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SCIENTIFIC ARTICLE

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# Brazilian Agri-Food Trade Amid Geopolitical Turbulence: New Perspectives on Old Challenges

**ABSTRACT**

This article analyses the evolving role of Brazil in the global agri-food system within the context of rising geopolitical and geoeconomic instability. It explores how Brazil, a leading food producer and exporter, navigates the mounting challenges posed by climate change, shifting trade alliances, protectionist policies, and new sustainability standards, particularly those imposed by key partners. Drawing on statistical data, policy analysis, and a comprehensive literature review, the study develops a critical and exploratory framework to understand the implications of these dynamics for Brazil's agri-industrial sector. The paper traces Brazil's agricultural transformation since the 1970s, driven by technology adoption, productivity gains, and export orientation. Brazil has achieved global competitiveness in agricultural products; however, its trade revenues are still highly concentrated on a restricted set of agricultural products and largely dependent on a few large importing countries, especially China. This dependency raises vulnerability amid global trade tensions and demand shifts. Simultaneously, emerging environmental regulations like the EU's Deforestation Regulation introduce new compliance pressures, prompting the development of compliance and certification mechanisms. Although short-term gains have stemmed from geopolitical shifts such as the US–China trade war, long-term sustainability and market access hinge on Brazil's ability to meet evolving environmental and governance expectations. This paper also highlights Brazil's unique positioning as a "mid-level power" capable of leveraging its resource wealth, agri-food expertise, and diplomatic neutrality to play a pivotal role in a multipolar world. The paper concludes that Brazil's path forward must balance competitiveness with sustainability, deepen public-private institutional collaboration, and strategically diversify trade relations. Robust governance is essential to safeguard Brazil´s agri-food leadership amid intensifying global uncertainty.

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## Introduction

Throughout the centuries, the world has experienced cycles of protectionism and trade liberalisation, in which the rise and decline of economies and changes in political landscapes across different countries and regions have continuously reshaped the balance of power and the logic of international markets. With the emergence of a broad global financial market, new and significant variables have entered the economic and political reasoning that underpin trade, foreign investment, and international diplomacy.

Agri-food trade has consistently played a dual role throughout these phases and cycles, both shaping and being shaped by geopolitics. Territory, natural resources, political and military power, international relations, and cultural and ideological factors are foundational elements that, at various times and with differing degrees of relevance, have influenced the patterns of global trade. Cohen (2014) emphasises that ideological, economic, and territorial reconfigurations produce substantial adjustments in trade routes, partners, and networks.

More recently, the intensification of global social and environmental challenges – such as increasing migratory flows from impoverished or conflict-affected regions, as well as heightened concern over the impacts of climate change – has gained significance in the understanding of international relations, configuring a new global geopolitical landscape.

The interdependence among countries – whether in the supply or demand for strategic inputs such as energy, fertilisers, or food – and the diversification of these interdependencies have further contributed to the complexity of external relations and their influence on domestic socioeconomic policies. The deepening of the conflict between Russia and Ukraine, along with growing instability in the Middle East, adds to the mounting effects of climate change, increasing

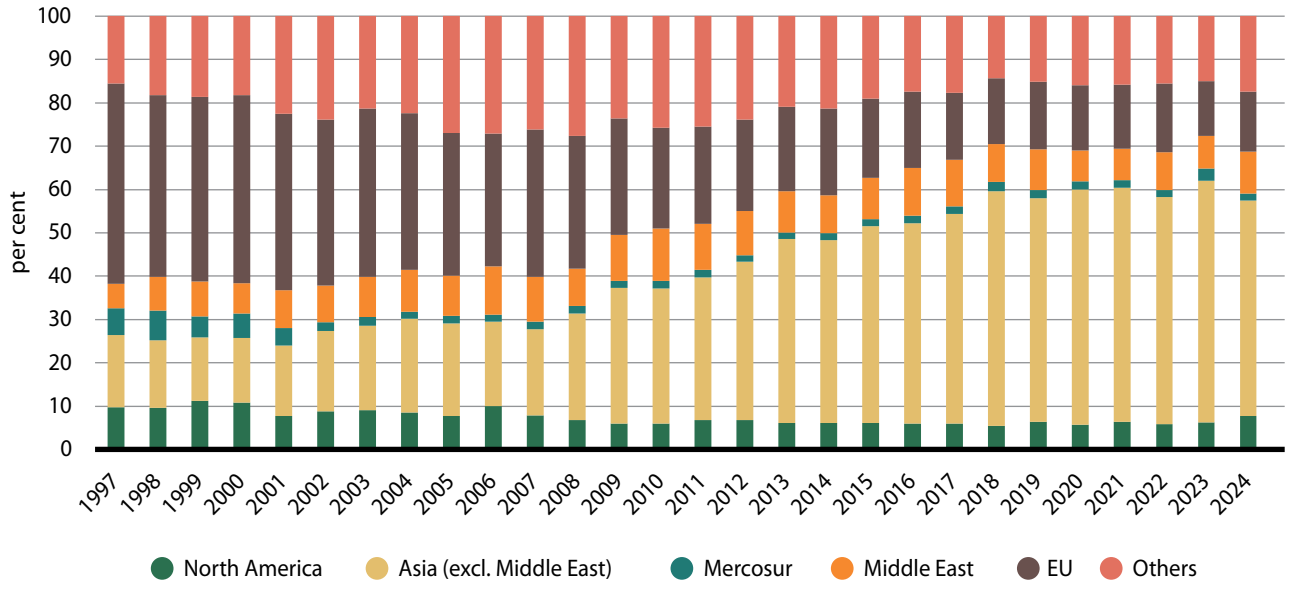


**Figure 1: Agri-industrial Brazilian export share in major regions or economic blocs (percentage of total exports in US$ FOB), 1997–2024.**

Note: Covers HS codes 01 to 24, including Chapter 03.
Source: Own composition based on ComextStat (2025) data

uncertainty and volatility in global markets, including that of agri-food trade.

