

Chinese global agribusiness project in the Brazilian soybean commodity chain: Historical structures and current actions

*O projeto global do agronegócio Chinês na cadeia mercantil
da soja brasileira: Estruturas históricas e ações atuais*

GIACOMO OTAVIO TIXILISKI*,**

RESUMO: Este artigo descreve as motivações políticas e as ações econômicas do projeto global do agronegócio chinês. Para isso, utilizamos os métodos de revisão de literatura e análise qualitativa de dados através de uma descrição histórica das ações políticas e econômicas dos agentes chineses. Além disso, conectamos os investimentos chineses na cadeia produtiva da soja brasileira como uma representação prática dessas ações. Em suma, o artigo destacou que as estruturas de longo prazo influenciam as ações atuais na China e ganha impulso com a participação ativa de empresas chinesas em cadeias mercantis, como a soja brasileira.

PALAVRAS-CHAVE: China; Brasil; cadeia mercantil; soja.

ABSTRACT: This article describes the political motivations and economic actions of China's global agribusiness project in the Brazilian soybean commodity chain. To verify these facts, we use literature review and qualitative data analysis through a long-term description of the political and economic actions of the Chinese agents. Additionally, we connect Chinese investments on the Brazilian soybean commodity chain as a practical representation of these actions. In sum, the article highlighted that long-term structures influence current actions in China and is being strengthened by the active participation of Chinese firms in commodity chains, such as Brazilian soybean.

KEYWORDS: China; Brazil; commodity chains; soybean.

JEL Classification: F23; N45.

* PhD Student in International Relations at the Federal University of Bahia – UFBA, Salvador/BA, Brasil. This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (CAPES). E-mail: giacomotix@gmail.com. Orcid: <https://orcid.org/0000-0001-6436-9374>. Submitted: 6/February/2023; Approved: 21/August/2023.

** The author expresses his gratitude to Prof. Pedro Antonio Vieira for his master's degree supervision, which helped in the construction of this article.

INTRODUCTION

One of the most famous greetings in China is “Have you eaten?” (你吃了吗 – *chī le ma?*). Mallory (1928) explains that greetings were created by the rural population and could be seen as the most straightforward demonstration that, for the Chinese people, food has always been one of the most critical problems. Unfortunately, this was due to food scarcity in the Imperial era, which modified eating habits and social relations in China. While the 18th century is considered a prosperous century, the 19th and 20th centuries, with their internal rebellions, external attacks, and natural disasters, led the West to perceive China as a land of famine (Li 1982; Mallory 1928).

Over time, China has risen in the capitalist world-economy’s hierarchy, one of the most important processes in the contemporary capitalist world-economy (Li 2008). Arrighi (2010) sought to understand the peaceful Chinese rise in the face of US power in the early 21st century and credited this rise to the historical roots of Chinese policies and institutions. Moreover, for the author, due to the size of its population, China’s growth subverts the global hierarchy of wealth much more than all the economic growth of the other East Asian countries in the 1990s (Arrighi 2010).

Despite all the arguments for the economic rise, the sustainability of China’s food security remains a topical issue for academia, the global press, and the actions of China in the capitalist world economy. In order to understand this issue, this paper attempts to describe the political motivations and the economic actions of Chinese participation in the Brazilian soybean commodity chain. To do so, we use a historical description based on Braudel’s (1977) historical time in the following three sections. The methodological approach provides a solid foundation for constructing an interconnected analysis of political and economic actions through space and time. As an outcome, “in this flexible, dynamic, and open approach, objects of inquiry are understood not as things with properties, but as ensembles of changing relations forming configurations that are constantly adapting to one another and to the world around them through definite historical processes (Tomich 2011:55).

The first section describes food security as a historical and structural priority for China. The description begins in imperial times and will lead up to the present day. This is done by using a literature review, i.e., surveying publications that contain the agricultural and food security policies undertaken by the Chinese state, as well as historical analyzes of these political-economic processes. The second section will try to show how China’s Outward Foreign Direct Investments (OFDIs) policy is one of the main tools for achieving food security policy objectives in the 21st century. In the third section, the connection between investments and food security will be understood by the practical example of the Brazilian soybean commodity chain.

FOOD SECURITY ISSUE IN CHINESE HISTORY

“Mencius replied, ‘Is there any difference between killing a man with a stick and with a sword?’ The king said, ‘There is no difference!’ ‘Is there any difference between doing it with a sword and with the style of government?’ ‘There is no difference,’ was the reply” (Mencius, N.d.).

The Zhou dynasty (1000-221 BC) was the first to take responsibility for feeding the people. Confucian philosophers believed that the emperor had the right to lead the people, although this right could be lost if the emperor failed in his responsibilities (Loewe 2003). From this political ideology, emperors built public policies to maintain good administration, a grain supply, a fair tax system, civil order, and to defend the borders from barbarians (Crook 1999).

An example is Emperor Kangxi (1661-1722), who, after the military reunification of the Ming-Qing dynasties, introduced grain policies such as regular production reports, tax reductions, migration incentives for unused lands, seed donation, and grain storage. His policies had short- and long-term effects, especially on grain storage, because they could immediately reduce the effects of famine and could be applied to the agricultural development of the empire in the following years (Will and Wong 1991). But for Will and Wong (1991), the main function of public storage in China was the autonomy of political agents to regulate the market, far from the liberal ideals of the West.

Food security policies promoted economic integration by transferring resources to regions with insufficient market linkages and low agricultural production (Will and Wong 1991; Wong 1982, 1997). This compensatory and complementary integration, which involved Chinese people and elites in what Wong (1997) describes as an agrarian economy, was weakened by internal rebellions (e.g., White Lotus and Taiping). But it was the Opium Wars against Britain in 1839 and the Sino-Japanese War that began in 1894 that broke the Qing dynasty. The imperial impoverishment of 1911 was part of the nationalist resentment against external attacks and internal disputes. In this way, the 1911 revolution was a dual process in which the emperors could not provide internal order and external autonomy.

