

PolicyPennings by Daryll E. Ray & Harwood D. Schaffer

Several countries are ramping up corn production (and corn exports)

One of the speeches at the recent USDA Outlook Forum was given by Mariano Marquez, director of commodity analysis for Brazil's crop assessment agency. In that speech, Marquez summarized the changes in the production, domestic consumption, and exports of corn and soybeans in both Brazil and Argentina and the effect these changes have on US markets. His presentation got us to thinking beyond these three countries and their impact on each other's agricultural markets. To start, we decided to take a broader look at corn.

In 2000, the US, Brazil, and Argentina accounted for nearly 84 percent of world corn exports, with China making up another 9 percent. These four countries were responsible for 93 percent of the world exports of corn. It took 33 other countries to make up the remaining 7 percent of world corn exports.

By 2011, these four—US, Brazil, Argentina, and China—were responsible for only 70 percent of world exports with Brazil and Argentina posting small gains in their share of world exports, 1.3 and 2.1 percentage points respectively. China had virtually dropped out of the world corn export market; in 2011 it was, instead, a net importer of 154 million bushels. US exports of corn declined by 241 million bushels comparing 2000 to 2011 while China's corn exports declined by 279 million bushels.

In addition to Brazil and Argentina, 33 other countries increased their share of world exports led by Ukraine, India, EU-27, Serbia, Russia, Paraguay, and South Africa. The total share held by these 7 exporters in 2011 was 26%. Ukraine, alone, increased its exports by a larger number of bushels than the combined decline of China and the US.

The decline in US exports of corn was not the result in a decline in the international trade of corn; it increased by 712 million bushels. Neither was the lower share of corn exports the result of a decline in production—US corn production increased by 25 percent between 2000 and 2011.

Most of the increase in US corn output went for domestic ethanol production. Similarly, domestic factors drove change in China as well. A large portion of China's increased corn production was used for food

and feed. In case of the US, it is doubtful that the increased use of grain for ethanol prevented the filling of a large number of export orders. Rather the higher corn prices provided encouragement for other countries to increase corn production and thereby increase export competition for the US.

There was a time when the US had the corn export market locked up, with everyone else playing a minor role. Over the last decade or so, US farmers and commodity traders have had to pay more attention to South American corn production, particularly Brazil and Argentina. Today that view has to include countries in Europe, Asia, and Africa as well.

As multinational agribusiness firms have begun selling corn seed with top-notch genetics to farmers around the world, the list of competitors has increased dramatically. This is reflected in the increase in non-US yields from 50.1 bu/ac in 2000 to 65.1 bu/ac in 2011, a 30 percent gain. Comparing those yields to US yields in the 150-165 bu/ac range, we have an indication of the potential competition US farmers may face in world export markets over the next couple of decades as these countries bring their yields closer to US levels.

With the collapse of the Soviet Union, breadbasket countries whose trade was limited to the Soviet sphere are now free to participate in world agricultural commodity markets. They are also able to access the management systems, equipment, and seed technologies they were previously denied. As a result agricultural production is booming in some of these countries.

Looking at these numbers, one is apt to conclude that, "If it were not for the over 5 billion bushels of domestically produced corn to produce ethanol in the US, the US corn production sector would be a lot smaller and much less prosperous.

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