In the case of Brazil, due to its historical trajectory as a former European colony, one can assert that until the late 1990s, its political and economic relations were primarily oriented toward Western countries – Europe and North America. However, in recent decades, a new economic and political axis has emerged in Asia, offsetting Western influence and posing new challenges for Brazilian economic diplomacy and foreign policy. The shift in Brazil's primary trade axis from Europe toward Asia is illustrated in Figure 1, which displays the export share of Brazil's agri-industrial products across major economic blocs and destination regions from 1997 to 2024.

Despite trading with a large number of countries, Brazil's export profile remains highly concentrated in a few commercial partners, and in the agricultural sector; this concentration is also evident in a limited number of production chains. Figure 1 underlines that, over time, the European Union (EU) has diminished in relative importance as an importer of Brazilian agri-industrial products, declining from 46.2% in 1997 to 13.8% in 2024. In contrast, during the same period, Asia – mainly China – increased its Brazilian agri-industrial import-share from 16.7% to 49.6%.

This evolution also reflects changes in Brazil's foreign policy, which has gone through various phases, some characterised by closer alignment with the United States, while others, such as during the period of the Independent Foreign Policy (Política Externa Independente, PEI) in the early 1960s, characterised by the pursuit of autonomy from both the United States and the Soviet Union, have promoted exports to all countries, including communist states (Cervo and Bueno, 2008; Vizentini, 2003). Even under the military governments beginning in 1964, the autonomy of the Itamaraty (Brazilian Ministry of Foreign Affairs – MRE) was respected, allowing Brazil to pursue an open foreign policy. This approach, throughout the 1970s and 1980s, became known as the Policy of Responsible and Ecumenic Pragmatism (Pragmatismo Responsável e Ecumênico) and led to strengthened diplomatic and trade relations with Arab and African countries. Notably, in 1974, Brazil also established diplomatic and trade relations with communist China, clearly demonstrating the success of its independent foreign policy and pragmatic diplomacy, known as Universalist diplomacy (Cervo and Bueno, 2008; Vizentini, 2003).

According to Vizentini (2003), the administration of President Fernando Henrique Cardoso (1995–2002) "emptied" the Itamaraty as the main center for foreign policy formulation, transferring economic responsibilities from the MRE to the Ministry of Economy, while its political dimension came to be led by "presidential diplomacy". Actually, since early 1990s, the foreign policy also focused on strengthening integration among South American countries, culminating in the creation of the Southern Common Market (Mercosur). Beyond regional integration, starting with the Itamar Franco government (1992–1994) and extending through to the Dilma Rousseff administration (2011–2016), Brazil adopted external commitments in defense of democracy, social justice, human rights, individual liberties, and development.

In 2001, Goldman Sachs economist Jim O'Neill coined the acronym BRIC in the report Building Better Global Economic BRICs, referring to a group of countries – initially Brazil, Russia, India, and China – which held their first formal meeting in 2006. Today, these four countries play a prominent role in global economic discussions and the group was enlarged, firstly to include South Africa (2010) and, in 2023, with the invitation of other additional six countries. It is also noteworthy that BRICS created, in 2014, the New

Development Bank (NDB) in order to finance infrastructure and sustainable development projects in member states and other emerging economies. The NDB was presented as an alternative to the World Bank and the International Monetary Fund (IMF), two institutions predominantly led by the United States of America (USA) and the European Union.

This growing political and economic alignment among Brazil, India, Russia, and China raises opportunities, but also diplomatic challenges for Brazil's current government: how to maintain a strategy of "good neighbour" diplomacy with all partners amid escalating conflicts that pit traditional Western allies – the United States and the European Union – against new strategic partners – Russia and China. When focusing on the supply of food, technological products, and strategic inputs such as energy, countries from the Southern Cone of South America, India, and Russia also emerge as significant geoeconomic actors. At the same time, a substantial portion of the global population remains marginalised in terms of access to these critical resources.

As one of the world's leading food suppliers, and home to some of the largest reserves of tropical forests and freshwater, Brazil can no longer rely solely on its use of technology and competitive pricing to promote its role in global food markets. In the current context – marked by the urgency of climate change mitigation, the widespread availability of communication technologies that bring consumers closer to the origin of their food, the growing importance of agroecological transitions, and increased consumer awareness of corporate social and environmental responsibility – new demands are being placed on agri-food systems.

Simultaneously, with supply chains increasingly integrated globally and greater attention given to value chains in the food system, Brazilian agribusiness sector and food producers must develop differentiated strategies. While maintaining productivity and competitiveness, Brazil must demonstrate to both domestic and international consumers that it is aligned with the emerging principles of the new food system and actively seeking solutions to the adjustments it requires.