However, Confucianism and food security continued to guide economic and political dynamics after the establishment of the republic (Wong 1997). For Mao Tse-Tung (1949), the revolution was a struggle against imperialism. However, as in the Qing dynasty, the revolutionary process did not provide the political power to create a unitary state. The struggle for Chinese leadership intensified between the Kuomintang nationalists led by the ideals of Sun Yat-Sen and the practices of Chiang Kai-Shek, the Communists led by Mao Tse-Tung, and the provincial militias allied with the Qing dynasty. From 1921 to 1927, the communists and nationalists joined forces to eliminate the provincial militias (Eastman 2002; Hung 2016).

After 1927, the Kuomintang nationalists broke the union and began to persecute communists in the coastal cities. The Nationalists’ rise to power was well re-

ceived by society, which was enthusiastic about the new government and its proposals for peace, prosperity, and democracy (Eastman 2002). While the urban centers buzzed with the new government, the communist movement found its strength in the countryside against the nationalists, becoming a revolutionary peasant party. With this division, the Chinese Civil War lasted until 1949 (Hung 2016).

In the midst of the civil war, there was an agreement between the Kuomintang and the Chinese Communist Party (CCP) to fight the Japanese invasion of 1937. After the Japanese defeat in 1945, the civil war resumed. This war was important for the Communists, who made a quick maneuver with Soviet soldiers who seized the northeastern military-industrial base from the Japanese and transferred the military capabilities they found to the CCP. In this way, the CCP had the strength to seize power and drive the Kuomintang leaders out of mainland China in 1949. Taiwan was the place where the Nationalists took shelter, and from that moment on they had great protection from the United States (Hung 2016).

The internal conflict ended with the communist revolution. However, with the Chinese participation in the Korean War in 1950, the United States imposed economic embargoes on China, which ignited the beginning of a new economic crisis in the country (Hung 2016). American political discourse argued that even if the Communists took power, no revolutionary political movement would be able to end hunger in China. This criticism was answered by Mao himself in the article “The Bankruptcy of the Idealist Conception of History,” in which Mao proposed solutions based on revolutionary practices linked to economic production (Tse-Tung 1949).

In 1956, following Mao’s view, the CCP created a targeted plan known as the Great Leap Forward. This plan included policies such as land collectivization in rural areas and industrialization in cities to increase overall productivity. Mao’s economic policies economically divided China into rural and urban, with the former serving as an adjunct to the latter (Wong 1999, 2008). On the whole, the Great Leap Forward achieved mixed results, as it simultaneously caused a major food crisis in the rural areas, but also managed to achieve a consistent process of industrialization and to increase health, education, and income indices in the urban areas (Hendler 2018; Hung 2016). This result was due to the transfer of more than 800 billion yuan from rural to urban areas between 1953 and 1978, making the industrial sector 47.9% of China’s GDP in the same period (Hung 2016).

Meanwhile, the introduction of communes, the flattening of wages, and the high production targets of militarized policies brought the worst food crisis in China to the countryside between 1959 and 1961. The crisis was exacerbated by embargoes promoted by the United States (Hung 2016; Wong 1999, 2008). According to Crook (1999), more than 16 million people died of starvation during this period. Hung (2016) sees the collectivization of land as just as violent as in the Soviet Union; the difference was that the CCP did not kill the peasants directly, but indirectly, through starvation; the similarity between these two processes is that the lives of the peasants were the price of industrialization in both countries. Instead, Wong (1999) sees Maoist economic reforms, especially in the countryside and in

food distribution, as more closely related to the imperial period than to other regions of the capitalist world-economy.

Under the leadership of Deng Xiaoping (1978-1992), the Chinese state implemented the most important economic policies of the 20th century. As in other Chinese periods, the reforms began in the countryside. Xiaoping (1998) believed that China was wasting its time closing itself off during the Maoist era and sought economic reforms to open the country to the world. In the Chinese leader's vision, openness meant "[...] not only making more contacts with other countries but also drawing on their experience" (Xiaoping 1988:175).

To achieve this, Xiaoping attempted reforms with three goals: 1) to provide food and clothing for the population; 2) to provide a comfortable life for the people by the year 2000; and 3) to reach the level of the middle-industrialized countries by the decade of 2010 (Xiaoping 1988). To achieve these three main goals, the Chinese state carried out the decollectivization of land through the Household Responsibility System (HRS), which distributed small plots of land to families in 30-year contracts; and the accumulation of capital through local enterprises called Town-Village Enterprises (TVEs), which marketed agricultural production, processed food, and led the industrialization of the countryside (Nogueira 2021; Wong 1999, 2008).

The HRS easily took over the space of collective agricultural production. From 1979 to 1982, the HRS was implemented as a regional experiment, and then it was considered by the state as the main model for national production. By 1984, five years after the start of economic reforms, the HRS was already present on 99% of China's farms. In addition, the Chinese central government was looking for ways to make agricultural production more attractive. To this end, China raised the prices of agricultural products and lowered production fees. As a result, household savings increased in the early years from 7% in 1978 to 17% in 1982 (Naughton 1995).

For Naughton (1995), this process was linked to the HRS, as there was a monetization of the countryside. The household savings capacity and the large labor reserve of the HRS allowed for investment and labor for the industrial sector. To support these investments, the Chinese state transferred the productive structures of the TVEs to the rural workers. As a result, small and medium-sized industries aimed at capital accumulation flourished in all regions, either in the form of public or private cooperatives. The labor force was immediately absorbed by the TVEs. In 1984, TVEs employed 106 million people and were responsible for 35% of the income of rural families. From 1978 to 2003, TVEs invested more than 200 billion yuan in China's agricultural sector (Liang 2006). TVEs contributed to the sustainability of production and the potentiation of capital accumulation in all Chinese regions (Hung 2016; Liang 2006; Naughton 1995).

