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To U.S. Congress Economic and Security Review Commission hearing on "China's Agricultural Policies: Trade, Investment, Safety, and Innovation" Russell Senate Office Building, Room 328A Washington DC Thursday, April 26, 2018

Chairman Cleveland and other members of the Commission, my name is Fred Gale and I am an Economist at the USDA's Economic Research Service. I appreciate this opportunity to present information on China's agricultural policies. My remarks are based on the most recent data available from USDA's Economic Research Service (ERS) and publicly available data from China's customs statistics.

The mission of ERS is to inform public and private decision-making on economic and policy issues related to agriculture, food, the environment, and rural development. Our efforts support the goals and objectives of USDA by providing economic statistics pertaining to agriculture.

My remarks today will summarize China's food security policy, how it has evolved since the 1990s, and its influence on agricultural production and trade. I will also discuss the intersection of China's food security strategy, its One Belt One Road initiative, and foreign investment by Chinese agribusiness companies. I will characterize China's policies based on my review of Chinese documents, speeches, and articles and my analysis of China's agricultural imports. My remarks will not include specific policy recommendations since the mission of ERS as a research agency is to evaluate policy impacts but not to make policy recommendations.

Food security has always been a chief concern for China. For decades China struggled to produce enough grain to feed its population.

A 1996 State Council white paper on "China's Grain Issue" by China's State Council formalized China's food security policy. This paper was a rejoinder to the 1995 book by Lester Brown, Who Will Feed China?, which warned that China's demand for imported grain would disrupt global markets and consume excessive amounts of global resources. The warnings seemed to be validated at the time by a surge in both global grain prices and Chinese imports of grains in 1995. The white paper's food security policy focused on increasing China's grain production through science and technology, reclaiming land, reducing waste and increasing efficiency of the marketing system. The paper set a 95-percent self-sufficiency objective for "grains" (cereals, beans, soybeans, and the dry weight of tubers) which entailed maintaining imports at less than 5 percent of national consumption.

The food security policy influenced China's 2001 World Trade Organization (WTO) accession agreement. China negotiated limits on imports of cereal grains with tariff rate quotas and focused domestic policy support on cereals (as discussed below). China accepted low tariffs without quotas for imports of soybeans, rapeseed, sorghum, distillers grains, and edible oils (temporary quotas for oils were phased out by 2005).

A medium- and long-term food security plan for 2008-20 reaffirmed the 95 percent self-sufficiency objective and focused on increasing grain production, but it also encouraged Chinese agribusinesses to invest abroad to obtain food for China. This plan also introduced a strategy of raising minimum prices for grain annually to assure farmers that revenues would grow at the same pace as costs.

Since 2013, a revised food security strategy has de-emphasized numerical targets for grain self-sufficiency. Instead, imprecise phrases like "Chinese people must hold their food bowls firmly in their own hands at all times," China must be "basically self-sufficient in cereals and absolutely secure in rice and wheat," and toleration of "moderate imports" guide domestic support and trade policy for grains.

Another slogan, "Two markets, two kinds of resources," acknowledges that China's food needs can be met with a combination of domestic and international markets and Chinese and foreign resources. The strategy encourages Chinese companies to invest in agriculture abroad to profit from China's imports and to play a more active role in global markets.

China uses a combination of domestic support policies and controls on imports and exports of grains to support domestic producers. Since most producers are smallholder farmers who traditionally grew crops for subsistence, the same policies are portrayed simultaneously as supporting incomes for poor farmers. Government programs cover nearly every major crop and livestock commodity, but the chief targets are producers of wheat, rice, and corn. These support programs, protection given by import quotas for these commodities, and restrictions on use of land designated for grain production are designed to ensure that China's cereal grain output remains at a high level.

Farm support programs include various payments to farmers, transfer payments to agricultural counties, price stabilization mechanisms, irrigation and road construction, field upgrades, tax breaks for farmer cooperatives, subsidies for storage facilities, subsidized machinery purchases, subsidies for improved breeds, soil testing subsidies, subsidized agricultural insurance, and so-called model farms. New programs are added every year. China's Ministry of Agriculture has listed 37 different domestic agricultural support programs in place during 2018.

China views its grain reserve as a critical tool for maintaining food security. The 1996 food security white paper emphasized the importance of maintaining a large reserve of grain—double the ratio of inventory to consumption recommended by the U.N.'s Food and Agriculture Organization. China keeps the size of grain reserves a state secret.

According to an explanation by Sinograin (the national grain reserve corporation), the function of national and local grain reserves is to insulate domestic farmers from global price fluctuations. Sinograin holds grain for emergencies and uses reserves as a buffer stock to stabilize markets. Sinograin said that it had purchased a cumulative total of 560 million metric tons (mmt) of grains during 2005-14 and it had sold 410 mmt, a net purchase of 150 mmt. More recent statistics have not been revealed, but it is well known that purchases ballooned even larger during 2015-17 as Sinograin and other State-owned companies acted to maintain support prices after international prices had fallen far below Chinese prices.

