CHINA’S ACCESSION TO WTO: IMPLICATIONS FOR US AGRICULTURAL EXPORTS

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As the world’s largest agricultural economy and a top producer and consumer of all the major agricultural commodities, China’s accession to the WTO and further integration into the world economy will lead to a wealthier and more stable international food system. Farmers in the United States are particularly well positioned to benefit from China’s accession to the WTO because the farming systems and underlying resource endowments in China and the United States complement one another, providing opportunities for mutually beneficial trade.

WTO accession is the latest in a series of liberalizations in China’s economy that will benefit United States agricultural exports. We expect to see a modest increase in China’s imports of important commodities in 2002 due to the new trade regime under WTO, but most of the benefits to US farmers will be realized several years down the road. Even before China’s accession to the WTO was formalized, US exports of major commodities were expected to increase due to internal market reforms and gradual economic liberalization since the 1980s. WTO accession must be seen in the context of China’s broader economic development and its transition from a command to a market economy.

China is still a low-income economy but it has been growing at an unprecedented pace over the last 20 years and WTO accession bodes well for China to continue this high growth rate for many years. In addition, China has made enormous progress in establishing markets to replace the institutions that determined production decisions under the planned economy of the collective era (1958-1978). Despite this progress, China has yet to develop all of the supporting institutions and infrastructure that are required by a modern market economy. Under a more liberalized and competitive trading environment, the twin forces of development and transition will move China toward producing goods that bring the highest return and importing those that are produced more efficiently elsewhere. It is this longer-term process that holds out the most promising opportunities for agricultural producers in the United States.

China’s WTO Agreement Revisited

As part of the agreement for WTO accession, China made far-reaching commitments to cut agricultural tariffs to an average of 17 percent, to eliminate export subsidies, to apply sound science for sanitary and phyto-sanitary regulations and to limit potentially trade-distorting domestic crop support.

Central to China’s agricultural policy commitments in the WTO agreement is a system of tariff-rate quotas (TRQs) for many of the major agricultural commodities. Under the TRQ regime, a specified quantity of imports – i.e. quota – may enter at minimal tariffs while over-quota imports are charged much higher tariffs. It is important to note that these are not “minimum purchase” agreements, and actual imports may fall short of the full quota amounts. A share of the TRQ for each commodity will be set aside for private and other non-state trading enterprises, a provision intended to loosen the control of

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1 ERS researchers Fred Gale, James Hansen, Bryan Lohmar, Michael Price, Randall Schnepf, Ralph Seeley, Richard Stillman and Francis Tuan participated in the research and contributed to writing of this report.
China’s state trading enterprises over agricultural trade. The TRQ system is designed to ensure that market opportunity rather than bureaucratic decree will determine the level of imports.

China is still working on the details of how the TRQ regime will be implemented, and those details will determine just how open China's market will be. China agreed that TRQs will be allocated to end users (such as millers, crushers and feed lots) and the quotas will specify whether the user must import its quota through a state enterprise or a non-state trader. Beyond this, China has yet to announce the details of TRQ allocation and administration. Exactly how the quotas will be allocated (first come-first served, open bids, or based on historical use), the role of provincial authorities in the allocation, and revision of the list of designated state trading enterprises are among the important issues that will have to be clarified. It is unknown whether state trading enterprises will respond to market signals or continue to trade according to politically determined levels of imports and exports. We will not know just how open China will be to imports until these details are worked out, and it may be some time before we can make a more complete assessment of accession's impact.

Despite these questions, there is cause for optimism regarding further trade liberalization in China. Aside from the TRQ system, China has made substantial commitments to limit trade-distorting policies in agriculture that go beyond the commitments of many of China’s trading partners. China has also agreed to reforms that will liberalize domestic marketing institutions, giving foreign producers greater access to inland markets. Over time, pressure from domestic users who want access to imported wheat, corn, soybeans, and cotton will likely reduce some of the initial rigidity and bureaucracy that may plague the TRQ system in its infancy. Self-sufficiency goals that have kept grain imports from rising may be relaxed as China’s leaders recognize that farm incomes can be raised without tapping into tight fiscal budgets by letting farmers move land out of grains into high-valued, labor-intensive crops that China can grow more efficiently.

**Effects of WTO Accession**

China’s commitment not to use export subsidies is expected to have an immediate impact on the market for corn. Over the last several years, China has significantly expanded corn exports to Asian markets, competing with U.S. exports. China’s exports, however, were subsidized since the export price was substantially less than price paid by the exporters. Without subsidies, China’s corn exports could decline by over 1 million tons per year compared with the non-WTO baseline scenario, increasing opportunities for U.S. exports. Imports to corn-consuming areas in China's south are also expected to rise. In 2001, corn prices at ports in southern China were about 15 percent above world prices including insurance and freight. ERS expects that annual corn imports after WTO accession will average 3 million tons above baseline projections over the projection period. Thus, there could be a total swing of more than 4 million tons annually in China's corn trade over the next 10 years.