This article, therefore, aims to offer a broad perspective on the challenges that global geopolitical instability in its various dimensions poses for international agri-industrial trade, with a particular focus on Brazil. To that end, it develops an exploratory and critical discussion based on statistical data analysis and a literature review, placing emphasis on developments over the past three decades, future perspectives and potential scenarios.

## Brazil's role in the international market and recent movements in domestic policy and external demands

Brazil ranks among the world's top ten exporters of agricultural and food products, according to World Trade Statistics, accounting for 7% of the global flow in 2023. Collectively, the top ten exporters represented 71.3% of total exports in this category (WTO, 2025), as shown in Figure 2. Although some trade analysts criticise Brazil's export profile for relying heavily on primary agricultural commodities, rather than products with higher value added, this performance stems largely from the country's competitive advantage in the production of grains, cereals, and meats. This advantage, in turn, is partially a result of cumulative productivity gains in agriculture sector since the 1970s.

Average agricultural productivity in Brazil has shown a consistent upward trend, despite the wide variation across regions. These gains are driven by the incorporation of new

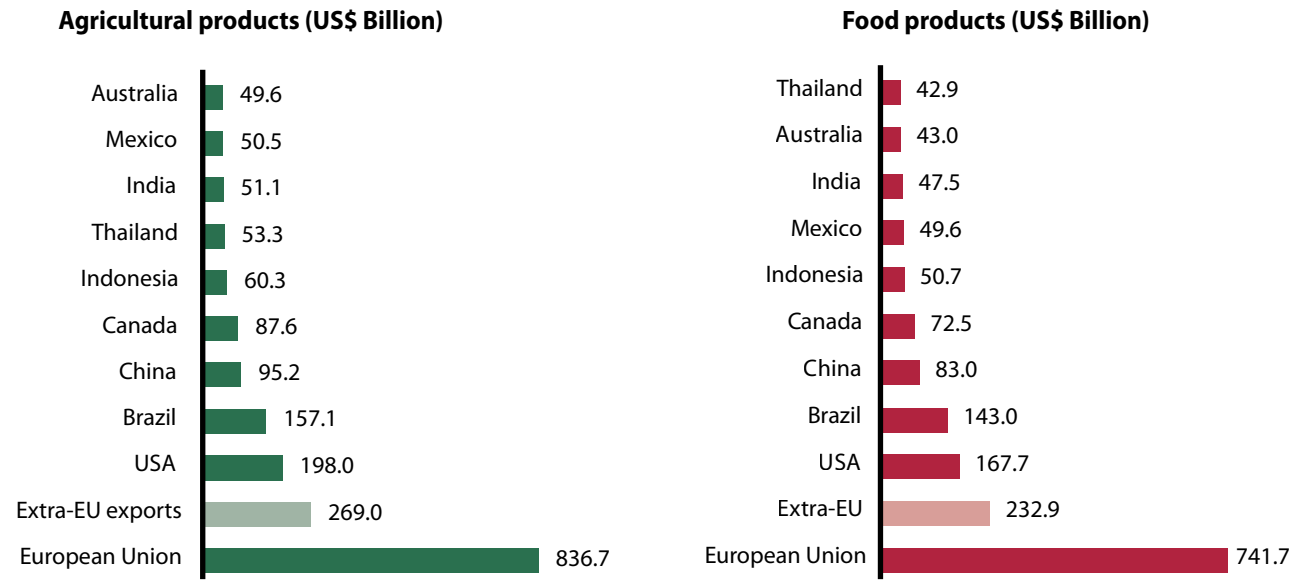


**Figure 2: Top 10 exporters of agricultural products and food, 2023 (in US$ billion).**
Source: own composition based on WTO (2025) data

technologies, which have enabled more efficient use of economies of scale and contributed to significant reductions in production costs. However, the country's strong agricultural performance has not been solely attributable to increased productivity levels. A substantial share of output growth has also come from the expansion of cultivated land and livestock activities, mainly in the Cerrado region.

Brazilian agribusiness, though considering not only the agriculture commodities and animals, but their products, are widely recognised for their international competitiveness, and underlined by the indices presented in Figure 3. Notably, even amid the appreciation of the Brazilian Real during a long period since 2005 (ICR), the export volumes of agribusiness products have continued on a consistent upward trajectory (IVE-Agro) over since 2000. Figure 3 displays four trade indices calculated by Cepea/USP, which has defined a basket of the major exported agri-industrial products to monitor the volume exported, the exporting price in US$, and the effective real exchange rate for that basket, taking into account the main importers and the exporting price converted to Reais, i.e., the price received by Brazilian exporters in Reais (IPER-Agro).

Over the past 25 years, various State policies – often involving multiple federal agencies and ministries – have aimed to diversify exports, support family farming and small-scale agriculture, and integrate these actors into export chains, including traditional communities. The National School Feeding Program (PNAE) exemplifies this effort by enabling direct sales to municipal and state-run school programmes, offering a short supply chain alternative. Another example is the recent inclusion of certain sociobiodiversity products in the price monitoring list of CONAB, the public agency currently overseen by the Ministry of Agrarian Development.

Successive Brazilian governments have promoted GHG mitigation and adaptation through the Low-Carbon Agriculture Program (Programa ABC) (Gianetti and Ferreira Filho, 2021) support for scientific research, and dissemination of environmentally friendly technologies like biological control. Tools such as biodiversity protection, bans on illegal burning and deforestation, mandatory Rural Environmental Registration (CAR), and enforcement of the Forest Code (Law No. 4,771/1965) – which requires preserving native vegetation on rural properties – have long contributed to more sustainable production systems, despite ongoing enforcement challenges.

