

## Summary

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As the 21<sup>st</sup> century opens, China stands ready to assert itself as a major player in global markets. Its accession to the World Trade Organization (WTO) is the latest step in China's incremental journey from an economy characterized by planning and self-sufficiency to one that is market driven and globally integrated. How will China's role in world agricultural trade evolve in coming years? Will it continue to integrate its economy with world markets? Will it import products that can be grown more efficiently in countries with more abundant land and water resources? Or will China maintain its past commitments to self-sufficiency in grains? Will the government allow markets to play a greater role in agriculture or will central planning and government-supported monopolies continue to play dominant roles?

China is one of the world's largest and most volatile customers for agricultural products. Yet, for a country of its size and limited resource endowment, its level of agricultural imports is modest. China tends to import bulk commodities and items used as intermediate inputs in labor-intensive manufacturing. China is a major exporter of high-value, labor-intensive food products, such as manufactured foods, animal products, fish, vegetables, and fruits. China's agricultural exports go largely to other Asian markets. Although per capita incomes and food expenditures in China are still low, food security is not a problem for most of the country's population. Food-consumption levels have grown and will continue to grow as the country grows richer, but this effect will further strain China's limited land and water resources.

Income growth and urbanization are likely to boost food demand considerably and change the mix of foods consumed in China. As incomes grow, demand for meat, fish, vegetable oils, and dairy products will grow particularly fast. The country's transition from rural semi-subsistence to urban lifestyles will also have profound impacts on consumption patterns, shifting demand from self-grown rice, wheat, and vegetables to fish, meat, processed foods, and restaurant meals. Consumers will also pay more attention to food quality, and they may demand foods with specific attributes.

Until the 1980s, there was relatively little value-added in China's food sector, as consumers prepared most meals at home using rice, noodles, raw vegetables, and meat produced at home, purchased from state-run foodstuff stores, or purchased directly from farmers. In the 1980s and 1990s, China's food processing and food retailing industries grew remarkably fast, as consumers demanded more quality and convenience in foods. Modern supermarkets are now the country's most widespread retail outlet for food, but they are being challenged by emerging hypermarkets, most of which are owned by foreign chains. Hypermarkets are introducing China to modern supply chain management techniques designed to improve efficiency in wholesaling and distribution. These developments may open new channels for high-value food imports. The demand for quality, uniform farm products in high volumes generated by modern processing and retailing may transform agricultural production in China.

The increase in meat consumption may be one of the most important developments in China's agricultural sector. Per capita meat and egg consumption by urban residents (not including away-from-home meat consumption) increased an average of 1.5 percent annually from 1985 to 1999. China produces nearly half of the world's pork and is the world's second-largest poultry producer and third-largest beef producer. The meat industry is expected to grow further to supply the country's

growing appetite for meat. Livestock production is shifting from small-scale household production to larger, more commercialized operations. Most of China's growing demand for livestock products will be supplied by domestic producers, predominantly specialized household and commercial livestock operations. However, these farms will increasingly rely on imported corn and soybeans or soymeal to feed their growing livestock numbers.

As exporters prepare to enter the "China market," it is important to keep in mind the regional diversity of the country. Important differences in development level, living standards, and reliance on trade are evident between northern and southern China, eastern and western China, and urban and rural China. These differences seem to be magnified as rapidly growing coastal cities pull further ahead of inland cities and rural areas. Historically, China's provinces have competed with one another to develop their local industries, a practice that dampened interregional trade and encouraged inefficient industry structure and overcapacity. Greater competition brought about by the country's WTO accession will likely encourage a more integrated national economy with fewer, more efficient firms.

The rapid development of transportation and marketing infrastructure is also playing a role in integrating the national economy. However, transportation and logistics costs account for an estimated one-fifth or more of retail prices in China, much higher than in developed countries. Marketing costs will need to be reduced to allow farmers in China's interior to compete for markets on China's coast and overseas. Inadequate port facilities and lack of warehousing and cold storage facilities impede both domestic and international trade. Increased competition after the country's WTO accession will likely push China's food marketing system to squeeze out inefficiencies and reduce farm-retail margins.

