

2022-2023 WILSON CHINA FELLOWSHIP

Scaling Up and Going Out: The Politics of Chinese Agribusiness Development

Kristen E. Looney is an Associate Professor at Georgetown University and a 2022–23 Wilson China Fellow



Abstract:

This paper investigates the politics of Chinese agribusinesses “scaling up” production domestically and “going out” to make investments globally. It addresses the following questions: What are the key drivers behind the transition from smallholder farming to industrial-scale agriculture in China? What are the domestic and global implications of this transition? The paper argues that the development of dragon head enterprises, or large-scale, agro-industrial firms, lies at the heart of China’s recent agricultural modernization efforts, that the factors driving their development are irreversible, and that US firms will face tough competition with them both within China and globally. Given the economic importance US-China agricultural relations and the two countries’ shared interest in promoting global food security, US policymakers should focus on enhancing the transparency of Chinese firms’ global activities, rather than banning Chinese investment in the US agricultural sector.

Policy Implications and Key Takeaways

- China’s largest agribusiness firms, known as dragon head enterprises, have emerged as central players in the development of Chinese and global agriculture. They are responsible for “scaling up” production domestically and “going out” to make investments globally.
- The factors driving dragon head development are irreversible. On the domestic side, the shift from smallholder to industrial farming is tied to shifts in the rural economy, changes in urban consumption, concerns about food safety, and promises of food self-sufficiency. On the international side, outbound agricultural investments are intended to mitigate global food supply risks, to improve firm competitiveness, and to help the Chinese state project political power.
- The idea that China is taking over America’s farmland and food supply is more myth than reality. The United States is not a major target of Chinese agribusiness activity, which means that recent efforts to ban investment are unnecessarily pushing Chinese firms toward other

markets. This trend makes it more difficult for the US to understand and compete with China, and it is costing potential jobs and export opportunities that those investments would have generated.

- US policymakers interested in repairing US-China agricultural relations should work toward normalizing trade relations, reducing barriers to Chinese investment in the US, and vice versa, and allocating more resources for enhancing the transparency of Chinese firms engaged in international trade and investment.

Introduction

China is the world's largest producer, consumer, and importer of agricultural goods. It ranks first in the global production of cereals, cotton, fruit, vegetables, meat, poultry, eggs, and fish products, in addition to being a lead purchaser of both raw agricultural commodities and high-value processed foods on international markets.¹ While most of what China produces is consumed domestically, the country has also emerged as a major agricultural exporter. It ranked third after the United States and Brazil in 2021, with total exports valued at 63.14 billion US dollars.² Following the path of many developed countries, China has become a significant subsidizer of domestic agriculture as well, creating new tensions in global trade governance. Producer support in 2019–2021 amounted to 14.8 percent of gross farm receipts, compared to 11 percent for the United States and 17.3 percent for all OECD countries.³

Much of China's agricultural growth over the past four decades has been attributed to internal reforms that facilitated the de-collectivization, marketization, and industrialization of the rural economy, albeit with uneven effects over time and across different localities. In the 1980s, the replacement of people's communes with household contract farming resulted in historic gains in economic growth and poverty reduction. So did the rise of township and village enterprises, which helped to absorb surplus farm labor and jumpstart China's industrial takeoff and export manufacturing drive. Yet, not all rural communities prospered. In the 1990s, it became apparent that industrialization had also drained the countryside of resources, as many local governments propped up fledgling industries by imposing heavy taxes on farmers and cutting spending on rural public goods. Farm incomes declined, and the rural-urban and coastal-inland gaps widened, causing social unrest, mass migration to the cities, and the hollowing out of villages. During the 2000s, the central government tried to improve rural conditions by abolishing the centuries-old agricultural tax and making rural development, broadly conceived, the country's top domestic policy priority. The government's focus on rural development continued into the 2010s and 2020s, while the goals of eliminating absolute poverty and modernizing agricultural production were elevated.⁴

One issue that lies at the heart of recent modernization efforts is the transition from smallholder farming to large-scale, industrial agriculture. Since the late 1990s, when references to newly emerging "dragon head enterprises"

first appeared in central policy documents, Chinese agribusinesses have been working closely with government agencies to transform the country's domestic agriculture and, increasingly, global agriculture. Also translated as "leading enterprises," the term dragon head refers to a company that the government deems capable of guiding rural communities toward prosperity. According to official statistics, by 2011, China had over 280,000 agro-industrial firms, of which 110,000 were registered dragon heads (the asset requirements for this status differ by locality). Altogether, they had reportedly integrated 110 million farm households into their operations, through various contracting, shareholding, and cooperative arrangements, and they had assumed control of more than 60 percent of total crop area and 70 percent of livestock production. They also accounted for about 66 percent of the urban food supply and 80 percent of agricultural exports.⁵ Although the total number of firms has declined in recent years due to mergers and standardization—at present there are about 90,000 officially registered dragon heads—the scale of these firms has grown rapidly, with the average operating income of the top 500 firms surpassing 12.36 billion Chinese yuan (1.71 billion USD) in 2021, a 62 percent increase from the previous year.⁶

Chinese agribusinesses have also made international headlines for several high-profile acquisitions of foreign firms. In 2013, China's Shuanghui (later renamed WH Group) acquired the US company Smithfield Foods for 4.7 billion USD (or 7.1 billion USD including debt), making it the world's largest pork production and processing firm.⁷ In 2014, China Oil and Foodstuffs Corporation (COFCO) began its acquisition of two international grain trading firms, the Netherlands-based Nidera and Singapore-owned/Hong Kong-based Noble Agri, after which it became one of the world's top food trading companies.⁸ Then in 2017, China National Chemical Corporation (ChemChina) purchased the Swiss company Syngenta for a record-breaking 43 billion USD, turning itself into one of the world's biggest agrochemical and seed firms.⁹ Collectively, these deals suggest a shift away from the long-standing dominance of Western multi-national firms in global agriculture.