Due to pressure from record-high reserves and surging imports, China announced a reform of its corn program in 2016 that would allow its domestic price to fall closer to global prices. A similar reform for rice was announced in 2018.

According to Sinograin, a second measure used to ensure food security is "management" of tariff rate quotas (TRQs) for imported grain. When China joined the WTO, officials agreed to set TRQs for imports of wheat, corn, and rice, a measure intended by counterparty negotiators to increase transparency and establish commercial channels for grain imports. Sinograin, however, explained that it regulates the flow of grain imports to supplement domestic supplies and to balance supply and demand. Sinograin said that it had imported grains and edible oils for designated purposes and stored them separately to isolate the imports from the domestic market. This appears to undermine the intended purpose of the TRQ system: opening a transparent commercial channel for imported grains.

In 16 years since WTO accession, China's grain TRQs have never been completely filled, even during years when high Chinese prices made imports extremely profitable. For example, during 2015, Chinese corn prices were as much as 60 percent higher than the price of imported corn and over 1,100 Chinese companies applied for import quotas, yet over a third of the corn import quota was unfilled. That year China imported 4.6 million tons of corn, but feed mills and starch manufacturers imported over 37 million metric tons of commodities that are substitutes for corn and have no quotas on imports (sorghum, barley, distillers grains, cassava). The United States has initiated a WTO challenge of China's system for distributing the grain TRQs to potential importers.

While China produces more corn, rice, and wheat than it consumes, the country nevertheless does import all three commodities. This seeming contradiction is an outcome of the relatively high price and poor quality of much of the grain produced in China and the geographic separation between production regions and coastal consuming regions. Sinograin and other designated companies purchase and store large volumes of surplus grain in production regions at the same time feed mills and processing companies near ports import grains. Chinese authorities try to forestall this by brokering domestic trading partnerships between producing and consuming provinces.

China's support programs are opaque and difficult to evaluate. China has been slow to submit notifications of domestic support programs to the WTO. The United States has brought a WTO case to challenge Chinese policies for wheat, rice, and corn which guarantee farmers a minimum price to encourage them to plant these crops by eliminating the risk of a decline in price.

New direct payments have been introduced for corn, soybeans, cotton, and rapeseed. These payments are quite large and administered by local authorities using funds transferred from the central government. Only fragmentary information is available about the programs. Authorities have promised a similar payment for rice but no details have been announced.

The two main outcomes of food security policy have been growth in China's production of cereal grains and parallel growth in its soybean imports. From 2003 to 2017, China's production

of cereal grains increased by 198 mmt while imports of soybeans grew 80 mmt. Today, China produces excess supplies of corn, rice, and wheat, but it imports over 85 percent of the soybeans it consumes.

Chinese agricultural officials acknowledge that their strategy is to focus domestic resources on producing cereal grains while selectively opening to imports of soybeans. China now plants a combined 220 million acres in wheat, corn, and rice, but just 17 million acres of soybeans. Based on its average yield, China would need an additional 130 million acres to grow the soybeans the country imports.

The land-rich North and South American continents are the main suppliers of China's grain and oilseed imports. The United States is the largest single country exporting farm products to China. The United States exports dozens of farm products to China that are critical to the diversification of the Chinese diet. Since the 1990s, the U.S. accounted for about 25 percent of China's agricultural imports, but the U.S. share dropped to 20 percent during 2017.

China's food security policy shapes the composition of U.S. agricultural exports. Soybeans stand out as by far the most prominent U.S. agricultural export to China, while U.S. exports of wheat and corn to China are smaller. China's demand for soybeans has been one of the factors encouraging U.S. farmers to increase their production of soybeans.

With export sales of over \$12 billion during 2017, soybeans account for about 60 percent of all U.S. agricultural exports to China, and they are the no. 2 export item (after aircraft) to China among all categories. During 2017, the no. 2 and no. 3 U.S. agricultural export items were cotton (\$976 million) and animal hides (\$946 million). U.S. exports of wheat and corn combined totaled \$390 million.

China's vigorous growth in soybean imports is a major factor stimulating soybean production in the United States. The latest USDA baseline projections anticipate that U.S. farmers will plant more land in soybeans than in corn over the next ten years—a reversal of the historical dominance of corn in U.S. agriculture.

Chinese agribusinesses are encouraged by Chinese officials to invest abroad to take a more active role in supply chains for China's food imports. According to China's Ministry of Agriculture, there were 1,300 Chinese businesses investing abroad in agriculture and related business at the end of 2016. The investments reflect an intertwining of profit motives with a "social responsibility" to contribute to China's food security and to increase Chinese influence in global markets. Some companies receive large loans to finance investments, but most receive little tangible support. Investments include a few large acquisitions of Smithfield Foods, Syngenta, and Noble agriculture, alongside hundreds of smaller projects. Relatively few Chinese investments have targeted U.S. agriculture. Most are made in Southeast Asia, Russia's Far East, and in Africa. New Zealand and Australia have been favored targets for dairy and beef investments.

