, it would not be expected that the US share of world exports would remain steady. So what happened?

US grain (barley, corn, oats, rice, and wheat) exports peaked at 106.8 million tonnes in the 1980-81 crop year. US grain exports are projected at 88.0 million tonnes in this (2010-11) crop year, 82.4 percent of grain exports three decades earlier. Roughly, for every five bushels of grains exported from the US in 1980-81, four bushels will be exported in 2010-11.

Although not directly comparable to grains as a food staple, US soybean exports have increased markedly over the decade. If one adds soybean exports to the grain numbers, the 1980-81 crop year US exports were 126.5 million tonnes and the 2010-11 projected exports are 131.3 million tonnes, an increase of 3.8 percent—not an annual increase of 3.8 percent but a 3.8 percent increase from the beginning to the end of a thirty-year period.

So how do US exports compare to world exports over the same period? In the 1980-81 crop year, world exports of the five grains were 196.7 million tonnes. For the 2010-11 crop year, world exports of those same grains are projected to be 261.3 million tonnes, an increase of 37.6 percent. In 1980, the US accounted for 54.3 percent of world exports.

By 2010-11, with world grain exports increasing by 37.6 percent compared to 1980-81 and US exports decreasing by 17.6 percent, the US share has dropped from its 1980-81 percent of 54.3 to 33.7 percent.

If one adds soybeans into that mix, world exports increased from 217.5 million tonnes to 359.6 million tonnes over that same period, an increase of 65.3 percent compared to a 3.8 percent increases in US exports of soybeans and grains. The US share of world exports of soybeans and the five grains declined from 58.1 percent in 1980-81 to 36.5 percent in 2010-11.

Amazingly, the drop in US share of world exports between the two periods is greater when soybeans are included than when only the five grains are considered.

So what is happening here? While, over the last three decades, the US has seen itself as the world’s ongoing breadbasket, the numbers indicate a much more modest role, that of the residual supplier. Our exports are most likely to increase when both importing nations and our export competitors run short on supplies.

A recent news story suggests that the future is likely to be more of the same. In that story, we read that a Chinese company is planning on acquiring access to 500,000 acres of farmland in Argentina, Australia, Brazil, the Philippines, Russia, Venezuela, and Zimbabwe. In some countries, they will provide machinery and labor for a portion of the crop, while in others they will purchase land. In still others, the land will be rented.

The current high prices and tight supplies have had provided two countervailing forces. They have impressed upon the Chinese the important of locking in the supplies they need to feed their people. At the same time some, some countries are restricting exports or limiting land ownership by foreigners. However, the Chinese do not need to make progress in all of the countries to lock-in at least a portion of their needs, including their need for soybeans, the bright spot in US commodity export numbers.

Concurrently, there is a gradual reaffirmation of agricultural development concepts that were widely held at one time but fell out of favor the last quarter century or so. Developing countries usually develop by developing their agricultures and, by increasing agricultural production for domestic consumption so they can better take responsibility for their countries’ food requirements.

When we look at US commodity exports over the next couple of decades, we will not be surprised if the Yogi Berra line, “It’s déjà vu all over again,” will be true; the US may well remain the world’s residual supplier of agricultural commodities.

*Daryll E. Ray holds the Blasingame Chair of Excellence in Agricultural Policy, Institute of Agriculture, University of Tennessee, and is the Director of UT’s Agricultural Policy Analysis Center (APAC). Harwood D. Schaffer is a Research Assistant Professor at APAC. (865) 974-7407; Fax: (865) 974-7298;* [*dray@utk.edu*](mailto:dray@utk.edu)*and*[*hdschaffer@utk.edu*](mailto:hdschaffer@utk.edu)*;*[*http://www.agpolicy.org*](http://www.agpolicy.org/)*.*

Reproduction Permission Granted with:

1) Full attribution to Daryll E. Ray and Harwood D. Schaffer, Agricultural Policy Analysis Center, University of Tennessee, Knoxville, TN;

2) An email sent to [*hdschaffer@utk.edu*](mailto:hdschaffer@utk.edu) indicating how often you intend on running the column and your total circulation. Also, please send one copy of the first issue with the column in it to Harwood Schaffer, Agricultural Policy Analysis Center, 309 Morgan Hall, Knoxville, TN 37996-4519