This paper draws from a wide range of sources to provide an overview of the politics and practices of Chinese agribusinesses "scaling up" production domestically and "going out" to make investments globally. The main argument is that dragon heads have played a central role in China's domestic and

global agricultural strategies, that the factors driving their development are irreversible, and that despite the United States not being a major target of Chinese agribusiness activity, American firms will face tough competition from them both within China and globally.

The paper is organized as follows: First, on the domestic side, it identifies a few critical factors behind the shift toward industrial agriculture and discusses how state policies have supported agribusiness development. Second, on the international side, the paper explains how agribusinesses fit into China's global food strategy and summarizes key debates about their impacts abroad. Finally, the third section of the paper focuses briefly on US-China agricultural relations, which have become more and more contentious since the Smithfield acquisition ten years ago. It concludes with a few recommendations for US policymakers regarding agriculture, namely, to normalize trade relations, reduce investment barriers, and allocate more resources for enhancing the transparency of Chinese firms engaged in international trade and investment.

Section One: Scaling Up

Key Drivers

An investigation into the causes of China's domestic agribusiness development reveals at least four important drivers: 1) shifts in the rural economy—a dwindling rural labor supply facilitating land consolidation and farm mechanization; 2) changes in urban consumption—an expanding middle class fueling demand for meat and other high-value foods; 3) concerns about food safety—a growing public perception that industrial agriculture is safer and easier to regulate; and 4) promises of food security and food self-sufficiency—continuous political pressure to maintain or increase the production of staple grains and other foods.

Addressing each factor in turn, in recent decades China has experienced an exodus of rural labor. According to the National Bureau of Statistics of China, there were an estimated 292 million rural migrant workers in 2021, comprising over one-third of the country's total workforce. Most migrants were employed in manufacturing, construction, and services rather than farming, though rural-to-rural migration for hired farm work also occurs.¹⁰

Like in many developing countries, with young and middle-aged adults leaving the villages, farming and child rearing have become the responsibility of older family members. This trend, combined with longstanding concerns about the limitations of small family farms, prompted the government to revise rural land regulations and encourage land transfers from smallholders to cooperatives and agribusinesses. Between 2007 and 2016, the share of village land transferred for agricultural use to large operators increased from 5.2 percent to 35.1 percent, far outpacing the amount of village land taken for urban development projects.¹¹ Government subsidies for advanced farm inputs and machinery has further accompanied a push for more “agricultural social service enterprises” (i.e., agribusinesses) to manage village land and farm production.¹²

The urban dietary shift away from grain toward higher-value food consumption—especially meat and dairy, but also fruit and vegetables—is another reason for agribusiness development. Historian Philip Huang refers to this phenomenon as a “hidden agricultural revolution,” whereby the consumption of high-value foods, rather than improved crop yields, caused the output value of agriculture to rise during the first three decades of reform, 1980–2010. Although Huang maintains that the capital- and labor-intensive nature of China’s “new-age agriculture” still allows for small farmers to make a living, he also acknowledges that large operators such as dragon head enterprises play a role in vertically integrating small farmers into larger production, processing, and marketing chains.¹³

One problem, which feeds into the tilt toward agribusiness, is that neither consumers nor the government trust small farmers to produce nutritious and safe food. Following a series of food safety scandals, ranging from contaminated milk and baby formula to recycled cooking oil, public trust in China’s food safety record plummeted, with over two-thirds of respondents in a 2010 national survey claiming that they lacked a sense of safety about food.¹⁴ To rebuild public trust, the government attempted to reform the regulatory system, but the scale of the problem, and the scale of the bureaucracy itself, proved to be too great a challenge.¹⁵ The state’s solution has been to lean into industrial-scale agriculture, on the basis that fewer producers are easier to regulate. At the same time, agricultural producers, of various sizes, have embraced technologies that allow consumers to trace the foods they want to buy through the

whole supply chain. Of course, the irony of towering “hog hotels” and “block-chain chicken farms” is that they come with their own set of safety and environmental risks, and they accept consumer distrust as an unshakeable feature of modern society.¹⁶

With each new public health threat, such as the 2018 outbreak of African swine fever that killed up to 40 percent of China’s pig population, or the Covid-19 virus that was linked early on to a wet market in Wuhan, the government’s response has been to impose stricter health and safety standards that small producers with fewer resources often find challenging to implement. The pandemic indeed further pushed small farmers out of the market and gave large agribusinesses a boost, as wet markets that once served as an important venue for small farmers to sell their products were shuttered.¹⁷

