

# True or false? World food availability will decline next year due to high input prices

This third column in our “four crises facing food and agriculture series” (see <http://www.agpolicy.org/articles22.htm>, numbers 1135 and 1136, for the two prior columns) focuses on examining the suggestion that while food affordability is the current issue facing agricultural commodity markets, next year the issue will be a question of food availability.

The logic behind the argument that the world will face a food availability during the coming calendar year rests on the idea that farmers will respond to the higher price of inputs (primarily fuel, fertilizer, pesticides, and herbicides) by reducing the quantity of these inputs they use in producing the crops that will be harvested in the coming year. As a consequence, the production of basic grains and oilseeds (wheat, corn, soybeans, sunflower seeds and their substitutes) will be lower in the coming year. The result will be reduced food availability.

To begin with, recent events suggest that scenarios that were developed a couple of months ago depend on a set of facts that have changed somewhat in the short interim. Fuel prices are down, a shipload of Ukrainian grain has moved out of the Black Sea, and China has reduced the volume of its grain imports. How long these changes will last is anyone’s guess.

What we can talk about with a greater degree of certainty is the price responsiveness of farmer-crop-production-decisions to external events. Depending upon the crop, farmers will make key decisions about next year’s crop production strategies in the current calendar year.

As we write this column in early August 2022, we are seeing well above average prices for both crops and crop inputs. For the food availability crisis to become a reality, we would have to believe that farmers would reduce production at a time of historic crop price highs that are above the full cost of production. Is there any likelihood of that happening?

To answer that question, let’s look at the late 1990s. The 1996 Farm Bill, aka “Freedom to Farm” (FTF), set farmers free from traditional commodity programs in the belief that farmers would respond to price signals in the same way that manufacturing firms respond to high prices (increasing production) and low prices (reducing production). To the detriment of many farmers, it turns out that as a group they do not behave like the CEOs of manufacturing firms and kept on using all of their crop acres year after year.

If farmers did not reduce production during a period of below-the-cost-of-production prices and financial loss, why would we expect that they would decide, in a period of high crop prices, to reduce production because of high fuel and other farm chemical prices?

It turns out that the proponents of FTF and their academic supporters failed to understand the asymmetric response of farmers to high prices compared to low prices.

With high prices, farmers respond as textbook economics would expect. They increase their crop output by bringing new resources, primarily land, into production. And, voila, it works, and they produce more. But according to the food availability crisis scenario, farmers are expected to reduce production when input prices are high even if crop prices are also high.

Is that a possibility? We don’t think so.

Now let’s look at the asymmetry. Have farmers historically reduced production materially in response to low prices as theory would suggest? In a word, no. If anything, farmers, operating individually, seek to increase production so they can spread their fixed costs out over more units of production.

And that brings to the farm profitability crisis that we will discuss in the next column.

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