TVEs modernization creates a strong link between industry and agriculture, leading to the rapid development of the agro-industrial sector. Deng Xiaoping achieved the Confucian precepts of nourishing the people, could achieve rapid industrialization, and maintain social order. Zhu Rongji (1998-2003), the former premier, said that after Xiaoping's reforms, the CCP effectively solved the problem

of hunger in China. However, agricultural modernization was accompanied by integration into the capitalist world economy, which deepened changes in rural areas, such as the privatization of enterprises, entry of foreign investment, and Chinese demand for agricultural products from other countries (Zhang 2018).

In addition, TVEs were removed from the provincial tax source and transferred to the federal source, which reduced the interest of local governors in these enterprises. Similarly, urbanization and the financialization of the countryside changed the characteristics of familiar production. Over time, the agricultural sector lost its place in the national economy. In 1952, 50.5% of GDP was generated by the agricultural sector; in 1980, this figure fell to 30.1%, and in 1996, it reached only 20.4% (Yao 2000). The central government's tax reforms and preference for urban industries caused a large rural exodus in the 1990s, creating social problems such as the "left behind," consisting of women and children in extreme poverty, and migrant rural workers without any civil rights (Zhang, Oya, Ye 2015).

The social problems did not stop the production of Chinese agriculture, which ensured food security for most of the population. Li (2008) emphasizes that China's economic policies promoted a quality of life and development unprecedented in Chinese history. However, the large amount of food required by China created internal and external environmental pressures. In this sense, China's food security creates international problems for China, which has been bombarded by critics of its economic model in general.

In the late 1990s, the West defied the CCP by attacking the industrialization and sustainability of Chinese food security (Crook 1999). From Brown's perspective, Chinese food imports and production are detrimental to the world because of the interconnectedness of our ecosystems (Brown 1995). On the other hand, the Chinese central government reiterated that the attacks were unfounded, given the grain production and food security achieved since 1949. Chinese authorities reiterated that "The Chinese people can not only feed themselves but also make their quality of life better and better year by year. Instead of forming a threat to the world's grain supply, China will make even greater contributions to it" (China 1996).

After the controversy, the Chinese government formulated a policy of self-sufficiency in the production of 95% of all grains consumed in China and the designation of 120 million hectares for agricultural production. Likewise, the Chinese state established the New Socialist Rural Plan, which reformed the tax system, subsidized agricultural production, and created a new welfare plan to try to correct the problems caused by the liberalization in the 1990s (Zhang, Oya, Ye 2015).

In addition, China's food security policy was transformed into a dual internal-external policy. Since 2013, moderate imports were officially introduced into the food security policy, especially soybeans. This led China to reshape its relations with other countries. The Chinese state created political and economic strategies to create a global agribusiness with local roots (Zhang 2018). Locally, State-Owned Farms are used to guarantee food supply in border regions and to strengthen national enterprises to dominate the agricultural sector (Schneider 2016). Globally, state-owned enterprises (SOEs) participate in agricultural commodity chains.

Every year, China's central government publishes a document to update the actions and achievements in the agricultural sector; in these documents, it is possible to see that the most important issue for China is to reduce inequality in the countryside. Likewise, these documents are the basis for improving technology, production, and industrial connectivity (Lu 2021). In relation to the international market, the 2019 document makes it clear that the Chinese state seeks to "actively expand the import of agricultural commodities in short supply, diversifying the import channels, nurturing multinational agricultural corporations, supporting agricultural companies 'going out' to invest abroad, strengthening agricultural international cooperation [...]" (SCIO 2019).

It is possible to structure the goals of the global agribusiness project into: China's leadership of a new model of agricultural cooperation, increased participation in the global pricing of agricultural products, and the internal acquisition of new technologies for the modernization of the sector (Zhang 2018). For this, China needs to actively participate in the capitalist world economy. However, Chinese politicians tend to national integration with their political and economic interests, making China an important and unique actor in the world economy. For Lu et al. (2022), China's food security policies demonstrate clear state leadership in the agricultural sector, allied with private and SOEs.

Internal contradictions show that China is not a monolithic bloc; on the contrary, complexity and multifaceted are adjectives to describe public policy formation in China (Hairong, Yiyuan, Bun 2016). In this paper, Chinese food security policy highlights the importance of long-term structures, such as Confucian precepts, for state policymaking. Moreover, although food security is a national issue, the policies implemented by the Chinese state have implications for other regions of the capitalist world economy. The next section will attempt to argue that China's foreign investment policy is a necessary condition for achieving food security.

CHINESE INVESTMENT POLICY AS A TOOL FOR GLOBAL PARTICIPATION

The great OFDIs expansion occurred in the 1990s with the strategy known as "Going Global" (走出去). The program was designed to boost OFDI by Chinese firms seeking new commercial opportunities for the country as part of the process of economic rise in the capitalist global economy (Chen et al. 2017). In 2000, Chinese investment accounted for 1% (40 billion) of global investment; by 2020, this amount will grow to 17% (149 billion) (UNCTAD 2022). Investment in the agricultural sector accounts for only 1.3% of China's total outward investment. From 2005 to 2016, Chinese outward investment in agriculture grew by 36%, reaching US\$ 27.9 billion in 2016 (EIU 2017), involving 1,300 Chinese companies operating at the nodes of agricultural market chains in 100 countries around the world (Zhang 2019).

Chinese agricultural OFDI could be divided into two phases: the first from

2000 to 2012, with greenfield investments in land acquisitions, and the second since 2012, with acquisitions of foreign companies. The most important investments were made in the trade sector, especially in the integration of SOEs in the South American market (Escher and Wilkinson 2019; Fares 2019; Giraudo 2019; Turzi 2017). In sum, Chinese investment policy involves combined processes: 1) agricultural reconstruction in national policies, and 2) increased participation of Chinese firms in the global market (McMichael 2019).

