

US major-crop export competitors have greatly upped their production capacity

On August 7, 2020 we wrote a column challenging the Zombie idea that by lowering the price of US commodities, the nation's farmers would be able to recapture the share of crop exports they had in the 1976-1978 crop marketing years. In that article we pointed out that the US would have had to increase total corn, wheat and soybean acreage by an additional 114 million acres to produce the additional crops needed to maintain the share we had in the 1976-1978 period, a near impossibility.

In our writings we have also argued that Brazil and Argentina will expand their cropland until they have cultivated all their land that is suitable for growing crops.

In this column we take an excursion through the 1990-2019 soybean complex data for Brazil and Argentina. We talk about soybean complex (soybeans, soybean meal, and soybean oil) because while the US exports far more soybeans than it does soybean meal and oil, our South American neighbors export a significant amount of the value-added products soybean meal and soybean oil.

During the 30 years from 1990 through 2019, Argentina devoted an additional 30 million acres to soybean production while Brazil added 67 million acres for a total of 97 million acres for the two countries. Argentina's harvested soybean area increased by 256 percent. Brazil increased its harvested area by 283 percent.

For Argentina, the 2019 yield was 21 percent larger than it was in 1990. Brazil's yield increase was 106 percent larger. With the combination of increased acres and yields, these two countries became soybean power houses with Argentina's production increasing by 332 percent and Brazil's increasing by 700 percent.

As a result of these gains, Argentina was able to increase its export of soybean complex by 282 percent in the 30-year period from 1990 through 2019. Brazil, on the other hand, was able to increase its soybean complex exports by 887 percent.

Even if the US had extra land on which it could produce soybeans, we believe that there is little that the US could have done by way of policy to impede the agricultural expansion of Argentina and Brazil over the last 30 years.

Turning to the three major crops (corn, soybeans and wheat) we wondered what the trend in production was for countries other than the US, Argentina, and Brazil (UAB). Countries in the rest of the world increased their production of corn, soybeans, and wheat from 555 million tonnes (metric tons) in 1978 to 1,132 tonnes in 2019 for an increase of 104 percent.

The production of the three crops by UAB has increased from 288 million tonnes in 1978 to 778 million tonnes in 2019 for an increase of 170 percent.

Our conclusions from this analysis:

- While countries other than UAB have significantly increased their production of the three crops under consideration, many will still be dependent upon imports for the foreseeable future;
- Argentina and Brazil will continue to see their exports to other countries increase; and
- In the absence of vast areas of land to bring into production, the US will continue to see its share of exports decline.

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