Lastly, and closely related to food safety, is the government’s enduring commitment to food security, which is to say the ability of China to feed itself. This goal has led to grain support policies that increasingly privilege and rely on large agribusiness firms. In 1996, the central government released a white paper on “China’s Grain Issues” that set the goal of achieving 95 percent self-sufficiency in grain production. The paper was a response to the influential writings of American environmentalist Lester Brown, who posed the question: who will feed China?¹⁸ China was not food insecure at the time, but the ensuing debate struck a nerve for Chinese officials, who remembered the Great Famine of 1959–1961, and who were concerned with new threats to food security stemming from rapid industrialization and environmental pollution. Since then, the government has released numerous documents reiterating its commitment to food self-sufficiency, although in 2013 it stated that a moderate amount of imports could be used to supplement domestic production, and it removed soybeans and tubers from the list of products that fall under the self-sufficiency category, narrowing the targets to rice, wheat, maize, and coarse grains. It then adjusted the self-sufficiency goal for rice and wheat upwards to 100 percent.¹⁹ Some highlights from the most recent “Number One Central Document,” released in January 2023, include the goals of maintaining national grain output above 1.3 trillion *jīn* (650 billion kilograms), increasing grain production capacity by 100 billion *jīn* (50 billion kilograms), expanding soybean and oil crop production, and diversifying the food supply system by developing

all kinds of food resources (expressed in official-speak as “establishing a big food concept”).²⁰

To reach these goals, the government has identified certain provinces and counties as major grain producing areas and channeled significant financial support to them. Scholars Shaohua Zhan and Lingli Huang describe the relocation of grain production from southeastern coastal provinces to less developed parts of central and northern China as an “internal spatial fix,” made possible because of state policies, new technologies, and expanded irrigation infrastructure.²¹ Another “fix” is that, in many rice producing areas, local governments have promoted double cropping, even though it makes little sense from an economic perspective. In fact, because of the marginal gains and high costs of double cropping, small farmers have largely rejected the practice, causing local officials to turn to agribusinesses instead. Weigang Gong and Qian Forrest Zhang call this dynamic “betting on the big” and note that large operators such as dragon heads have become “preferred agents” for local policy implementation, helping officials to access the status (and spoils) of being a leading grain producer.²²

It should be noted that China’s lack of self-sufficiency in soybean production is a controversial subject among trade and agriculture experts. China laid the groundwork for becoming a net importer of soybeans when it temporarily reduced soybean tariffs in the mid-1990s, followed by a permanent reduction upon joining the World Trade Organization (WTO) in 2001. A few years later, in 2004–2005, extreme price fluctuations led to a crisis in which Chinese firms overpaid for soybean imports by an estimated \$1.5 billion US dollars, causing 70 percent of the country’s soybean crushing plants and refineries to go bankrupt, and creating an opportunity for foreign multinationals to step in and take over the industry.

By all accounts, the soybean crisis was a watershed moment, after which Chinese state-owned agribusinesses were tapped to rebuild the domestic soybean processing sector to the point of overcapacity, even though domestic production remains low (the self-sufficiency rate in soybeans was about 17 percent in 2020). The struggle to re-gain domestic control over soybeans has served as a warning to policymakers about the dangers of trade liberalization and as a reference point for those advocating greater domestic protection. At the same time, the incredible growth of China’s livestock sector, which depends on soybeans to produce animal feed, has rendered China highly dependent

on imports, a situation that even the staunchest advocates of domestic protection concede makes self-sufficiency in soybean production elusive. The soybean issue has also animated critics who point out that both the crisis and the state's solution to it have entrenched industrial agriculture at the expense of more sustainable farming methods.²³

Setting aside the question of whether small farms are more efficient and sustainable than large farms, the direction of change is clear. Taken together, all these factors—migration, consumption, food safety, and food security—have coalesced to set China on a path of agricultural industrialization.

Dragon Head Enterprises at a Glance

Beginning in the late 1990s, the central government issued several policy statements outlining its vision of modern agriculture: it would be commercialized, specialized, scaled up, standardized, and internationalized. Dragon head enterprises, along with cooperatives and large farm households, would serve as key vehicles for vertical integration, that is, connecting farmers to advanced technologies and the wider marketplace, and integrating agricultural production with processing and marketing.²⁴

Dragon head status can be conferred on companies by different levels of government—there are national, provincial, municipal, and county-level dragon heads—and comes with benefits such as direct subsidies, tax breaks, and preferential loans. In exchange, dragon heads are required to incorporate farm households into their operations, usually as shareholders or contract farmers. Consistent with China's "Company Law" (1994, revised 2018), dragon heads can have different ownership structures: state, collective, private, Chinese-foreign joint ventures, or even wholly foreign-owned (a situation that rarely if ever occurs). The latest stipulations for identifying "national key point" dragon heads, released in 2018, states that they must derive at least 70 percent of their sales revenue from agriculture. They must also meet certain criteria in terms of total assets, fixed assets, and sales revenue, in addition to having a healthy assets-to-liabilities ratio and significant links with farm households. Specific measures and thresholds for each criterion are laid out and broken down by region (eastern, central, and western China).²⁵

The relationship between dragon heads and farmers is a topic of debate among scholars, with some taking the view that capitalist agriculture can

accommodate smallholders, and others arguing that it has led to rural land grabs, dispossession, and proletarianization, turning once independent farmers into insecure wage laborers. There is also disagreement on whether farmers' cooperatives, which local governments have promoted alongside agribusinesses, are a viable alternative to agribusiness-led development. Most observers agree, however, that agricultural industrialization has proceeded unevenly, and that there are still places in China where smallholder farming has proven resilient, at least for the moment.²⁶ A recent survey-based study found that land transfers were not as widespread as official statistics maintain, and that smallholders producing fruit, tea, and other cash crops were already fully integrated into modern supply chains, often without the help of dragon heads.²⁷ Yet, regardless of conditions on the ground, developing dragon heads remains a priority for local governments because of the potential to attract outside funding and policy benefits and to generate local growth and tax revenues.