These policies contribute to the pursuit of food security and the ability to compete internationally with foreign companies. All these processes have as a visible mark the confluence of state and private interests. For McMichael (2019), current Chinese policies, mainly in the internationalization of national companies, are characteristic of “state-centered neoliberalism,” which is described by the author as an exceptional Chinese process in the integration of the country into the capitalist world economy and the internal maintenance of communism, which generates short-term (strengthening of the party-state in the national economic execution with partial submission to the trade rules and policies of international organizations) and long-term consequences (reorientation of international power from the West to the East).

In general, the Chinese state uses the pressures for infrastructure, energy, and telecommunications from the urbanization process to activate its industrial base and raise wages. As a result, demand for commodities and processed foods expands. This virtuous cycle is sustained by state investments in all industrial sectors through SOEs, private companies, and the national financial system (Hiratuka 2018). Gabriele and Jabbour (2022) state that “The centrality of the large publicly-controlled industrial sector, which generates major spillover effects throughout the national economy as a whole, is the key distinctive feature of China’s development model” (Gabriele and Jabbour 2022:121).

As with other economic sectors, the Chinese global agribusiness project uses this spillover to advance around the world. COFCO (grain supply), CNADC (meat supply), and ChemChina (biotechnology supply) are the principal beneficiaries of this process (Zhang 2018). All of them are controlled by the State-Owned Assets Supervision and Administration Commission of the State Council (SASAC), a Chinese committee that regulates Chinese SOEs since 2003. SASAC is essential for the modernization of Chinese corporations and for the effectiveness of the Chinese State in organizing national development through long-term goals (Gabriele and Jabbour 2022).

In 2017, COFCO appeared as the fourth biggest company in international agribusiness, surpassing Deyfrus and Bunge in revenue. However, COFCO’s profit (US\$ 200 million) was small compared to other agribusiness companies, such as Bunge (US\$ 700 million). COFCO’s profit would be lower if there were no subsidies from the Chinese government, which in 2016 was 790 million. Also, the state companies use the monopoly of the Chinese market to increase their revenue, and the low import tariffs, which in the case of rice, wheat, and corn went from 65% to only 1% tariffs, for State-Owned enterprises (Zhang 2018).

CNADC was formed in 2004 by the merger of China National Fisheries and China Animal Husbandry. Today, CNADC has 17 subsidiaries in 40 countries. Its main function is the export of fish but is also involved in the purchase of land in Africa and South America for the production of grain, the production of veterinary vaccines, and the import of pigs and cattle (CNADC 2022). In 2015, China National Fisheries closed the year with a US\$ 38 million debit; in 2016 received US\$ 10 million in subsidies from the Chinese State (White 2017). CNADC's financial problems are currently in its history, as demonstrated by the audit made by the central government in 2010 (China 2012).

The case of ChemChina is the most successful of the three pillars of Chinese global agribusiness. It is the manufacturer of more than 120 pesticides and is listed as one of the largest companies in the world by Fortune magazine, is present in more than 100 countries with 11 international subsidiaries and more than 140,000 employees (ChemChina 2022; Fortune 2021). In 2017, it bought the giant Syngenta for US\$ 44 billion. In 2021, ChemChina and Sinochem, the two largest companies in the Chinese chemical sector, formed a conglomerate with revenues estimated at US\$ 150 billion; this is more in ways to compete with North Atlantic companies (Yang and Mou 2021).

SOEs are instrumentalized by the State to achieve political aims, either internally or externally (Gabriele and Jabbour 2022). In Zhang's (2018) perspective, SOEs might be seen as strong, but their structures do not imply their weakness. Nevertheless, private companies are also impacted by Chinese state control over SOEs. Private companies, along with SOEs and public farms, are considered "Dragonhead Enterprises". These companies are considered to be the conductors of a sector and are responsible for leveraging or opening space for others. For this, the Chinese State helps with the reduction of taxes and fees and the opening of markets (Gabriele and Jabbour 2022; Schneider 2016). This synergy is part of a national project, in which: "[...] State and private elites in China are working together to consolidate a robust domestic agribusiness sector, as both an arena for national-level rural and economic development and a new frontier for accessing resources and markets abroad" (Schneider 2016:2).

Even if there seems to be harmony among the agents, one must remember that China is not a monolithic block; thus, contradictions occur at various levels, as described above. The conduct of business in African countries, for example, is influenced by various Chinese and African actors (Gu et al. 2016). This empirical finding makes the view of a highly coordinated policy by a strong state questionable. For Zhang (2019), even if there are these contradictions and the increasing autonomy of firms in the pursuit of profit, it is possible to note that, due to national interests, the external investments of Chinese companies in the agricultural sector are coordinated and/or aided by the State.

From Belesky and Lawrence's (2019) perspective, the state's participation is a continuum in the Chinese agricultural sector. To the authors, it is possible to see the "hand" of the Chinese State in the neo-mercantilist policies in the agricultural sector, specifically in OFDIs. China's participation in WTO in other International

Organizations, instead of reducing the state's economic intervention, made China adapt its actions (Belesky and Lawrence 2019).

At first glance, state-market dynamics in OFDI would seem controversial but it is because Chinese leaders want more than profits, they are sourcing for a strategic supply that other leaders do not see as important: grain. In Chinese thought, grains are weapons, and these weapons could be used against China. In fact, grain was effectively used against China in the US embargoes of the 1960s, and in the 1990s rhetoric of the unsustainability of grain production in China (Morton 2012; Zha and Zhang 2013; Zhang 2020).