Environmental certification initiatives, led by the private sector – including companies, NGOs, and professional associations – have also emerged as some of the most significant instruments in driving this transformation. Recent examples include the certification of soybean and corn producers by the Round Table on Responsible Soy (RTRS). This certification is expected to accelerate the adjustment of productive systems or, alternatively, attest to practices already in place, with the aim of complying with the requirements established by the European Union Deforestation Regulation (EUDR). Another notable example is RenovaBio, established under the National Biofuels Policy (Federal Law No. 13,546/2017), which seeks to promote the expansion of biofuels within Brazil's energy matrix and support the transition to a low-carbon economy, based on the principles outlined in the Paris Agreement (MME, 2023). Under RenovaBio, production processes are certified according to the technological pathways adopted – such as first-generation ethanol, biomethane etc, as described by Pinto and Lima (2023).

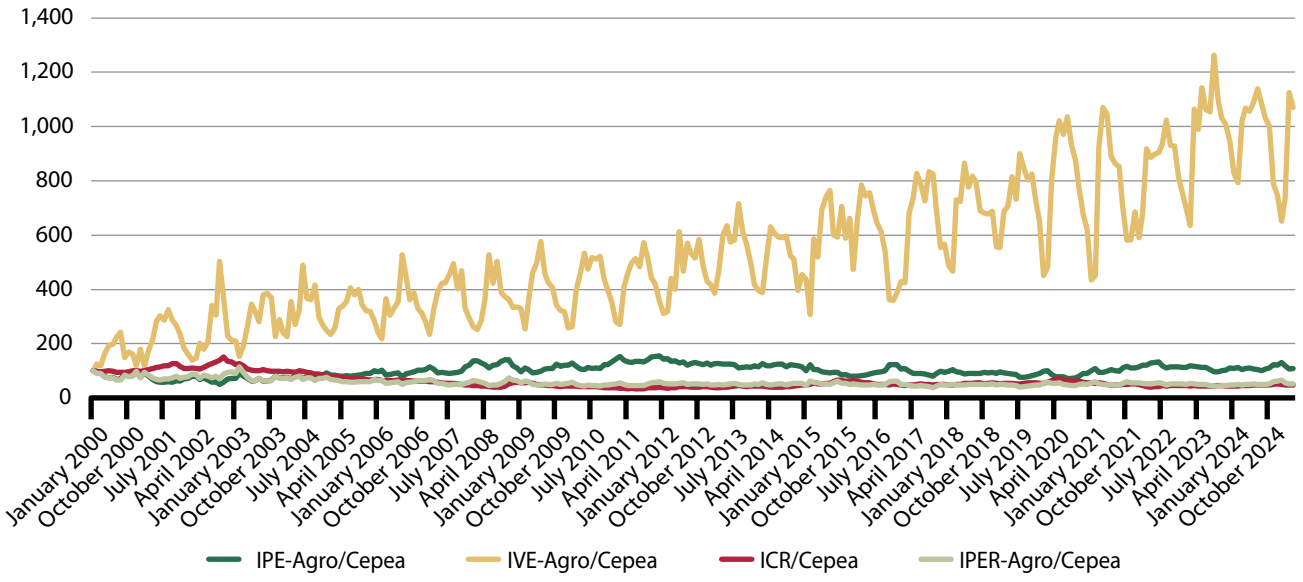


**Figure 3: Brazilian Agribusiness Export Indices, Cepea/Esalq-USP. January 2000 to April 2025.**

Note: Considers 16 product categories classified as agribusiness items, according to the specific methodology available at: https://www.cepea.org.br/br/metodologia/metodologia-1.aspx.
IPE – Brazilian Agribusiness Export Price Index (prices in US$ FOB);
IVE – Export Quantum Index for Brazilian Agribusiness;
ICR – Real Exchange Rate Index for Brazilian Agribusiness;
IPER – Brazilian Agribusiness Export Price Index in Local Currency (BRL).
Source: own composition based on CEPEA (2025) data

Among the current challenges facing Brazil's food production sector, one of the most pressing is the effective communication of product-related information, compliance with applicable standards and regulations, traceability data, and other elements increasingly demanded by global markets.

To assess the impact of Brazil's environmental image on agri-industrial trade with the EU, Silva (2021) created an explanatory variable using text mining and content analysis of New York Times articles. Incorporated into a gravity model, this variable showed a significant negative effect on trade flows. Similarly, Oliveira (2024) used a gravity model to examine how Brazil's environmental reputation affects its main agri-industrial importers. She developed a reputation index based on text mining and content analysis of tweets from a selection of national and international authorities engaged in sustainability and/or in trade. Although her results were not statistically significant, they also indicated a negative relationship between environmental reputation and Brazil's agri-industrial exports from 2013 to 2022.

The two aforementioned studies reinforce the need for both the public and private sectors in Brazil to invest in transparency tools that ensure information on product quality, sanitary and phytosanitary attributes, origin, traceability, and environmental and social compliance of food production systems, and that make this information readily accessible to importers and end consumers.