Although dragon head enterprises can theoretically be foreign-invested or foreign-owned, in practice few of them are. In 2022, there were 90,000 agribusinesses with dragon head status in China, registered at the county level or above, including 1,959 national key point dragon heads. I cross-checked the list of national key point firms with data from the Ministry of Commerce on all foreign-invested firms and found that 150 of them (about 7 percent) were foreign invested. Details about the identity of those investors reveal that many are Hong Kong-based companies or located in international tax havens, suggesting that much of what is being recorded as foreign direct investment is Chinese "round-trip FDI." The United States is also notably absent from the list of foreign investors (it shows up five times in the data and, in each case, appears to be linked to a Chinese individual or subsidiary based in the United States)—which is not to say that US investment is entirely absent from Chinese agriculture, only that it is not tied to the country's largest agribusiness firms. The same is true for well-known multinational agribusiness companies, such as the "ABCD" grain traders (Archer Daniels Midland, Bunge, Cargill, and Louis Dreyfus) and the top seed and chemical companies (Bayer-Monsanto, DowDuPont/Corteva, and BASF). None of them appear to be investors in the national key point dragon heads, even though these companies are certainly present in the larger dataset of foreign-invested firms operating in China.²⁸

Previous research on China's pork sector in particular shows that the industry is dominated by large agribusinesses rather than small farmers, and domestic firms rather than foreign capital. One study citing official statistics notes that, between 2009 and 2017, the number of rural households operating small pig farms (less than 50 pigs per year) declined from 64.6 million to 35.7 million, while the industry's largest companies (raising over 50,000 pigs per year) increased from 96 to 407. It further notes that only one foreign company, Thailand's Charoen Pokphand Group, ranked among the top pig producers.²⁹ Comparing pork to other sectors, Mindi Schneider found that the industry was almost entirely dominated by domestic firms and specifically dragon head enterprises: nine out of ten firms with the highest sales in 2011 were dragon heads. Poultry was similarly structured to pork, while the soybean sector in contrast was dominated by foreign firms (a situation that may have changed in recent years).³⁰

These findings are unsurprising when one considers the state's support for dragon head firms and the drivers of agribusiness development mentioned earlier, especially the commitment to strengthening food security. To that end, China maintains enormous grain reserves and a strategic pork reserve, reflecting the centrality of pork in the national diet.³¹ In the past decade, dragon heads have also become associated with Xi Jinping's poverty alleviation and rural revitalization initiatives, high-profile policies for which the party-state wishes to take full credit—with no role in the narrative for foreign actors or firms. In 2021, the Ministry of Agriculture and Rural Affairs announced plans to develop 2,000 national key point dragon heads and 500 national key point agro-industrial consortiums or clusters by the year 2025.³² Recent reports describe dragon heads as the "ballast stone" of the rural economy and the leaders of a "new flying geese pattern" of rural industrialization, a reference to the theory that technology transfers from leader to follower countries can promote catch-up development. Only in this case, the leaders are not other countries but China's own national champions in agriculture.³³

It is striking that Chinese agro-industrialization differs from previous patterns of (non-agricultural) industrialization because of the lesser role afforded to foreign investment. In contrast with the growth of Chinese manufacturing, which relied heavily on FDI, Chinese agribusinesses are being created by surplus domestic capital. This trend also makes China different from other

developing countries where agribusinesses are closely linked to, if not directly owned by, transnational capital. One explanation is timing: China's agro-industrialization took off in the 2000s, after the country had already experienced two decades of rapid economic growth and urban-industrial accumulation that could be redirected to the countryside. The 2004–2005 soybean crisis also left a legacy of wariness towards foreign firms. Another explanation is the securitization of the food sector: within China, food safety and security are seen as vital issues for social stability and regime legitimacy. As explained in more detail below, agriculture tends to become more "securitized" in official discourse when a crisis occurs, whether that be a food safety scandal, sudden spikes in global food prices, or other shocks to the international system (e.g., Covid-19, the war in Ukraine) that disrupt global food trade. Partly in response to that uncertainty, Chinese agribusinesses have expanded their presence beyond China's borders to influence the development of global agriculture as well.

Section Two: Going Out

Key Drivers

China has a long history of engaging in agricultural aid, cooperation, and investment activities abroad. During the Maoist period (1949–1976), China competed with the Soviet Union and Taiwan to establish itself as a leader among socialist and developing nations. It dispatched agricultural experts to dozens of countries in Southeast Asia, Latin America, and Africa, and built large state farms in places like Tanzania and Guinea. As China moved into the post-1978 reform era, its foreign agricultural engagement continued, though it mostly took the form of a few state-owned enterprises signing on to cooperative agreements and joint ventures that had a clearer business purpose than previous aid projects.³⁴

A turning point occurred in 1998, when the central government announced its "Going Out" strategy of encouraging both state and private firms to invest in other countries, a response to mounting overcapacity problems in Chinese industry. Agribusiness was not a major focus of the policy until 2007, when the "Number One Central Document" called for "hastening the implementation of an agricultural 'going out' strategy."³⁵ Since then, several

types of actors have participated in foreign agricultural investment projects, ranging from state-owned enterprises to private firms, policy banks, and individual expats. Among them, state and private firms with dragon head status have been the most active.

