U.S. DEPARTMENT OF AGRICULTURE

A report summary from the Economic Research Service *April 2021*

Reforming Market Access in Agricultural Trade:Tariff Removal and the Trade Facilitation Agreement

Jayson Beckman

What Is the Issue?

The Uruguay Round Agreement on Agriculture (URAA) and the founding of the World Trade Organization (WTO) in 1995 led to new rules in the areas of market access, domestic support, and export subsidies. Despite substantial growth in agricultural trade since 1995 (243 percent in 2018, in nominal terms), market access is still limited, in particular by high agricultural tariffs (relative to nonagricultural products). The goal of further negotiations has been to continue the process of agricultural policy reform begun in the URAA, and some progress has been made in the Trade Facilitation Agreement (TFA). However, while the number of bilateral and regional trade agreements (RTAs) that grant market access on a preferential basis has increased, multilateral negotiations have slowed.

As an aid to understanding the potential benefits of improved market access, this report provides a quantitative analysis of two scenarios: completely removing all agricultural tariffs or reducing agricultural trade costs in the context of TFA implementation. For each of these reforms, we report resulting changes in trade, production, prices, and welfare (societal well-being).

What Did the Study Find?

The analysis of the two reform measures indicates that each scenario, if undertaken separately, would increase global agricultural trade. However, removal of agricultural tariffs would result in larger trade gains and welfare improvement than implementing the TFA agreement.

Scenario 1: Removal of Agricultural Tariffs

- Removing agricultural tariffs is projected to lead to a global increase in trade value of 11.09 percent. This is close to the average global tariff on agricultural products (10.33 percent).
- The removal of agricultural tariffs is estimated to lead to increases in the value of total agricultural exports and imports for all regions except the European Union. By commodity type, increases are projected for all sectors except live animals.
    - Rice, beef, and other meats (mainly poultry and pork) would experience the largest increase in export trade value, as removal of their relatively high average global tariffs would reduce the resulting larger barriers to trade.
    - A projected decrease in the EU's exports is largely due to a estimated increase in its imports of beef and other meats—commodities for which the EU has large tariffs in place. The increase in imports displaces domestic production, leading to less product to export.

- The region with the highest tariffs, India, is also the region with the largest estimated increase in agricultural imports.
- Changes in production due to tariff removal are mixed, with just over half of the regions projected to undergo a decrease as production shifts to more efficient producers. The regions that would experience production declines tend to be those with the highest tariffs in place; some regions cite protection of agricultural employment and food self-sufficiency as reasons for retaining their tariffs.
- Tariffs act as a tax on imports, and removing them leads to a reduction in the market price for many commodities. Of the 20 regions in the model, 12 are projected to see a reduction in the average price for all agricultural products, which would help bolster food security by reducing consumer prices.
- Global welfare is projected to increase by $56.3 billion annually if all tariffs are removed (this is a little more than 2 percent of the global value of the agricultural sector). The EU would have the largest increase in welfare due to its reallocation of resources from commodities with high tariffs (and low productivity) to other uses. The results indicate some welfare improvements from nonagricultural sectors, but most of the increase is related to agriculture.

Scenario 2: Implementation of the Trade Facilitation Agreement for Agriculture (with nonagriculture not considered)

- All regions except for Argentina would have an increase in aggregate agricultural export trade values in the TFA scenario.
  - Reducing trade costs through the TFA could increase agricultural trade value by 7.27 percent.
  - The TFA scenario finds that low-middle-income regions would have the largest export gains from more streamlined release and clearance of agricultural goods.
  - Like the tariff-removal scenario, meats are projected to have the largest gains in export value, but milk products and rice also benefit. Trade in these commodities stands to increase because they tend to have high tariffs, and demand for meats and milk products is responsive to income growth resulting from falling commodity prices.
- A double-digit increase in aggregate imports is projected for all regions, above 20 percent for most.
- Most regions have a decrease in aggregate agricultural production. Increases only occur for Brazil, the non-EU part of Europe, Indonesia, and "AgExp" (which consists of countries among the top 20 global agricultural exporters as of 2014 that do not appear in another group). Each of these four regions specializes in the production/export of certain commodities, which leads to the increase of the commodities in aggregate production.
- The estimated increase in global societal welfare of $42.9 billion annually is largely due to lower consumer prices for imports of commodities in the EU. A larger proportion of welfare gains from the TFA scenario accrue to nonagricultural sectors compared to the tariff-removal scenario.

How Was the Study Conducted?

The study analyzes two agricultural trade policy scenarios using a modified version of Global Trade Analysis Project's (GTAP) static computable general equilibrium (CGE) model with the GTAP v.10 2014 database (the latest GTAP data available). A CGE model is a large system of equations and data that links commodities, regions, and economic agents together to calculate the potential impacts of a change in policy. To allow for more precise analysis of the agricultural sector, the analysis disaggregates agriculture into 16 commodities and 20 regions, some consisting of individual countries and others of a group of countries. The model is referred to as ERS-GTAP, and the results are given in percentage changes except for welfare, which is reported in dollars. Effects from trade are in terms of changes in relative values, not in volume.