## Multipolarisation, Geoeconomics, and Environmental Geopolitics: A Challenging Context

According to Imessaoudene (2022), the end of the Cold War in the 1990s marked a shift in which geopolitics – traditionally the main driver of foreign policy and strategy – was replaced by geoeconomics, whereby states utilise economic and policy instruments such as investment rules, commodity restrictions, and financial sanctions to achieve geopolitical objectives and advance national interests.

Brazil has recently experienced a case that clearly falls within this framework. Disagreements over the Brazilian federal government's discourse and policies on environmental issues and deforestation led to the suspension of the Amazon Fund in August 2019. Dialogue on the fund was only resumed following the election of President Lula in November 2022. This context of economic interdependence has enabled major trade partners to adopt so-called "carrot and stick" strategies – that is, the use of both incentives and sanctions – as a means of influencing other countries to align with the priorities of dominant economic powers. Another strategy in international relations – also common in the realms of trade and socio-environmental governance – is the so-called naming and shaming, which aims to publicly expose and embarrass target countries in ways that damage their reputations. A key reference on this topic is the work of Tingley and Tomz (2022).

An illustrative case of this dynamic for Brazil is the set of environmental conditionalities imposed by the European Commission on Mercosur countries as prerequisites for ratifying the free trade agreement between the two regions. Dupre and Kpenou (2024) note that these requirements arose from concerns that Mercosur countries might not adhere to the sustainability principles promoted by the European Commission. Accordingly, the Commission explicitly incorporated two additional elements beyond what is typically included in its preferential agreements: (i) a reference to compliance with the Paris Agreement (Article 6), which addresses trade and environmental concerns; and (ii) a clause on trade and sustainable forest management (Article 8), encouraging trade in sustainably harvested timber and the inclusion of local and Indigenous communities in related supply chains.

Indeed, the international policy agenda of the world's leading trade and investment powers – particularly those in the Western bloc – has been dominated by concerns over which foods should be produced, where, and how, and more recently, the carbon footprint associated with these products. In response, Western economic powers have imposed standards on other countries that often do not align with their national priorities, production models, social infrastructure, political goals, or technological capabilities. Gomes (2025) expresses concern that the EU Deforestation Regulation (EUDR) will disproportionately impact small and medium-sized producers in exporting countries, who generally have less access to financial and informational resources necessary to meet the new requirements.

Whereas environmental geopolitical issues have been at the forefront of Brazil's relations with the EU and the United States of America (USA), tariff and non-tariff trade policy has been especially strategic in Brazil's relations with both, USA and China. In 2017, the commercial dispute – or trade war – between China and the USA had widespread effects on global agricultural markets. Miranda *et al.* (2020) observe that Brazil's agri-food exports benefited from this trade war, as Chinese demand for Brazilian products rose significantly between 2016 and 2018, just as US exports to China declined – particularly in the cases of soybeans, poultry, and cotton, with nearly proportional shifts in trade flows.

Other geopolitical events, while not directly involving Brazil, have also had significant economic impacts on the country. The war between Ukraine and Russia, for example, led to energy price shocks, especially in Europe, which were aggravated by Russian sanctions in response to NATO countries' political and financial support for Ukraine. Russia limited its gas exports to Europe, triggering a surge in energy prices. Given Russia's importance as a global supplier of both agricultural commodities and energy, the conflict has indirect political and economic repercussions for Brazil. As previously mentioned, Brazil's longstanding commitment to Universal diplomacy, coupled with its growing alignment with Russia through the BRICS coalition, has led to ambiguity in its diplomatic stance on the war. This lack of a clear position has generated criticism among Western nations and may, in the future, result in retaliation or other adverse outcomes, again reflecting the dynamics of a "stick" policy.

More than simply noting the potential for conflict arising from competing global priorities, current developments offer clear evidence of both increasing tensions and new

opportunities for collaboration. Confronting climate change and implementing mitigation and adaptation strategies, while also ensuring food security – not only in developed countries, but especially in developing and least-developed nations – are crucial for reducing poverty and hunger, and, ultimately, preventing the collapse of modern society and the global economic system.

From a political standpoint, Brazil's historical foreign policy strategy of maintaining diplomatic relations with countries across all ideological and economic spectrums, once considered an asset due to its independence from Western hegemonic interests, has now become a diplomatic dilemma in today's volatile global environment. This ambiguity carries geoeconomic implications within the context described by Imessaoudene (2022). Furthermore, there remains the risk of escalating military conflicts involving other nations, which could exacerbate global instability.

As Imessaoudene (2022) argues, singular global events such as the Covid-19 pandemic or the war in Ukraine can produce cascading political and economic effects worldwide. Decades of technological advancement in communication and information systems, combined with deepening globalisation, have increased the interdependence among nations.

The transformation of the geopolitical landscape – both in its structural dimensions and in response to recent shocks – presents formidable challenges for governments and populations across all regions. At the same time, it also creates new opportunities. These changes affect not only the traditionally dominant economic and political powers – such as the USA, the EU, and Russia – but also so-called "peripheral" countries such as China, India, and Brazil. In recent years, these shifts have become so pronounced that, while politically the world may still resemble a bipolar order, in environmental, social, and economic terms, one can increasingly discern a multipolar environment in which regional and middle powers, once labeled as peripheral, are assuming a central role in shaping geopolitical and geoeconomic dynamics.