The primary drivers or goals behind Chinese agribusinesses going out are three-fold: 1) mitigating global food supply risks; 2) improving firm competitiveness; and 3) helping the state to project political power. Of course, the growing presence of Chinese firms in developing countries with rich agricultural resources has sparked accusations of land grabbing and neo-colonialism, an issue that will be addressed more below. The focus here is to better understand these drivers and to establish that China is not only a large buyer of agricultural commodities, but a major investor in global food production as well.

Mitigating risks in the global food supply, or “strengthening control over food imports and exports,” is the main government rationale for agribusinesses going out.³⁶ Firms and investors have responded by targeting specific commodities for which China relies on imports, diversifying the suppliers of those imports, and increasing China’s presence throughout the “whole supply chain.” That means investing in upstream and downstream segments, including food production, processing, storage, logistics, trade, and retail, as well as finance and research and development. The aim is not for China to purchase as many imports as possible, but to increase its purchasing leverage over the commodities it needs and to ensure access to them in the event of trade disruptions. Boosting or maintaining high levels domestic production, in order to avoid becoming overly reliant on imports, enhances China’s bargaining power in global trade. As Shaohua Zhan persuasively argues, China’s objective is to achieve an optimal “national-global food duality,” balancing a robust national food supply with access to imports that can help to alleviate internal resource constraints.³⁷

One facet of this global food and agriculture strategy is developing new sites of production from which to source imports, such as rubber from Laos, jasmine rice from Cambodia, or soybeans and oil crops from Russia.³⁸ Yet another facet is to enhance the ability of other countries to feed their own populations, thus reducing competition for imports. In many developing countries, and especially those that are quite far from China, increased production volume tied to Chinese investments has been absorbed by domestic consumers

in those countries or sold on international markets, without necessarily going to Chinese buyers. China is also a major food exporter to countries where it has invested, suggesting that it is not food insecurity at home that is driving investment abroad.³⁹

In general, the push to go out has focused on acquiring lower-value, non-grain crops that fall outside of China's self-sufficiency basket (soy, oil, sugar) or higher-value products that are very resource intensive (meat and dairy).⁴⁰ Indeed, a recent Chinese journal article reports that, during the 2000–2020 period, China's grain self-sufficiency rate stayed above 97 percent, while the self-sufficiency rate for other key products declined—from 81 to 25 percent for oils, 60 to 17 percent for soybeans, 92 to 75 percent for sugar, 99 to 93 percent for meat, and 98 to 91 percent for dairy.⁴¹

The drop in Chinese soybean and oil crop production after the mid-2000s soybean crisis, combined with upward surges in global food prices in 2007–2008 and again in 2011, prompted a shift in official discourse. It became increasingly urgent that China utilize “two markets and two kinds of resources” (i.e., domestic and international) to meet the country's growing demand for food. Chinese dragon head firms, moreover, would actively enter into and help to rebuild the “three chains” (production, supply, and value) of the global food system, becoming competitors to the world's leading multinational food companies.⁴²

Improving Chinese agribusiness firms' competitiveness is about mitigating risks and generating growth, as companies seek to exert greater influence over prices, capture more profits from trade, gain access to emerging technologies, and create new markets for exports that can drive growth and provide a safety net in the event of domestic economic and policy challenges. To compete with large multinationals, Chinese companies have taken a two-pronged approach: expanding into less developed markets where large multinationals have a weaker presence, while also making inroads to more developed markets through mergers and acquisitions.

There are numerous sources that report on these trends, but tracking Chinese investment systematically has proven to be a difficult task. To highlight just a few data points from a 2018 US Department of Agriculture report, which borrows from Chinese and outside sources, there were 1,300 Chinese firms with overseas agricultural investments valued at 26 billion US dollars in 2016. Most of that investment went to other countries in Asia (about 51 per-

cent in 2014), a roughly equal amount went to Europe (15 percent), Oceania (14 percent), and Africa (12 percent), and only a small portion was directed to Latin America (6 percent) and North America (only 2 percent). It should be noted that Europe includes the Russian Far East. Also, despite low levels of investment in North and South America, over half of China's food imports came from there in 2010–2015, and as mentioned previously, Chinese companies did acquire major firms operating in the pork and soybean sectors: WH Group's purchase of Smithfield Foods in 2013 and COFCO's purchase of Nidera and Noble Agri in 2014–2016 (Noble had significant assets in Argentina, Uruguay, Paraguay, and Brazil at the time of the acquisition). The report highlights a range of investments across a diverse set of countries and explains that they reflect a mix of commercial ventures and foreign aid or technical assistance.⁴³

A more recent Chinese news report states that there were over 1,000 firms investing in 108 countries at the end of 2020. The total capital stock for agricultural investment had also reached 30.2 billion US dollars in 2020, up from 9.7 billion in 2014.⁴⁴ Compared to the USDA report, these figures may be somewhat lower because of different measurements (the inclusion or exclusion of investments in agriculture-related manufacturing and services), or because Chinese outbound direct investment in general, not just in agriculture, grew at a slower pace after 2016, owing to problems with Chinese lending institutions and the Covid-19 pandemic.⁴⁵ There is also the possibility of consolidation among dragon heads, with smaller companies being absorbed by larger ones.⁴⁶

