China's Growing Role in Agricultural Trade

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This article discusses developments in China's agricultural trade and implications for the United States. We highlight areas in which China has become a major exporter of agricultural products, the global importance of these exports, and factors that underlie the export trends. In addition, we reference market access issues faced by China's agricultural exports.

China produces over 20% of the world's cereal grains, 25% of the world's meat, and 50% of the world's vegetables. China is the world's largest agricultural economy, and it ranks as the top global producer of pork, wheat, rice, tea, cotton, tomatoes, potatoes, eggs, wool, apples, walnuts, and fish, etc. In fact, the annual value of China's agricultural output is about two and one-half times the U.S. total.

After joining the World Trade Organization (WTO) in 2001, China increased its trade dependence on agriculture. As of 2011, it was the fourth largest exporter and second largest importer of agricultural products in the world, according to WTO trade statistics. Its import growth has been driven by a shift in its domestic production mix, and changing consumer diets with rising incomes and urbanization. China's substantial increase in fruit and vegetable production is a major factor behind it agricultural export growth.

In agriculture, China's major policy objectives are focused on increasing grain production and starting the transition to larger-scale farms. China has a relatively low set of agricultural import tariffs compared to other WTO members and domestic support to agriculture in China remains less than that for many developed countries.

Changing Trade Structure

With imports growing faster than exports during the post-WTO accession years, China reversed its long-time status as a net agricultural exporter to that of a net importing country since 2004. Most of China's increased imports came from soybeans and cotton. Today cotton and soybeans account for over 40% of China's agricultural imports, a very concentrated portfolio. China is the world's largest importer of soybeans and cotton, accounting for over 60% of global soybean imports and approximately 40% of cotton imports.

It was expected that China's production and trade of agricultural products would be significantly affected by WTO entry and this has turned out to be the case. China's agricultural exports have increased by more than 12% annually. Import growth has averaged 19% per annum, while total agricultural trade has grown by more than 16% per annum from 2002 to 2011. These are truly impressive annual growth rates.

The changing structure of China's agricultural exports has been dominated by very strong growth in exports of horticultural products (e.g., garlic, apples, pears, and citrus), semi-processed food products (e.g., animal products, pet food), and aquaculture (e.g., fish fillets). Table 1 shows the annual growth in exports for various agricultural categories from 2001-2011. From top to bottom, the annual growth rate was 18% for horticultural exports, 14% for semi-processed foods, 13% for aquaculture, 12% for processed (e.g., apple juice, processed tomatoes), and less than 2% for bulk items such as tea or tobacco.

Regarding accomplishments in world markets, China's exports of aquaculture products have grown from 8% of the world market in 2001 to 14% of the market in 2011—a remarkable achievement. China is very successful at exporting frozen fish fillets of various types, including salmon. There is a large fish processing industry in China that imports whole salmon and other fish from the U.S., Russia, and elsewhere and then, in turn, re-exports fish fillets. Another category that is also a strong export performer is horticultural products, rising from 2.5% to 5.6% of world exports, more than doubling its market share.

China's trade patterns have been affected by concerns over food safety with some food products. For instance, the melamine-spiked milk scandal of 2008 has led to a surge in China's imports of milk powder—China's skim milk powder imports were up about 50% just in the past year, contributing to higher milk powder prices in world

Table 1. Annual Growth Rates of China's Agricultural Exports Since WTO Accession

	Aquaculture	Bulk	Processed	Horticulture	Semi-Processed
2001–2011 Annual Growth Rate in Value of Exports	13.3%	1.7%	12.2%	18.0%	14.5%

Source: Compiled from UN COMTRADE data

Table 2. Export and Import Trade Growth Rate of China's Labor-Intensive Agricultural Products, 2001–2011

	Aquaculture	Livestock	Horticulture
Exports	13.3%	7.7%	18.0%
Imports	13.5%	15.8%	21.0%

Source: Compiled from UN COMTRADE data.

markets. China is responding to the food safety issue and has reorganized its food safety regulatory system, modeled on the FDA in the United States.

China's agricultural trade is more and more in line with its comparative advantage and it has noticeably increased imports of land-intensive agricultural products. But what about its trade in labor-intensive products? Although exports of labor-intensive agricultural products did increase quite fast after WTO accession (especially for fruits and vegetables), the rate of increase for these years was lower than imports of land-intensive agricultural products. For instance, the annual export growth rate for labor-intensive fruits and vegetables was 22% and 16.7%, respectively. At the same time, imports of land-intensive soybeans and cotton grew by 25% and 35.7%, respectively.

Surprisingly, the import growth of labor-intensive agricultural products was also quite high—in fact, greater than the export growth rate of these products for the same period. Aquacultural exports grew by 13.3%, slightly less than its import growth of 13.5%. Horticultural exports grew by an impressive 18% per annum, but horticultural imports grew even faster at 21% per annum (Table 2).

So what do all these numbers suggest regarding China's trade? First, land-intensive imports are growing faster than labor-intensive exports. Second, for labor-intensive products, imports are actually growing faster than exports. There are three likely factors behind these trends. First, there is growing domestic demand for high-valued agricultural products including labor-intensive imports, increasing with income and urbanization. Second, China's agricultural labor is shifting away from agriculture to the higher paying manufacturing and service sectors. Third, China's labor-intensive agricultural exports face headwinds in world markets due to trade barriers and perceptions of poor quality.

China-U.S. Agricultural Trade

The United States enjoys an agricultural trade surplus with China, which exceeded $20 billion in 2012. This is partly a result of reduced import trade barriers in China, and growing incomes and urbanization. China is the most important market for U.S. agricultural exports (accounting for 17.2% of U.S. agricultural exports in 2012) and the third most important supplier of U.S. agricultural imports (with a market share equal to 4.2% of U.S. agricultural imports in 2012).