## The Role of Brazil in the Global Agri-Food System

Since the 1970s, with the establishment of Embrapa (the Brazilian Agricultural Research Corporation) and the implementation of a series of instruments and policies aimed at promoting technological development and adoption in the agricultural sector, Brazil has experienced a notably positive response in terms of productivity gains for its main grains and cereals. Despite persistent structural challenges – such as land concentration, limited access to technical assistance, the still underutilized cooperative model, and, most importantly, the heterogeneity of farming and livestock systems – there has been significant technological advancement. These developments have resulted not only in increased production levels, but also in additional positive outcomes.

Among these are Brazil's scientific advances in pasture-land restoration, biological pest control, no-tillage farming, and crop-livestock-forest integration systems. Progress in quality control, traceability, and sanitary and phytosanitary legislation has also enabled the country to obtain certifications that opened access to previously restricted international markets.

As shown in Figure 4, which presents the evolution of average yield for Brazil's main grains and cereals, the observed productivity gains were not limited to export-oriented crops such as soybeans and cotton. Commodities such as rice, beans, and corn – the latter having only recently transitioned from an imported to an exported commodity – have also shown significant and sustained yield increases throughout the analysed period.

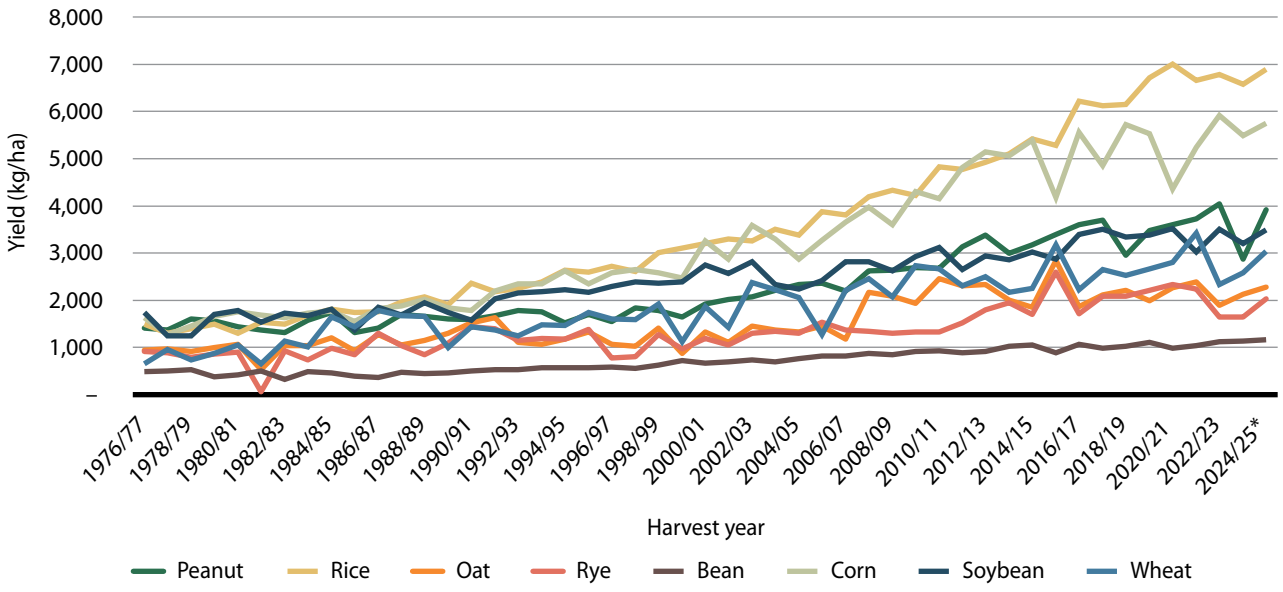


**Figure 4: Yields for main crops (grains, cereals, and oilseeds) in kg/ha from 1976/77 to 2024/2025 in Brazil.**
Source: own composition based on CONAB (2025) data