As such, the increase in Chinese foreign investments seeks, in part, to enhance bargaining power in the international arena. To achieve this goal, China has become a major supporter of international organizations such as the Food and Agriculture Organization (FAO), the International Monetary Fund (IMF), and the World Trade Organization (WTO) (Morton 2012). China and the FAO have maintained a project for agricultural cooperation in developing countries since 2009, there have been three Chinese grants through 2020, the first worth US\$ 30 million, and the last two worth US\$ 50 million each (FAO 2020). The increase in Chinese participation is also visible in the World Food Program, in 1998 China donated US\$ 1.1 million, and in 2021 it was US\$ 26 million (WFP, 2022).

Participation in food security and humanitarian aid projects around the world is a diplomatic tool to disengage the image of China as a usurper of natural resources (Jiang et al. 2018). Allied to this, agricultural technical cooperation projects with countries in the periphery, especially African countries, seek to create win-win international cooperation. In the countries that receive the projects, local economies are stimulated, and the agricultural sectors are modernized. In China, these projects become, besides food, productive experiences (know-how), and a source of internal agricultural modernization.

Morton (2012) sees Chinese food security as dual with internal and external axes with economic integration into the capitalist world-economy through practicing, in other words, China seeks to participate in various commodities chains, in international organizations, and in building bipolar and multipolar relationships in the interstate system. The Chinese investment policy is connected with the search for political legitimization, either in central regions or in peripheral regions of the capitalist world-economy. This Chinese objective makes political agents follow the rules of the 'international order', but also create alternatives to it (Benabdallah 2019).

BRAZILIAN SOYBEAN: A PRACTICAL CASE OF CHINESE ECONOMIC ACTIONS

It is no coincidence that Brazil is one of the countries receiving the most Chinese investment. The CEBC (Cariello 2021) database shows that Brazil is the largest recipient of Chinese investment in Latin America, being the destination of 47% of investments. The investment peak was US\$ 13 billion in 2010, with 12 projects.

The lowest value was US\$ 1.7 billion in 2014. In terms of industrial sectors, the energy sector stands out with 48% of investments. Due to the concentration of investments in the electricity sector, Chinese companies are already responsible for the generation of 10% of Brazil's total energy production. Taking advantage of the auctions promoted by the Brazilian government, the oil and gas sector has become one of the sectors that have attracted the most investment from Chinese companies, being the destination of 28% of investments. In mining, the sector is one of the most consolidated in terms of exports, attracting 7% of Chinese investments. In manufacturing, 6% of the amounts invested were in several segments such as automotive, electronics, chemicals, and machinery (Cariello 2021).

Infrastructure projects captured 5% of all Chinese investment in Brazil, mainly for the construction and expansion of ports (Cariello 2021). The infrastructure sector is important to Chinese commercial interests because of the flow of goods across Brazil's vast territory. According to CEBC, the agricultural sector itself will receive US\$ 1.9 billion in investments from 2007 to 2020 (Cariello 2021). For the AEI (2021), investments in the agricultural sector from 2011 to 2017 reached US\$ 3.2 billion. The Red-Alc (2021) captured US\$ 2.8 billion of Chinese investments in the sector, which employed more than 9,500 workers from 2007 to 2017. As we can see, the data is contradictory due to the different methodologies used in these studies. In order to identify Chinese investments in the agricultural sector, we conducted research through press releases, academic articles, and official documents. As a result, we found fourteen projects from eight Chinese companies, as summarized in the table below.

Table 1: Chinese investments in Brazilian Soybean commodity chain

Company	Production/ Land	Agrochemical/ Seeds	Storage/ Processing/ Commercialization	Transportation	Total
CCCC					0.75
CHEMCHINA					1.1
CMPORTS					0.92
COFCO					2.7
HOPEFULL					0.12
PENGXIN					0.45
TIDE					No info.
TOTAL					6.04 bi. US\$

Source: Data from AEI (2021), Cariello (2021), and RED-ALC (2021).

Production/Land: Chinese investment began in 2007 with the purchase of land in the states of Rio Grande do Sul and Tocantins by the consortium of the private Zhejiang Fudi Agriculture Company and the Beidahuang Heilongjiang State Farm Company. The Chinese companies found difficulties in the deal and resold for the Chongqing Grain Group (CGG). In 2010, CGG failed to buy 200,000 hectares of land in the state of Bahia, with a planned investment of around US\$ 300 million. After political pressure led by the local agrarian class, the Brazilian government limited international land purchases to 5,000 hectares. CGG closed its investments in Brazil after the occupation of its land by the Landless Workers Movement in 2013 (Oliveira 2018).

The legal problems of these land investments led to the cancellation of the US\$ 7 billion project between the Hopeful Grain & Oil Group and the China National Development Group (CNADG). The same happened with the purchase intentions of Pallas International in 2011 (Oliveira 2018). Fairbairn (2015) affirms that there are several cases of maneuvering the law and its interpretations, which allow the management of land by foreign companies. The most common is the creation of a joint venture with a Brazilian company that holds more than 50% of the capital, with which the new company can make land purchases above the imposed limit. In other words, companies facing land investment problems are changing their strategies of (in)direct management of the production process.

Seeds/Agrochemicals: In 2014, ChemChina acquired Prentiss Química, a Brazilian company that produces more than 20 million liters of agrochemicals per year (TIDE 2021). In 2018, Citic Agri acquired Dow Sementes do Brasil for 1.1 billion (Escher and Wilkinson 2019). These purchases were part of the Chinese strategy to buy Western agrochemical companies in order to gain autonomy in the sector. According to Gaudreau (2019), these investments are important for Chinese companies to develop new products with technology.