Table 3 shows that based on the value of trade, the top five U.S. agricultural exports to China (in order of importance) are soybeans, cotton, corn, hides/skins, and swine offal. On the other hand, the top five U.S. imports from China are apple juice, dog and cat food, frozen tilapia fillets, canned citrus, and frozen salmon fillets. It is notable that the sum total of China's agricultural exports to the United States represents only two-thirds of the value of just one single item that the United States sells to China—soybeans.

China is an emerging competitor for U.S. farmers in some specialty crops, and China has a positive trade balance with the United States on horticultural crops, although the total dollar value is a relatively small share of total agricultural trade. Figure 1 shows China had a trade surplus of $40 million in horticultural products with the United States in 2011, down from $157 million in China's favor in 2007. The 2011 $40 million surplus is only 1% of the value of agricultural trade between the United States and China. China's growing demand for almonds, pistachios, and walnuts is a positive development for U.S. agriculture. And per capita consumption of these specialty crops is still very low in China. For instance, per capita consumption of almonds in China is only about 5% of the U.S. figure.

U.S. food products enjoy a certain advantage in China and there are growing opportunities for U.S. products, considered to be high quality. However, price remains an obstacle for U.S. products in the China market. Chinese consumers spend about 20%

Table 3. Major U.S.–China Agricultural Products Traded Bilaterally in 2012

U.S. Exports to China		U.S. Imports from China	
Item	Value (Mil.)	Item	Value (Mil.)
Soybeans	$15,374	Apple Juice	$561
Cotton	$3,686	Dog and Cat Food	$467
Corn	$1,658	Frozen Tilapia Fillets	$444
Hides and Skins	$1,219	Canned Citrus	$233
Frozen Swine Offal	$744	Frozen Salmon Fillets	$216

Source: USDA FAS GAIN Report 2/25/2013, based on China Customs Data

of their disposable income on food consumed at home, compared to less than 7% of income spent on at-home food in the U.S., on average.

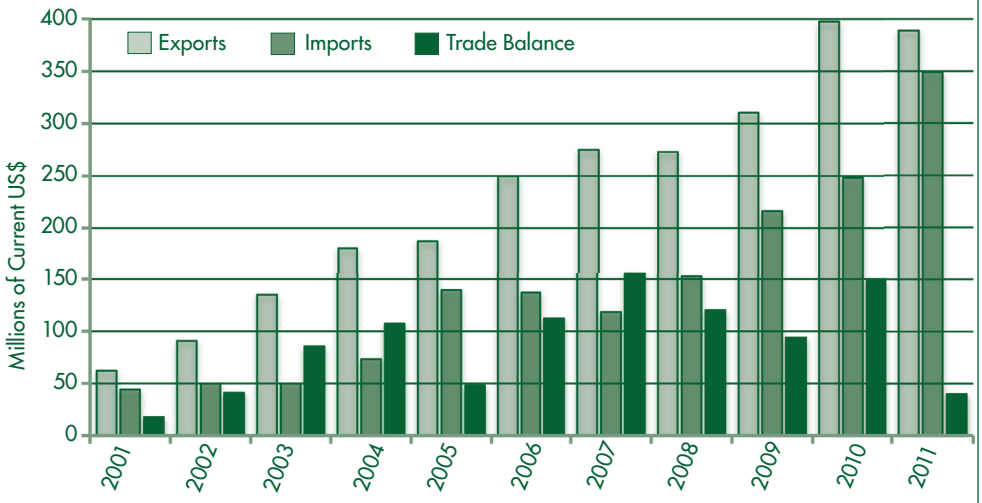
Impediments to China's Exports

Impediments to foreign market access are an issue for Chinese agribusiness firms. For instance, China's agricultural exports of horticultural products have been adversely affected by anti-dumping (AD) investigations against them, launched by firms in both developing and developed countries. Globally, there have been about 23 AD cases against China's agriculture since that market opened up in the early 1980s, and many of the AD actions in agriculture have targeted horticultural products—resulting in very high tariff rates against Chinese exports.

Most anti-dumping cases are nothing more than hidden protectionism. Under U.S. AD law, China is treated as a "non-market economy" and, as a result, its exporters have been assessed tariffs higher than typical AD rates applied to so-called market economies. U.S. AD cases against China's exports have targeted imports of fresh garlic, preserved mushrooms, apple juice concentrate, shrimp, and crawfish tail meat. With the exceptions of honey and shrimp, these cases have had mixed success at keeping out Chinese exports for more than a few years.

But in each and every case, the U.S. consumer has paid higher prices as a result of the dumping orders. Honey from China has clearly been kept out. China's share of U.S. honey imports was around 30% when the AD case was initiated in 2000, and today that market share is near zero. Instead, the U.S. imports honey from India, a higher-cost supplier. This is called trade diversion, good for the honey industry in India and the United States, but costly for U.S. consumers.

Figure 1. China's Trade Balance with the U.S. in Horticulture



Source: Compiled from UN COMTRADE data

Conclusion

After more than a decade following WTO accession, the value of China's agricultural trade has increased dramatically and China has turned into a net importer of agricultural products and now ranks as the number one foreign market for U.S. agriculture. Although considerable resource shifts have taken place from land-intensive towards labor-intensive agricultural products in both production and trade, this transfer remains well below the potential. This is partly due to trade barriers facing China's exports of labor-intensive agricultural products.

Food, animal, and plant safety are rightfully a concern of importing countries, but have unfortunately been used, like AD, for protectionist purposes. There is considerable interest in the impacts of China's rising income growth, a growing middle class and urbanization, and the associated changes in dietary patterns and food imports. These variables will only fully come into play if China's trading partners are willing to recognize that international trade is a two-way street.

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