ERS analysis suggests that WTO accession could boost China’s wheat imports. Over the last few years, wheat imports have been minimal as the government has sought to draw down excessive domestic stocks. Millers in China have had difficulty obtaining imported wheat that has high-protein and high-gluten wheat needed to blend with domestic wheat to make high quality breads and processed foods demanded by China’s increasingly wealthy urban consumers. Recently, imported wheat at the Guangzhou port in southern China was selling at 40 percent premium to the international price, indicating substantial excess demand for imported wheat at international prices. ERS projections indicate that, under WTO, China’s wheat imports will be an average of 2.6 million tons per year higher than baseline projections through 2011.
China consumes most of the rice it produces and will continue to do so. However, greater access to markets in Japan, Korea, and Taiwan may result in modest increases in japonica rice exports. These exports will be offset by modest increases in imports of indica rice to meet growing demand for high-quality imports and to offset declining domestic indica production as price supports and marketing subsidies are gradually phased out in coming years. While these changes are small as a share of world consumption, they could have important implications in the thinly traded world rice market.

China's soybean imports have skyrocketed since 1998, reaching over 14 million tons in 2001. Imports could rise further to meet the growing demand for vegetable oil and high-protein feed. Soybeans have already entered China at low tariffs of 3 percent in recent years, so WTO accession will have little direct effect. Of greater concern is the potential impact of China's new regulations requiring labeling of agricultural genetically modified organisms. China has announced that any agricultural GMOs imported into China after March 20, 2002, will need safety certificates issued by China's Ministry of Agriculture. However, information about the application process and other requirements remains sketchy, despite the approaching deadline. Thus, many observers expect the GMO regulations to be a major factor slowing China's soybean imports this year.

Like many other countries, China has in recent years sought to develop a domestic oilseed crushing industry to capture value added from oil and meal production. Although the increased crushing capacity has lowered domestic soy oil prices, many observers still feel that China’s crushers, on average, cannot match international crushing margins, and that imported oil will likely be competitively priced under the new TRQ regime.

Another non-WTO factor that could dampen growth of soy oil, soy meal and soybean imports is China’s value-added tax (VAT), which effectively raises the cost of imports. The VAT is officially applied to both imports and domestic production of soy oil, meal, and beans, but in practice domestic producers are often exempt. The imports of many non-agricultural commodities are also affected by China’s VAT policy and other WTO members may challenge it.

Near-term prospects for increased cotton imports due to WTO accession are not promising due to relatively abundant domestic supplies. Imports have been restricted for several years and the government has been selling off excess stocks. China’s cotton production rose by 20 percent increase in 2001, spurred by a combination of strong demand from textile producers, low prices for grain and other alternatives to cotton in early 2001, and adoption of Bt cotton in the eastern provinces. With this year's big harvest, domestic prices have fallen to near world levels. As with wheat, there could be potential for sales of high quality cotton to China for blending purposes, but total imports are likely to be well below the 818,500 ton TRQ for 2002. In the longer run, China's textile industry is expected to be a major beneficiary of WTO accession, which could lead to growth in cotton demand. However, important questions remain, including:

- How will market forces guide supply in China's newly liberalized cotton industry?
- How will production respond to changing relative prices for grain and cotton? and
- How will continued adoption of Bt cotton in China affect supply?

The Bottom Line for U.S. Agriculture

The bottom line for U.S. agriculture from China's accession to the WTO is an increase in the total foreign demand for U.S. corn, wheat, and oilseeds. ERS analysis suggests that increased exports resulting from accession, coupled with higher crop prices, could lead to an annual average increase in
export values of nearly a billion dollars over the 2002-2009 period. Over time, however, higher feed prices will lead to slightly higher livestock prices and higher retail food prices.

Higher crop prices will reduce farmers’ dependence on government payments as market returns rise while loan deficiency payments and marketing loan gains decline. On average, annual projected expenditures on marketing loan programs are $0.2 billion lower over the 2002-09 period. At the same time, total cash receipts from farm marketings will increase by approximately $2.0 billion annually, on average. Taking into account increased market returns, lower government payments, and some increases in farm production expenses, annual net farm income would rise by an average of $0.8 billion over the 2002-09 period.