Storage/processing/marketing: Chinese investments are also aimed at controlling the outflow corridors of grain producing regions (Gaudreau 2019). This can be seen in the investments of COFCO. Today, the state-owned company owns 40 warehouses, 8 processing units, and 8 ports in Latin America. In Brazil, COFCO employs about 6,500 people and can process 1.4 million tons of grain per year, 70% of which is in the state of Mato Grosso (COFCO 2021; Zanini 2020). COFCO's two major investments were made in 2014 with the acquisition of Noble Agri Limited for US\$ 1.2 billion and the Nidera Group for US\$ 1.5 billion (Escher and Wilkinson 2019). These investments are part of the verticalization process adopted by COFCO, like other European companies, to gain more control in the soybean commodity chain (Wesz Jr., Escher and Fares 2021).

The private groups are important for Chinese investment in the agricultural sector. Hunan Dakang Farming, part of the Pengxin group, acquired the Fiagril company in 2016 for US\$ 200 million. In 2017, the Belagrícola cooperative was purchased for US\$ 253 million (Red-Alc 2021). As a result, these Chinese SOEs and private companies have challenged the traditional groups in the international

grain trade. Moreover, and most importantly, China has gained more autonomy in the purchase of grain for domestic needs.

Transportation: Transportation is often left out of the analysis of Chinese interests in the agricultural sector. In our view, this is an epistemological and methodological gap, since transportation links all other commodity procurement processes, especially in an international transportation sector dominated by a few shipping companies.

Chinese investment in Brazilian ports began in 2017 with the acquisition of Brazil's largest port, Paranaguá Port/Paraná State, by China Merchants Ports Holding (CMPorts) for 925 million. In the same year, the China Communications Construction Company (CCCC) invested US\$ 240 million in the construction of the São Luís Port/Maranhão State. Also in 2017, the CCCC, in partnership with the investment fund Anessa Fund, invested US\$ 514 million in the construction of the Babitonga Bulk Carrier Terminal in the state of São Francisco do Sul/Santa Catarina. In the same city, Hopefull Grain & Oil Group led the construction of another grain port terminal for 120 million (AEI 2021; Red-Alc 2021). Together, these companies own four major grain export points in Brazil, three in the south, a traditional soybean production area, and one in the northeast, the new soybean production frontier.

China, which needs ever-increasing quantities of soybeans to produce oil and/or animal feed, has found Brazil to be an ideal economic environment for its interests. This involvement changes the intercapitalist struggle in the Brazilian soybean commodity chain and in the global agricultural commodity chains as a whole. We can see through the description that important nodes are being brought under the influence of the Chinese as nodes of seeds and transportation. Obviously, all these investments are interconnected with the goals of the global agribusiness project (Zhang 2018): a) China's leadership of a new model of agricultural cooperation due to the massive volume of Brazilian exports to China, reducing Brazil's bargaining power; b) increasing participation in the pricing of agrifood products globally through the vertical integration of Chinese companies and participation in international organizations; c) capturing new technologies for the modernization of the sector at the national level by merging with strategic companies that allow technological advancement centered in China.

CONCLUSIONS

This paper sought to provide insights into the fact that Chinese participation in global agribusiness is a multifaceted process driven by historical and current economic and political motivations. The analysis allowed an understanding of the Chinese actions in the Brazilian commodity chain. We demonstrate the purest capitalist mechanism described by Braudel, in which “[...] capitalism has always been monopolistic, and merchandise and capital have always circulated simultaneously [...]” (Braudel 1977:113). Moreover, the construction of Chinese foreign investment

policy, as well as food security policy, is the result of the continuity of the political perspectives of the millennial epoch and their adaptation to the contemporary capitalist world economy.

In sum, without the coordination of the Chinese state, it would not have been possible to achieve the goals of food security policy and the increased participation of Chinese companies in the nodes of agricultural commodity chains. China's integration and rise in the world capitalist economy has brought challenges that China has met through its ability to build policies based on the perception of a complex world capitalist economy. The effects of the participation of Chinese companies in agricultural commodity chains can be seen as beneficial by those who observe the importance of the Chinese market, and as harmful by those who point to a certain deindustrialization of national economies due to the high dependence on commodity exports. In any case, the impact of China influences political, social and environmental processes in different regions of the world, especially in Brazil.

REFERENCES

- AEI – American Enterprise Institute. China Global Investment Tracker. 2021. <https://www.aei.org/china-global-investment-tracker/>. Retrieved November 18, 2022.
- Arrighi, Giovanni. 2010. "Postscript to the Second Edition of the Long Twentieth Century." Pp. 371–86 in *The Long twentieth century: Money, power, and the origins of our times*, edited by G. Arrighi. London, England: Verso Books.
- Belesky, Paul, and Geoffrey Lawrence. 2019. "Chinese State Capitalism and Neomercantilism in the Contemporary Food Regime: Contradictions, Continuity and Change." *The Journal of Peasant Studies* 46(6):1119–41. doi: 10.1080/03066150.2018.1450242.
- Benabdallah, Lina. 2019. "Contesting the International Order by Integrating It: The Case of China's Belt and Road Initiative." *Third World Quarterly* 40(1):92–108. doi: 10.1080/01436597.2018.1529539.
- Braudel, Fernand. 1977. *Afterthoughts on Material Civilization and Capitalism*. Baltimore, MD: Johns Hopkins University Press.
- Bräutigam, Deborah A., and Tang Xiaoyang. 2009. "China's Engagement in African Agriculture: 'Down to the Countryside.'" *The China Quarterly* 199(199):686–706. doi: 10.1017/S0305741009990166.
- Brown, Lester R. 1995. *Who Will Feed China?: Wake-up Call for a Small Planet*. New York, NY: WW Norton.
- Cariello, Tulio. 2021. *Investimentos chineses no Brasil: histórico, tendências e desafios globais (2007-2020)*. Rio de Janeiro: CEBC.
- ChemChina. 2022. Introduction. Retrieved November 17, 2022 (https://www.chemchina.com/en/gywm/jtjj/A601601web_1.htm).
- Chen, Yangfen et al. 2017. "Is China Different from Other Investors in Global Land Acquisition? Some Observations from Existing Deals in China's Going Global Strategy." *Land Use Policy* 60:362–72. doi: 10.1016/j.landusepol.2016.10.045.
- China. 2012. "Audit Results of the Financial Revenues and Expenditures of China National Agricultural Development Group Co." Retrieved November 17, 2022 (<https://www.audit.gov.cn/en/n746/n752/n768/c66698/content.html>).
- China. 1996. "The Grain Issue in China." Retrieved Spring 11, 2022 (<http://www.china.org.cn/e-white/grainissue/index.htm>).
- COFCO. 2021. "COFCO around the World: Growing the South Cone Cooperation." Retrieved Spring