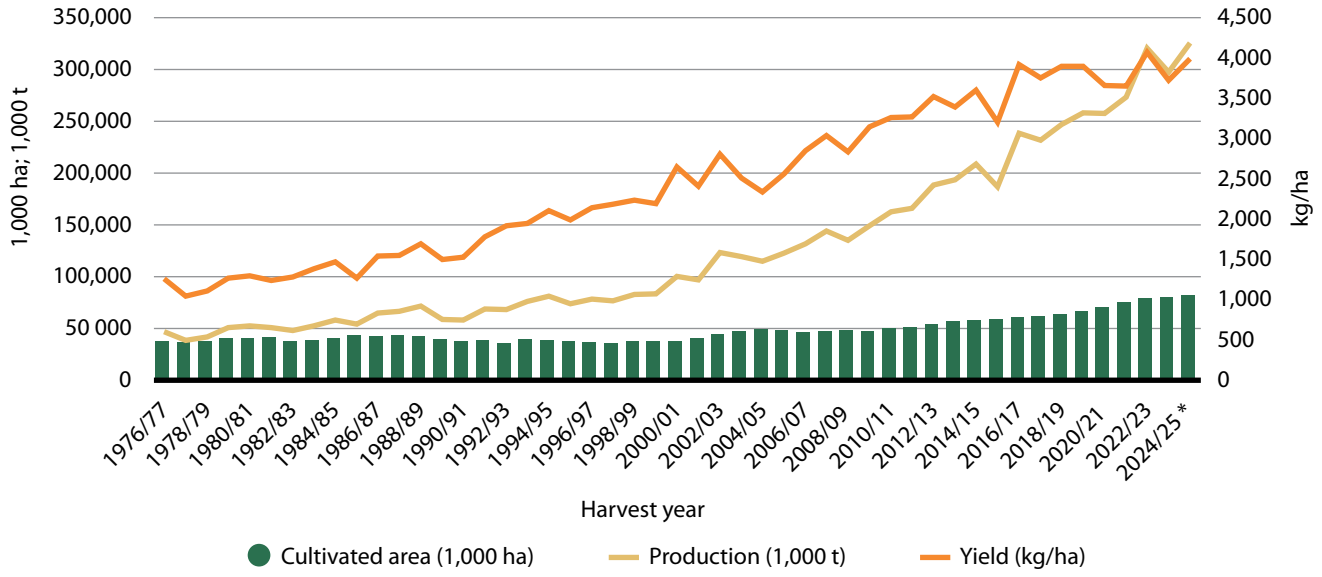


**Figure 5: Evolution of total cultivated area, yield, and production of major cereals and grains in Brazil from 1976/77 to 2024/25.**
Source: own composition based on CONAB (2025) data

Over recent decades, Brazil has laid the foundations for a competitive agri-industrial sector, with certain segments becoming integrated into the international market through participation in global supply chains. This is particularly evident in the animal protein sector – beef, pork, and poultry. Achieving high average productivity is a critical step toward ensuring food security; however, providing an abundant supply of high-quality staple foods at accessible prices is not, by itself, sufficient. In emerging and less developed countries, the demand side must also be addressed, particularly the economic conditions affecting access for socially vulnerable groups.

In addition to its involvement in global supply chains, Brazil also holds considerable potential to promote value chains based on sociobiodiversity products. Beyond contributing to the valorisation of these products and to food sovereignty, strengthening sociobiodiversity product chains, can also foster more sustainable income generation alternatives for smallholders and traditional communities.

In addition to technologies from Embrapa and other institutions – which supported frontier expansion into the Cerrado and leveraged Brazil's land-based comparative advantage – agricultural growth has also relied on expanding cultivated land. Figure 5 shows that while productivity gains were the main driver behind Brazil's rise as a major grain and oilseed producer, land expansion also played a role.

From the 1976/77 crop year to 2023/24, Brazil's production of grains, cereals, and oilseeds increased by approximately 576.3%, while cultivated area expanded by 111.1%. Over the entire period, yields increased by 363% for rice, 126% for beans, 245% for corn, 361% for wheat, and 105% for soybeans. It is important to note that these statistics reflect national averages, and significant variation exists across different states and regions. Technological adoption has not occurred uniformly throughout the national territory, nor has it extended evenly across all crops.

In this context, a growing pressure point for both domestic food security policy and international relations concerns the fact that traditional crops, regionally adapted species, and foods consumed in their natural form – such as fruits, vegetables, and greens – have not experienced the same productivity gains as grains and oilseeds.

Ferreira Filho *et al.* (2015) noted that Brazil's rise as a major food supplier was driven by farmland expansion at the expense of forests. They questioned whether the country could meet rising global food demand while preserving its forests. Using a dynamic, multiregional CGE model with a land-use change module based on satellite data, they analysed deforestation scenarios linked to public policies. The study found that food production could grow without expanding farmland, notably by converting low-productivity pasture into cropland. Moreover, according to their results, deforestation control led to only minor reductions in output, offset by modest productivity gains.

Another critical aspect to discuss when characterising Brazil's role as an agricultural producer and exporter is the food prices issue. Considering the country's high level of social inequality and the large portion of the population affected by food insecurity, it is important to underscore that the production expansion over nearly five decades has been accompanied by a long-term downward trend in the relative prices of food in the domestic market – an established pattern identified decades ago.

Figure 6, taken from Barros (2023), shows the evolution of an index for the agricultural prices in Brazil between 1950 and 2018, as well as for industrial products, and allows noticing that the ratio between the two indeces allows verifying the long-term decrease of agricultural prices. In the same picture, Barros shows that, if we also consider 1950 to be the base year, after a period of increasing consumer prices in Brazil until beginning of 1970s, the IPC for the São Paulo metropolitan area indicates a continuous decrease.