China's agricultural trade has grown slowly, especially in comparison with its booming merchandise trade. The country's goal of food self-sufficiency has led policymakers to restrain imports of land-intensive grains, the production of which has a high opportunity cost in land-scarce China. In the years leading up to WTO accession, China still maintained many barriers to agricultural trade, but it has liberalized trade considerably since the 1980s. In accordance with its membership in the WTO, China will lower tariffs, weaken state trading monopolies, increase the openness of import license and quota allocation, and require publication of trade regulations, thus weakening most of the policy instruments the government has used to restrain agricultural imports. China's WTO commitments call for annual tariff reductions that will cut the average agricultural tariff to a relatively low 17 percent by 2004. In the first few years after WTO accession, China will allow limited quantities of important agricultural commodities (grains, cotton, vegetable oils, wool, and sugar) to enter the country at low tariffs of 1-9 percent. At the same time, WTO entry may open more markets for China's labor-intensive exports, potentially moving China's trade patterns in a direction that will make more efficient use of the country's resource endowment.

From the 1950s through the early 1990s, China taxed its agricultural sector by procuring commodities at below-market prices to subsidize urban consumption and industrial development. During the 1990s, central government taxation of farmers receded (although local taxes and fees have become more of a burden for farmers). In the late 1990s, the government procured grain at above-market support prices and market prices of some commodities rose above world prices. As its control over trade weakens after the country's WTO accession, China's government may look at other means of protecting and subsidizing farmers to maintain a degree of

food self-sufficiency and social stability. Government subsidies for China's farmers are minimal now and both "amber-box" (potentially price-distorting subsidies) and "green-box" (infrastructure, education, and other subsidies not tied to prices) spending could rise considerably while staying within China's WTO commitments.

Since the 1980s, China's government has heavily supported research in biotechnology, including the development of high-yielding, insect- and drought-resistant plant varieties that potentially could allow farmers to produce more food from China's limited land area. However, China now seems to be taking a cautious approach to biotechnology. Genetically modified (GM) varieties of most of China's major crops have been developed, but only a few have been approved for commercial use. In 2001, the government published regulations on labeling of GM foods, which disrupted imports of soybeans, most of which are grown from GM seeds in the United States and South America. The regulations left out details that would determine the stringency of the regulations, leaving much uncertainty about China's approach to biotechnology.

Land and water are key agricultural inputs that are limiting factors in China's agricultural production capacity. Indeed, the current level of use of these inputs may be unsustainable. Surface water supplies have dwindled in much of northern China, and ground water is being depleted through heavy agricultural, industrial, and household use. Environmentally fragile cultivated land is being returned to forests and grass cover, while some highly productive agricultural land is being lost to urbanization. Much of China's economy is now governed by market forces, but land and water are not. Farmland is owned collectively by villages, and village leaders allocate land-use rights to households in their village. Land cannot be bought or sold by individual farmers, and land rentals are relatively uncommon and mostly informal. The land-tenure system is equitable, but the lack of land markets impedes the readjustment of land to its most efficient use. Water is exploited as a common property resource, and low marginal prices lead to overuse. The development of improved institutions to manage and allocate scarce land and water resources will be crucial to expanding China's agricultural production capacity.

Labor is China's most abundant resource, and roughly half of the country's workers are employed in agriculture, where incomes are low. The creation of nonfarm jobs for China's large rural population is critical to the country's economic development. Job creation will be a difficult challenge, as many rural and urban employers will face competitive pressures to cut costs after China's WTO entry, thus making employers less inclined to hire more workers. China will need to develop credit markets in rural areas and reverse its historical urban bias in education, technology, and infrastructure investment to spur development in the country's rural hinterland and create new jobs. The easing of restrictions on rural-urban migration will also be necessary. Service industries, which tend to concentrate in urban areas, will account for much of China's job growth.

Reliable statistical information is needed to accurately assess China's development and for markets to work efficiently. Many market analysts distrust China's official statistics, many of which rely on a bureaucratic bottom-up reporting system set up for a centrally planned economy. Improvements in China's statistical system, including implementation of modern survey methods and reconciliation of duplicative statistics produced by multiple agencies, will improve the functioning of markets. It will be equally important for China to increase transparency by publishing important numbers, such as grain and cotton stocks, which are now considered state secrets.