So far, China's foreign investment has had a relatively minor role in agricultural trade. Many projects fall short of targeted scale of operation and profit, and many have failed to export products back to China. The U.S. share of China's pork market has fallen in the four years since

Smithfield Foods was acquired by China's WH Group--the most prominent agricultural-related investment in the United States. Smithfield-owned farms appear to constitute the bulk of mainland China control of farmland in the United States.

China's "One Belt One Road" program--launched in 2013--is a major strategic initiative that overlaps with China's long-term plans for agricultural trade and food security. The Belt and Road initiative aims to foster new trade routes between China and Western Europe through Asia, Africa, Russia and Eastern Europe, and maritime routes that pass through the South China Sea, Indian Ocean, and Suez Canal. China is making efforts to promote agricultural trade with countries along these trade routes by upgrading ports and border crossings, streamlining food inspection and quarantine procedures, agricultural investment in Belt and Road countries, and holding technical exchanges and training programs.

A long-term objective of Belt-and-Road is to nurture new suppliers of agricultural imports to reduce reliance on major suppliers in North and South America and Oceania. China is positioning itself as a leader in "South-South" cooperation by emphasizing exchanges of agricultural technology, market information, and trade with developing countries. It has twice hosted a meeting of BRICS country agricultural ministers. China aspires to take a more active role in multilateral organizations like the WTO, and organizations that set rules for food hygiene and animal health.

Early results of agricultural Belt-and-Road efforts include a small but growing flow of soybean and vegetable oil shipments from Chinese farms in Russia, small wheat shipments from Kazakhstan, approval of soybean imports from Kazakhstan, trade in fruits and vegetables with Kyrgyzstan, booming imports of tropical fruit from Southeast Asia, a string of fourteen agricultural industry parks across Africa, and exploratory efforts to farm in Central Europe.

Now China's policies are shifting to cope with excess production of grains. An adjustment in the food security policy this year emphasizes improvements in quality of grains instead of simply maximizing output. China now has many programs aimed at mitigating environmental damage caused, in part, by past policies that maximized production. China is trying to reduce chemical fertilizer runoff, restore soil fertility, stop depletion of underground water supplies, prevent soil erosion, and to remove food crops from contaminated soils. The new attention to environmental regulation may restrain production growth, creating greater opportunity for food imports. Indeed, China's production of grain and many other commodities has plateaued since 2015. Chinese officials are encouraging farmers to produce high-quality varieties of wheat and rice that are demanded by consumers instead of maximizing yield per acre and selling surpluses to the government. This latter effort is aimed at substituting domestic wheat for imports of these varieties.

China is holding auctions of stockpiled grain and giving subsidies to processors to dispose of excess grain stocks. Exports of rice jumped during 2017. Antidumping and countervailing duty investigations launched against U.S. distillers dried grains and sorghum may be related to the corn de-stocking effort. Both commodities are commonly imported as substitutes for Chinese corn, so taxing imports of distillers grains and sorghum will encourage mills to buy more corn from China's stockpile.

While not purely a food security program, this year China is beginning a rural revitalization program that will reshape programs covering a wide variety of rural affairs. One aspect of this program is an effort to restructure agriculture by facilitating consolidation of farmland into larger "family farms," cooperatives, and other new types of farms. This is prompted by concerns that fragmented smallholder farms with high production costs and lagging technology are inefficient. Chinese officials hope to nurture a new generation of commercial-scale farms through a "support and protection subsidy" for all farmers who plant grain, training programs, machinery and equipment subsidies, and loan guarantees for operating expenses. Authorities hope that these new farms will be more technically proficient and achieve scale economies that will raise productivity and reduce costs, allowing farms to earn profits at prices aligned with the international market. The farms rent dozens of land parcels from village collectives and hire villagers as laborers. Although these farms may be more technically adept, they also have higher cash expenses for land rent, hired labor, machinery and grain storage compared with traditional small household farms.

In summary, food security is a longstanding concern that has shaped the mix of crops produced and agricultural policy in China. Opening China's market to imports of soybeans and vegetable oils facilitated diversification of Chinese diets by supplying edible oils and protein for animal feed. China's food security policies helped create a bifurcated sources of supply: nearly all cereal grains are supplied domestically and nearly all soybeans are supplied by imports from the United States, Brazil and Argentina. In a corresponding manner, U.S. soybean producers are highly reliant on exporting to China, but producers of corn and wheat have a more diverse mix of markets for their products.

China has aspirations to add new international suppliers of agricultural imports through outbound investment and its Belt and Road initiative. These efforts could reduce the U.S. share of global agricultural trade. The expanded supply of Brazilian soybeans and Ukrainian corn have contributed to the decline in U.S. share of China's agricultural imports, but it is unclear whether China's investment played a significant role in these developments.

China aspires to gain a voice in global food security dialogue. This is reflected by China's recent donations of humanitarian food aid to African nations. China is positioning itself as a leader of technical assistance in agriculture, and China has sought alliances with other countries to call for changes to WTO rules that would allow greater levels of domestic support in the name of maintaining food security.

Chairman Cleveland, this concludes my statement. I will be happy to answer any questions that the Commission may have.