The same Chinese report emphasizes that two of the top ten global seed companies in 2021 were Chinese—ChemChina-Syngenta and Longping High-tech Rice—and that COFCO had become the world's largest grain trader by assets and the second largest by revenues and profits. Lastly, it states that China is both a beneficiary of and a leader in agricultural science and technology exchanges. By the end of 2021, China had established agricultural cooperation agreements with more than 140 countries and had carried out over 1,000 technological extension projects, increasing crop yields by 30 to 60 percent and benefiting over 1.5 million small farmers.⁴⁷

Of course, not all of China's investments are successful, and these figures tell us little about the reality of going out, which one report summed up as

“gold everywhere, and traps everywhere.”⁴⁸ But the statistics on cooperation do suggest that the rationale for going out is not purely economic—it is also about helping the Chinese state to project political power.

Agriculture going out became intertwined with the Belt-and-Road Initiative after 2013, leading to increased investments in BRI countries. Although agriculture comprises a small part of BRI—the American Enterprise Institute estimates that BRI countries received 18.08 billion US dollars for agriculture between 2014 and 2022, or just under 2 percent of total BRI investment for the same period (912.61 billion dollars)—the hope is that baseline infrastructure investments in BRI countries may enable greater agricultural trade in the future.⁴⁹ By 2015, Chinese trade with BRI countries already accounted for 20 percent of China’s total agricultural imports and 31 percent of its exports, figures that have likely grown in recent years and that suggest China is less dependent on trade with traditional (non-BRI) exporting countries than before.⁵⁰ As many observers have noted, through greater economic integration, China aims to reshape geopolitics and the global balance of power, or put another way, to seek both profits and political influence by “telling China’s story well.”⁵¹

Critical Debates

In contrast with propaganda messages about “win-win” and “South-South” cooperation, the global expansion of Chinese agribusiness firms has engendered fierce criticism and debate among audiences outside China. The country has been widely depicted as a land-grabber bent on gobbling up resources and, in doing so, causing damage to precious ecosystems. The conventional view is that threats to China’s own natural environment, stemming from urban-industrial development and intensified agriculture, have led to the outsourcing of production for commodities requiring large quantities of high-quality soil and water.⁵² Like the internal spatial fix mentioned earlier, which involved shifting grain production from coastal to inland areas, going out represents a kind of external spatial fix to dwindling agricultural resources at home.⁵³

Moreover, Chinese agribusiness firms have been treated with suspicion due to their close links to the state. Critics assert that China’s government provides too much financial support to agribusinesses going out, rendering it difficult for foreign firms to compete. Chinese firms are also said to be gaining too much control over key nodes in other countries’ food supply

chains, putting their food security and food sovereignty at risk. Lastly, there is a growing fear that Chinese firms are bad actors trying to steal genetically modified (GM) seeds and other advanced agro-technologies with the possible intention of weaponizing them. In two separate cases in 2016 and 2022, Chinese scientists working in the United States for Dabeinong (a Chinese dragon head firm) and Monsanto (a multinational) attempted to steal agricultural IP technology in order to benefit China. Since then, some US officials have expressed concerns that stolen GM seeds could be used not only for boosting crop yields in China but also for developing a virus or fungus that could destroy US crops.⁵⁴

As an aside, biotechnology is a highly protected sector in China, and while GM crops may be imported, they have yet to be cultivated commercially within the country. Exceptions include GM cotton and papaya, and recent news reports indicate that the policy toward GM corn and soybeans may be changing. However, given the public's strongly negative opinion of genetically modified foods, agriculture going out may also be about finding markets for Chinese GM seeds. For example, a GM soybean variety developed by Dabeinong was approved for use in Argentina in 2019.⁵⁵

But returning to the idea of China as a threat, fieldwork-based studies conducted in Africa and Latin America present a more nuanced picture. During the 2000s, Chinese leaders Hu Jintao and Wen Jiabao committed to developing agricultural demonstration centers across the African continent. Even though these projects were already underway at the start of the 2007–2008 spike in world food prices, the timing raised questions about whether China was engaged in a land rush in reaction to the crisis. Several reports claimed that China was buying up or securing leases to hundreds of thousands, if not millions, of acres of farmland in Africa and that Chinese settlers numbering in the tens of thousands would soon follow. Yet, based on case studies and visits to several sites in Africa, Deborah Bräutigam and Haisen Zhang found that many projects linked to Chinese investors were not operating or that they were much smaller than the official numbers and media reports had suggested.⁵⁶

In another study of Chinese demonstration farms in Rwanda and Uganda, Isaac Lawther found that African officials and farmers were motivated to pursue partnerships with China because its technology was more affordable and

more appropriate for adaptation to the African rural context than Western alternatives. Chinese firms, for their part, used the demonstration farms as a platform for understanding the local market and advancing their commercial interests.⁵⁷ Research from Zimbabwe, Mozambique, Ethiopia, Ghana, and the Republic of Congo further reveals a mix of state and private agribusiness firms with varying ties to Chinese provincial governments, or individual entrepreneurs with no ties to the Chinese government, all operating without clear coordination from Beijing.⁵⁸ Taken together, these studies push back against the image of China as a neo-colonial power seeking to exploit African resources.