In addition to the increased exports of field crops under China’s TRQ regime, livestock, horticultural, and other high-valued products face substantially lower tariffs under WTO accession, and this will allow for larger exports to China. Opportunities to immediately expand exports of some of these items, however, may be limited by China’s lack of cold storage and other sophisticated transportation infrastructure. As marketing channels develop, these high-value products will gain greater penetration in the China market. China's agreement to open domestic distribution to foreign companies may enhance the extent to which imported high-valued products can be marketed to China’s consumers. It is also important to note that China’s low labor costs make domestic production of many of these products competitive with producers in other countries, so China’s exports of some high-valued agricultural products could increase substantially and compete with US producers on international markets.

**Larger Gains will Accrue over Time**

Beyond the immediate effects on import levels based on price differences and new trade rules, there are underlying forces that will influence China’s trade over a longer time horizon. Fundamentally, China’s endowment of the basic factors of production, (land, labor, and capital) will determine which agricultural products are most profitable for China’s farmers to specialize in and which to import from other producers. In addition, underlying economic development will boost food demand and commercialize China's subsistence-oriented farm operations. Finally, while China has made significant progress toward the transition from a planned to a market economy, there are still issues remaining in this process that will affect future trade.

China’s factor endowments will have the most profound effect on future agricultural trade. China has some 40 percent of the world’s farmers but less than 10 percent of the world’s arable land, so China’s comparative advantage clearly lies in labor-intensive agricultural products. Thus, the tendency will be for China to import more land-intensive grains and field crops, and export labor-intensive fruits, vegetables, and other specialty crops.

The adjustments needed in the structure of production and trade are hampered by the lack of mobility of factors of production. Land in China is still collectively owned by villages and leased to farmers. While rentals of land are possible, they are not common and it is not easy to transfer land to its highest-valued use. Rural laborers cannot freely move to cities -- where most nonfarm jobs are -- and formal farm credit institutions have only begun to emerge.

China’s accession to WTO bodes well for its long-term development prospects. As Chinese incomes grow, consumers will demand more meat, fish, fruits, vegetables, processed foods, and restaurant meals. Demand for feed grains will rise to support a growing livestock sector. This process will generate not
only increased export opportunities for bulk feed grains, but also increased opportunities for exporters of high-value and processed agricultural products.

As subsistence-oriented farm households become wealthier and more integrated into the non-agricultural economy, they will purchase food rather than growing it themselves and produce commodities that bring the highest returns. This will facilitate movement away from staple grains toward higher-valued labor-intensive products. As workers leave agriculture, China's tiny farms may grow bigger and off-farm earnings may finance investments in equipment and land improvements.

Lastly, it is important to note that China has already made remarkable progress moving away from a planned economy. It is hard to imagine that a little over 20 years ago all agricultural production in China was carried out according to bureaucratic decree. Today, the government guides production by setting procurement prices for a shrinking number of commodities, but most farmers make their own decisions about what to produce. Barriers to transporting goods between regions and provinces have fallen significantly and markets are becoming more integrated. Even grain markets -- the state-owned Grain Bureaus still handle more than 70 percent of all marketed grain -- are showing clear patterns of integration.

While the government has reduced its role in the economy, it has yet to establish reliable market information systems, develop transportation and market infrastructure, build an agricultural finance system, and modernize its legal system to clarify property rights, enforce contracts, and resolve disputes. Without the institutional infrastructure to provide these essential services, market development will be slowed and farmers will be constrained in their ability to take advantage of the opportunities provided by international markets.

Conclusion

China’s recent accession to the WTO is a positive development for the international agricultural economy and for producers in the United States. Integrating a large and diverse agricultural producer and consumer such as China into international markets will serve to rationalize world food production on an unprecedented scale. China’s rapidly growing and urbanizing economy will increase export opportunities for farmers in the United States and other countries.

In the big picture, however, formal accession to the WTO is a reflection of broader changes that are already underway in China and will continue for years to come. WTO accession solidifies these changes and sets the stage for further reform as China’s economy becomes more transparent and guided by the rule of law. For the same reasons policy makers in China strove to achieve WTO membership, they also are working to liberalize markets and integrate China with the world economy in ways that are independent of WTO. Continued economic development and transition to a market economy, along with trade liberalization, will provide greater opportunities for agricultural exports to China in the future.
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<th>Item</th>
<th>Change from baseline</th>
<th>2002-09</th>
<th>2005-07</th>
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<tr>
<td></td>
<td>billion dollars</td>
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<tr>
<td>U.S. agricultural export value (fiscal year)</td>
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<td>Grains and feeds</td>
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<td>U.S. net farm income (calendar year)</td>
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<td>Cash receipts from marketings</td>
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<td>Crops</td>
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<td>Net farm income</td>
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<td>Loan deficiency payments and marketing gains</td>
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1982-84 = 100

U.S. consumer price index for food                   | 0.4                  | 0.4     |         |