- 11, 2022 (<https://www.cofcointernational.com/stories/cofco-around-the-world-growing-the-south-cone-cooperation/>).
- Crook, Frederick W. 1999. "An Analysis of China's Food Grain Security Policy." Pp. 55–73 in *Agriculture in China and OECD countries: past policies and future challenges*, edited by OECD. Paris Cedex, France: Organization for Economic Co-operation and Development (OECD).
- Eastman, Lloyd E. 2002. *Seeds of Destruction: Nationalist China in War and Revolution, 1937-1949*. Palo Alto, CA: Stanford University Press.
- EIU. 2017. "China's ODI in Agriculture: The Third Wave." *EIU*. Retrieved November 11, 2022 (<http://country.eiu.com/article.aspx?articleid=335678817&Country=China&topic=Economy&>).
- Escher, Fabiano, and John Wilkinson. 2019. "A Economia Política Do Complexo Soja-Carne Brasil-China." *Revista de Economia e Sociologia Rural* 57(4):656–78. doi: 10.1590/1806-9479.2019.191017.
- FAO. 2020. "FAO Welcomes China's New \$50 Million Donation to Support South-South Cooperation." Retrieved November 17, 2022 (<https://www.fao.org/china/news/detail-events/en/c/1309397/>).
- Fairbairn, Madeleine. 2015. Foreignization, financialization and land grab regulation. *Journal of Agrarian Change*, 15(4), 581-591. doi:10.1111/joac.12112
- Fares, Tomaz Mefano. 2019. "The Rise of State-Transnational Capitalism in the Xi Jinping Era." *Journal Für Entwicklungspolitik: JEP* 35(3):86–108. doi: 10.20446/jep-2414-3197-35-3-86.
- Fortune. 2021. "ChemChina." *Fortune*. Retrieved November 17, 2022 (<https://fortune.com/company/chemchina/global500/>).
- Giraudó, Maria Eugénia. 2019. "Dependent Development in South America: China and the Soybean Nexus." *Journal of Agrarian Change* 20(1):60–78. doi: 10.1111/joac.12333.
- Gaudreau, Matthew. 2019. Constructing China's National Food Security: Power, Grain Seed Markets, and the Global Political Economy.
- Gu, Jing et al. 2016. "Chinese State Capitalism? Rethinking the Role of the State and Business in Chinese Development Cooperation in Africa." *World Development* 81:24–34. doi: 10.1016/j.worlddev.2016.01.001.
- Hairong, Yan, Chen Yiyuan, and Ku Hok Bun. 2016. "China's Soybean Crisis: The Logic of Modernization and Its Discontents." *The Journal of Peasant Studies* 43(2):373–95. doi: 10.1080/03066150.2015.1132205.
- Hendler, Bruno. 2018. "O Sistema Sinocêntrico Revisitado: A Sobreposição de Temporalidades Da Ascensão Da China No Século XXI e Sua Projeção Sobre o Sudeste Asiático." University of Rio de Janeiro, Brazil.
- Hiratuka, Celio. 2018. "Changes in the Chinese Development Strategy after the Global Crisis and Its Impacts in Latin America." *Revista de Economia Contemporânea* 22(1). doi: 10.1590/198055272214.
- Hong, Eunsuk and Sun, Laixiang. 2006. Dynamics of internationalization and outward investment: Chinese corporations' strategies. *The China Quarterly*, 187.
- Hung, Ho-Fung. 2016. *The China Boom: Why China Will Not Rule the World*. New York, NY: Columbia University Press.
- Gabriele, Alberto, and Elias Jabbour. 2022. *Socialist Economic Development in the 21st Century: A Century after the Bolshevik Revolution*. London: Routledge.
- Jiang, Xiaoyu et al. 2018. "Can China's Agricultural FDI in Developing Countries Achieve a Win-Win Goal?—Enlightenment from Literature." *Sustainability* 11(1):41. doi: 10.3390/su11010041.
- Li, Lillian M. 1982. "Introduction: Food, Famine, and the Chinese State." *The Journal of Asian Studies* 41(4):687–707. doi: 10.2307/2055445.
- Li, Minqi. 2008. *The Rise of China and the Demise of the Capitalist World-Economy*. London, England: Pluto Press.
- Liang, Xue. 2006. "The Evolution of Township and Village Enterprises (TVEs) in China." *Journal of Small Business and Enterprise Development* 13(2):235–41. doi: 10.1108/14626000610665935.