Scholars of Latin America have also complicated the China threat narrative, without quite rejecting the neo-colonial exploitation framework. Borrowing from dependency theory and food regime theory, they assert that China's expansion into Latin American agriculture has eroded the region's control over trade and resources, and reproduced core-periphery dynamics that have historically inhibited the region's capacity for autonomous development.⁵⁹

They furthermore describe China as pursuing a “neo-mercantilist agri-food strategy” that blends state control with corporate dominance over the global food system. Much of the attention has focused on the rapid growth of COFCO and how that company has challenged the ABCD group's domination of the soybean sector in Brazil especially. The argument is that, despite this challenge, the “corporate food regime” remains intact—which is to say, a global system that subordinates the interests of small farmers to the logic of capital accumulation and to a kind of neoliberal market fundamentalism. The key difference is that COFCO is a Chinese state-owned enterprise, which gives the company and others like it access to sovereign wealth funds.⁶⁰ The company's SOE status also means helping the Chinese government to achieve its food security goals. Philip McMichael, a leading scholar of food regime theory, writes that China's going out strategy “combines considerations of *domestic food self-sufficiency*...with *international self-reliance* in terms of the capacity to exploit possibilities in the global food system, including competing with foreign agribusiness” (italics in the original).⁶¹

A few studies have added to the debate by showing that on-the-ground realities do not fully reflect these narratives. For example, Emelie Peine's work illustrates that China's penetration of Brazilian agriculture is highly uneven and that local actors are not powerless, but capable of contesting and

negotiating their relations to Chinese and other foreign firms.⁶² In another study, Tomaz Mefano Fares finds that after China's soybean crisis, COFCO and Chinatex (another large SOE) actually worked with big multinationals in Latin America and mimicked them by making speculative investments that contradicted China's food security goals. This behavior led to their political decline within China as two other SOEs, Jiusan and Sinograin, made nationalistic appeals to expand China's domestic soybean production and processing capacity.⁶³ One final point worth noting is that politicians in Brazil, Argentina, and beyond have responded to domestic fears of Chinese land grabbing by imposing tighter legal restrictions on foreign land ownership. The backlash to and failure of many direct land purchases has caused Chinese companies to shift their focus from greenfield to brownfield investments, that is from building farms from the ground up to purchasing or forming joint ventures with firms that are already established.⁶⁴

While these studies contribute to a more accurate account of Chinese agriculture going out, it is important to remember that not all firms are like COFCO. Most of them are smaller, private firms without privileged access to government funds. In fact, Chinese sources report that private firms comprise about 95 percent of all firms going out.⁶⁵ This trend makes generalizing from the Latin American experience difficult and suggests that more research is needed on the activities of private firms in other regions, particularly in Southeast Asia, where most of China's outbound agricultural investment is concentrated.

The above analysis nevertheless highlights three broad strategic shifts that are linked to Chinese agriculture going out—from a domestic view of food security to an international one, from a focus on food production to the whole supply chain, and from land purchases to mergers and acquisitions. In line with the goals of China's Belt and Road Initiative, dragon heads are being promoted as an alternative to the largely Western-based multinational corporations that have controlled global agriculture for the past half century. That being said, the reach of dragon heads is not limited to BRI countries. They can be found across the developing and developed world, including in the United States, which has not been a major target of Chinese agricultural investment but is now facing tough competition from Chinese companies globally.

Section Three: US-China Agricultural Relations

In late January of 2023, an assistant secretary of the US Air Force, Andrew P. Hunter, released a letter stating that a Chinese company's plan to build a corn mill in Grand Forks, North Dakota, posed "near- and long-term risks of significant impacts to our operations in the area." The announcement put an end to a yearlong debate about whether the company, Fufeng USA (a subsidiary of the Chinese animal feed and food additives company, Fufeng Group), should be allowed to develop 370 acres of farmland that it purchased with the help of North Dakota officials, who believed the corn mill would create jobs and boost the local economy. Opponents of the deal took issue with the firm's Chinese identity—although Fufeng is private, its leadership's ties to the Chinese government were a point of contention—and with the fact that the development site was less than 15 miles away from the Grand Forks Air Force Base. The implication was that Fufeng would use the corn mill project to spy on the US military.⁶⁶

The Grand Forks city council was pressured to cancel the deal, and in the wake of Fufeng, both Democratic and Republican lawmakers in Congress rushed to express support for legislative proposals that would restrict or ban Chinese purchases of American farmland. Below the federal level, dozens of state legislatures have already introduced or passed bills to that effect. Yet it was not long ago that American city and state officials were courting Chinese investment.⁶⁷

The present moment marks a departure from previous periods in US-China agricultural relations that were characterized by cooperation and optimism—from early scientific exchanges in the 1920s, to the signing of the US-China Science and Technology Agreement in 1979, to the incorporation of China into the WTO in 2001, not to mention then-Vice President Xi Jinping's return visit to Muscatine, Iowa, in 2012. Xi first went there in 1985 as a Chinese county-level official participating in an agricultural exchange.⁶⁸ In retrospect, it seems that 2012 was the high point, if not the peak, of positive US-China agricultural relations.

