

PolicyPennings by Daryll E. Ray & Harwood D. Schaffer Study considers U.S. wheat exports if certain developing countries eliminated supports

US Wheat Associates and the National Association of Wheat Growers recently announced the results of a study by Dermot Hayes and several of his colleagues at Iowa State University that showed that “excessive farm supports” in China, Brazil, India, and Turkey “could cost US wheat farmers nearly \$1 billion in revenue” in the 2021 crop marketing year (USWA <http://tinyurl.com/qcm4og9>, Hayes <http://tinyurl.com/puzmzyv>). Hayes et al write, “Wheat support policies and trade barriers encourage domestic production and depress world prices. Removal of these policies, which reduces domestic wheat prices, results in a reduction in domestic production and an increase in domestic consumption. Lower supply and increased demand lead to higher global prices of wheat, which tend to benefit wheat-exporting countries.” The study looked at the removal of support policies in the countries one by one and then all four together.

To help us understand the situation, let’s look at wheat production and utilization in each of the four countries. China’s wheat production for the 2014 crop marketing year was 126 million metric tons (MMT) while domestic consumption was 124 MMT. Despite a surplus of production over consumption, China had net imports of wheat of 500 thousand metric tons (TMT). As a result, China added 2.5 MMT to its year ending stocks for a total of 62.8 MMT, nearly half of its domestic consumption. Even with China’s current support policies, it was a net importer of an average of 2.1 MMT of wheat over the last five years.

Brazil has long been a net wheat importer. A half century ago, Brazil imported 96.2 percent of the wheat it needed for its domestic use. At that time in 1965, the harvested area for wheat was 260 thousand hectares. Over the next five decades, Brazil increased the harvested area to as many as 3.8 million hectares; this peak occurred in 1986. Two years later in 1988, with a yield of 1.7 tonnes per hectare on a modestly reduced harvested area, net wheat imports (there were no exports of wheat until 1991) only accounted for 14.1 percent of domestic consumption. During the last five years, Brazil’s net imports of wheat amounted to 27.4 MMT or an average of 5.5 MMT a year or 49.0 percent of domestic consumption.

While the trendline for Brazilian wheat yield shows a choppy but upward trend, the harvested area plummeted after 1986, hitting a low of 1.0 million hectares in 1995. The area under harvest has increased erratically since then to 2.2 million hectares for the 2014 crop marketing year when Brazil’s net wheat imports accounted for 44.8 percent of the wheat used for domestic purposes. In 2014, Brazil’s net imports of wheat were 5.2 MMT.

Like China, Turkey has long-been nearly self-sufficient in wheat, importing an average of 138 TMT a year over the last 50 years. For the 2014 crop marketing year, Turkey’s net wheat imports amounted to 1.7 MMT with imports of 5.5 MMT and exports of 3.8 MMT. Net imports were significantly higher than the previous year as the result of an 18.8 percent decline in yield. Turkey’s harvested area and yields are far more stable than those of Brazil. During the 2010-2014 crop marketing years, Turkey had net imports of wheat of 2.3 MMT for an average of slightly less than 0.5 MMT a year.

Unlike China, Brazil, and Turkey, India has been a net exporter of wheat in four of the last five years. During the 2014 crop marketing year, India’s wheat exports were equal to 3.8 percent of production. A half century ago one would not have thought about India as a net exporter of wheat, with the first net exports coming in 1972. In 1965, India’s wheat yields were half of US yields while in 2014 they were higher. Over the last 50 years, India’s area harvested for wheat and yield have increased steadily. Over the last five years, India has been a net exporter of 17.0 MMT of wheat or 3.4 MMT per year.

One of the definitions of trade distorting behavior is the exporting of a product at a price lower than the cost of production. China, Brazil, and Turkey are net importers of wheat so the trade distortion argument is weak at best on their account.

The study instead considers imports by these countries that are foregone because of a domestic support program to be trade distorting because they displace the sale of a product from the low-cost producer.

From a strictly dollars and cents perspective, this makes perfect sense since the global-total-cost-of-food is minimized. This minimum cost objective is a key motivation of the study. It is commonly a core characteristic of economic studies, especially those relating to international trade.

These cost-minimization international trade studies correctly predict the direction of changes in production location and in consumption patterns, but typically the magnitude of those changes are significantly over-estimated.

Nations have a strong propensity to favor domestic production of staple foods even if domestically produced wheat, rice or other grains is somewhat more expensive than importing grains from other countries. Considerations besides cost minimization come to the fore. The main one is food security.

Food security for many countries is what military security is for the US. Short of brutal force, no government is able to survive the reaction of a starving public.

Originally published in *MidAmerica Farmer Grower*, Vol. 36, No. 39, September 25, 2015
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Access to an adequate supply of food is an essential responsibility of any government and is one element of The Right To Food (<http://tinyurl.com/nwczdzt>).

In the case of India, the subsidy program that the study refers to is The National Food Security Act, 2013 (<http://tinyurl.com/o8pwmk6>). The purpose of the act is “to provide for food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity.” The food grains that are included in the program are rice, wheat, and coarse grains.

The grains are purchased by the government at a “minimum price support” to be made eligible to priority households. Under the act, “every person belonging to priority households, identified...shall be entitled to receive five kilograms [approximately 11 pounds] of foodgrains per person per month at subsidized prices.” The most food insecure households are “entitled to [receive] thirty-five kilograms

of foodgrains per household per month.” With the passage of the National Food Security Act, 2013, the domestic consumption of wheat in India increased by 5 MMT.

The bottom line is that the existing pattern of international production and consumption of food staples reflect multiple objectives and studies that only consider cost-minimization are theoretical constructs that by definition leave other objectives unconsidered.

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