- Loewe, Michael. 2003. "Tiang Ming." in *Routledge encyclopedia of confucianism*, edited by X. Yao.
- Lu, Yuelai. 2021. *China's No1 Central Document 2021 - Speed up the Modernisation of Agriculture and Rural Areas*. edited by SAIN.
- Mencius. 2006. "Mengzi: Liang Hui Wang I - Chinese text project." *Ctext.org*. Retrieved November 17, 2022 (<https://ctext.org/mengzi/liang-hui-wang-i?filter=5042037>).
- Morton, Katherine. 2012. "Learning by Doing: China's Role in the Global Governance of Food Security." *SSRN Electronic Journal*. doi: 10.2139/ssrn.2169883.
- Naughton, Barry. 1995. *Growing out of the Plan: Chinese Economic Reform, 1978-1993*. Cambridge, England: Cambridge University Press.
- Nogueira, Isabela. 2021. O Estado na China. *Oikos*, 20 (1).
- Oliveira, Gustavo L. T. 2018. "The Battle of the Beans: How Direct Brazil-China Soybean Trade Was Stillborn in 2004." *Journal of Latin American Geography* 17(2):113-39.
- RED-ALC. 2021. *Monitor de la OFDI*. Retrieved November 15, 2022. <https://www.redalc-china.org/monitor/>.
- Schneider, Mindi. 2016. "Dragon Head Enterprises and the State of Agribusiness in China: Dragon Head Enterprises and Agribusiness in China." *Journal of Agrarian Change* 17(1):3-21. doi: 10.1111/joac.12151.
- SCIO. 2019. "Food Security in China." Retrieved November 17, 2022 (<http://www.scio.gov.cn/zfbps/ndhf/39911/Document/1666230/1666230.htm>).
- Tomich, Dale. 2011. The Order of Historical Time: Longue Durée and Micro-History. *Almanack*, n. 2, 52-65. DOI: <http://dx.doi.org/10.1590/2236-463320110204>.
- Tse-tung, Mao. 1949. "The Bankruptcy of the Idealist Conception of History." *Marxists.org*. Retrieved November 17, 2022 (https://www.marxists.org/reference/archive/mao/selected-works/volume-4/mswv4_70.htm).
- Turzi, Mariano. 2017. *The Political Economy of Agricultural Booms: Managing Soybean Production in Argentina, Brazil, and Paraguay*. Cham, Switzerland: Springer International Publishing.
- UNCTAD. 2022. "Beyond 20/20 WDS." *Unctad.org*. Retrieved November 17, 2022 (<https://unctadstat.unctad.org/wds/reportfolders/reportfolders.aspx>).
- Wesz Jr., Valdemar João, Escher, Fabiano, and Fares, Tomas Mefano. 2021. "Why and How Is China Reordering the Food Regime? The Brazil-China Soy-Meat Complex and COFCO's Global Strategy in the Southern Cone." *The Journal of Peasant Studies* 1-29. doi: 10.1080/03066150.2021.1986012.
- WFP. 2022. "Contributions by Year." *Wfp.org*. Retrieved November 17, 2022 (<https://www.wfp.org/funding>).
- White, Cliff. 2017. "China Fishery Firm Gets Government Cash Rescue." *Seafoodsource.com*. Retrieved November 17, 2022 (<https://www.seafoodsource.com/news/supply-trade/china-fishery-firm-gets-government-cash-rescue>).
- Will, Pierre-Etienne, R. Bin Wong. 1991. *Nourish the People: The State Civilian Granary System in China, 1650-1850*. Ann Arbor, MI: Centre for Chinese Studies Publications.
- Wong, R. Bin. 1982. "Food Riots in the Qing Dynasty." *The Journal of Asian Studies* 41(4):767-88. doi: 10.2307/2055449.
- Wong, R. Bin. 1999. *China Transformed: Historical Change and the Limits of European Experience*. Ithaca, NY: Cornell University Press.
- Wong, R. Bin. 1997. "The Political Economy of Agrarian Empire and Its Modern Legacy." Pp. 210-45 in *China and historical capitalism: genealogies of sinological knowledge*, edited by T. Brook and G. Blue. Cambridge, MA: Harvard University Press.
- Wong, R. Bin. 2008. "Transformations of China's Post-1949 Political Economy in an Historical Perspective." *Pacific Economic Review* 13(3):291-307. doi: 10.1111/j.1468-0106.2008.00402.x.
- Xiaoping, Deng. 1988. *Selected Works of Deng Xiaoping (1982-1992)*. Beijing, China: Foreign Languages Press.
- Yang, Jing, and Mou, Martin. 2021. "China Approves Merger of Chemical Giants, Creating \$150 Bil-

- lion Company.” *Wall Street Journal (Eastern Ed.)*, April 1. (<https://www.wsj.com/articles/china-approves-merger-of-chemical-giants-creating-150-billion-company-11617257687>).
- Yao, Shujie. 2000. “How Important Is Agriculture in China’s Economic Growth?” *Oxford Development Studies* 28(1):33–49. doi: 10.1080/713688306.
- Zanini, Fábio. 2021 Com armazéns e fábricas, China amplia presença no agronegócio. Folha de São Paulo. São Paulo, p. 0-0. 27 jun. 2021. Retrieved November 15, 2022. <https://www1.folha.uol.com.br/mercado/2020/07/com-armazens-e-fabricas-china-ampliapresenca-no-126agronegocio.shtml#:~:text=A%20Cofco%20tem%2019%20armaz%C3%A9ns,%C3%A9%20positiva%20>
- Zha, Daojiong, and Zhang, Hongzhou. 2013. “Food in China’s International Relations.” *The Pacific Review* 26(5):455–79. doi: 10.1080/09512748.2013.842308.
- Zhang, Hongzhou. 2018. *Securing the ‘rice Bowl’: China and Global Food Security*. 1st ed. Singapore, Singapore: Springer.
- Zhang, Hongzhou. 2020. “The U.s.-China Trade War: Is Food China’s Most Powerful Weapon?” *Asia Policy* 27(3):59–86. doi: 10.1353/asp.2020.0044.
- Zhang, Qian Forrest, Carlos Oya, and Jingzhong Ye. 2015. “Bringing Agriculture Back in: The Central Place of Agrarian Change in Rural China Studies: The Central Place of Agrarian Change in Rural China Studies.” *Journal of Agrarian Change* 15(3):299–313. doi: 10.1111/joac.12115.
- Zhang, Xiang. 2019. “The Socioeconomic Geography of Chinese Outward Foreign Direct Investment in Latin America.” *GeoJournal* 84(4):961–82. doi: 10.1007/s10708-018-9902-3.