Trade has always been a contentious issue in US-China relations because of conflict over subsidies, tariffs, and other barriers to market access, although in many ways agriculture has also been a bright spot from the US perspective. China is the top market for US farm exports, and agriculture has been the one

area of trade with China that has consistently generated a surplus. However, a breakdown in governance at the WTO, combined with the US-China trade war that started in 2018, severely strained agricultural trade relations between the two countries.⁶⁹ Without getting into the details, the main effect of those developments was to push China in a direction that it was already inclined to go—toward other, non-US suppliers of key imports. China shifted its soybean purchases to Brazil and Argentina, and more generally, it reduced the average tariff on imports from the rest of the world (from 8 percent to 6 percent) while increasing tariffs on the US (from 8 percent to over 20 percent). Despite the US-China Phase One agreement, signed in January 2020, most of the tariffs from the trade war remain in place, and China has fallen short of its agricultural purchasing commitments, citing Covid-19 as the main reason. Some US farm exports to China, such as soybeans, corn, wheat, and cotton, are returning to pre-trade war levels, but China's diversification away from US exporters has only continued.⁷⁰

The topic of Chinese agricultural investment in the US is even more contentious than trade because it has ramifications for the control of food supply chains, critical infrastructure, and value-added production. These issues took center stage during the lead-up to Smithfield's acquisition by Shuanghui/WH Group in 2013. At a US Senate hearing that year, expert witnesses debated the merits of the transaction, with those opposed to it arguing that the company was primarily interested in accessing Smithfield's advanced hog genetics and moving its value-added pork processing functions to China, to the detriment of American farmers and consumers.⁷¹ After the deal went through, Shuanghui/WH Group gained 146,000 acres of Smithfield farmland spread across several states. It was the biggest purchase of an American firm by a Chinese company and the beginning of a more securitized discourse surrounding US-China agricultural relations.

A few years later, beginning in 2016, a Chinese investor, Sun Guangxin, bought 140,000 acres of land in Val Verde County, Texas, to develop a wind farm. The company, Guanghui Industry Investments Group and its subsidiary GH America, came under scrutiny for Sun's links to the Chinese military and the Communist Party as well as his background as a real estate tycoon in Xinjiang province. The proposed Blue Hills Wind Development Farm was approved by the Committee on Foreign Investment in the United States

(CFIUS) and cleared by the Department of Defense, which got involved because of the site's proximity to Laughlin Air Force Base. But state politicians—Governor Greg Abbott and Senators Ted Cruz and John Cornyn—came out against the deal, on the grounds that the farm would enable China to tap into the Texas energy grid. Abbott signed the Lone Star Infrastructure Protection Act in 2021, sealing off the state's critical infrastructure from companies tied to China, Iran, North Korea, and Russia, and eventually causing GH Group to abandon the project.⁷²

One could argue that the Chinese wind farm ordeal in Texas set the stage for the now failed corn mill proposal in North Dakota, and it is interesting that both projects were set to be located near air force bases. However, Fufeng's plant would not have been able to tap into North Dakota's energy grid, and the scale of its land holdings was miniscule by comparison. In the absence of more information that could establish Fufeng as a genuine threat to American security, one is left to wonder if the deal failed because of American politics. That is certainly China's view on the matter.⁷³

The idea that China is taking over the American heartland is more myth than reality. The latest figures from USDA estimate that foreign persons held about 40 million acres of US farmland at the end of 2022, which amounted to 3.1 percent of privately held farmland and 1.8 percent of all land in the country. China held 383,935 acres, or less than 1 percent of foreign-held land (agricultural and non-agricultural), with the largest holder being Smithfield. In contrast, Canada held 12.8 million acres, or 31 percent of foreign-held land.⁷⁴ Drawing from other sources, the American Enterprise Institute records only five Chinese investment deals targeting American agriculture between 2008 and 2022, worth a total of 8.29 billion US dollars (it should be noted that AEI only tracks deals at or above 95 million dollars).⁷⁵ Rhodium Group lists the same five deals in their database, and they also provide an interesting comparison with US investment to China. Between 1990 and 2020, China invested just over 8 billion dollars in US food and agriculture, while the US invested nearly 20 billion dollars in Chinese food and agriculture.⁷⁶ When one considers the various barriers that prospective Chinese agricultural investors face in the US—unstable trade relations, increased restrictions on investment, and a relatively consolidated sector that is difficult and expensive to penetrate—these numbers no longer seem surprising.

Of course, US policymakers do have legitimate concerns about protecting intellectual property and reducing trade and investment barriers facing American firms doing business with China. Unfortunately, the narrative that China has gained control of America's farmland and food supply, and the knee-jerk assumption that all Chinese firms are controlled by the government, adds up to a distraction from the real issues at hand. Policymakers would be well advised to remember the United States and China's shared goals of enhancing global food security, addressing climate change, and achieving healthy trade relations. They should understand that the current state of US-China relations is driving Chinese agribusinesses toward less hostile investment environments, making it more difficult for the United States to understand and compete with China, and potentially costing the United States jobs and export opportunities that those investments would have generated. Instead of banning Chinese investment, more resources should be allocated to normalizing trade relations and improving information access, so as to enhance the transparency of Chinese agribusinesses going out.

Acknowledgements

I gratefully acknowledge Georgetown students Angus Lam and Aditi Sridhar for their research assistance, Samantha Vortherms for data advice and support, and the Wilson Center China Fellows program staff and peers for their feedback.

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