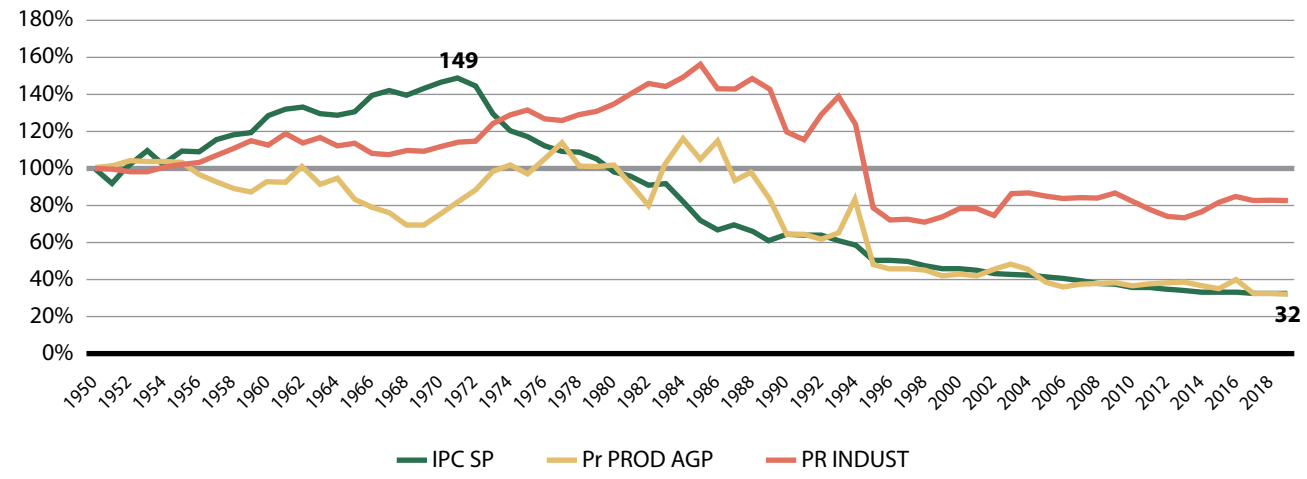


**Figure 6: Prices index in Brazil: Consumer prices (IPC SP), agricultural products prices (PR PROD AGP) and industrial products prices (PR INDUST), 1950 to 2018.**

Note: IPC SP – Consumer prices index – São Paulo; PR PROD AGP – Index of Agricultural products prices; PR INDUST – Index of industrial products prices.
Source: Extracted from Barros (2023), calculated by the author based on FIPE and IBGE

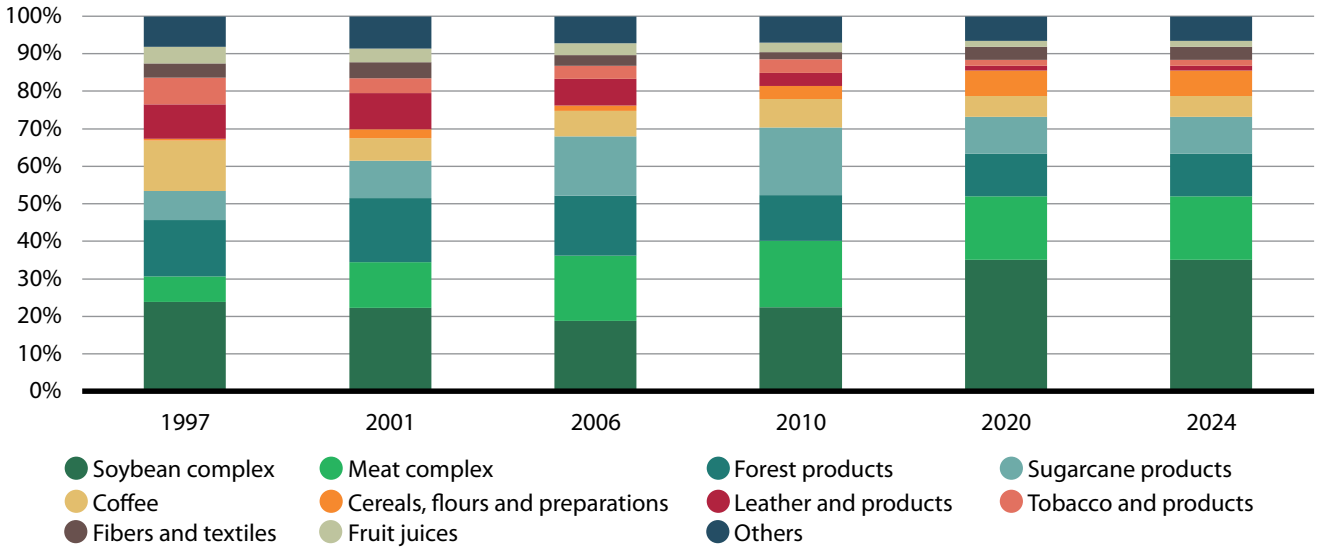


**Figure 7: Composition of Brazilian agribusiness exports by product groups for selected years (share of total export revenue, %).**

Source: own composition based on Agrostat (2025) data

According to Silva (2021), between 1995 and 2008, "agribusiness transferred R$641 billion to other economic sectors in the country, a result of the sector's loss of potential income due to increased production coupled with falling prices – a development beneficial to Brazilian society, particularly for lower-income segments". The sector expanded its output while maintaining stable or decreasing prices, ensuring the domestic supply of food at relatively lower prices in the medium and long term, alongside a steady growth in exports. Barros *et al.* (2019) highlight several contributing factors to this outcome, including productivity gains, support from public policies (agricultural policy, notably through credit instruments), and an expanding global market.

As a result of this productive competitiveness, and following Brazil's economic stabilisation in July 1994, its agribusiness exports recorded significant growth. In 2001, this trend was further accelerated by China's market opening, which led the country to become the largest importer of Brazilian agricultural products.

Despite these relatively recent developments, long-standing patterns in Brazil's international trade still persist. The structure of Brazil's agribusiness exports continues to reflect historical features: since the colonisation period, Brazil's trade balance has been characterised by the export of agricultural commodities – initially hardwoods, such as pau-brasil to Europe, followed by sugar and coffee, the latter two dominating exports throughout the 19th and 20th centuries.

Today, in the 21st century, Brazil's export portfolio remains highly concentrated in a relatively small number of agricultural product categories. In 2024, 10 product groups accounted for more than 92% of total agribusiness exports (Figure 7).

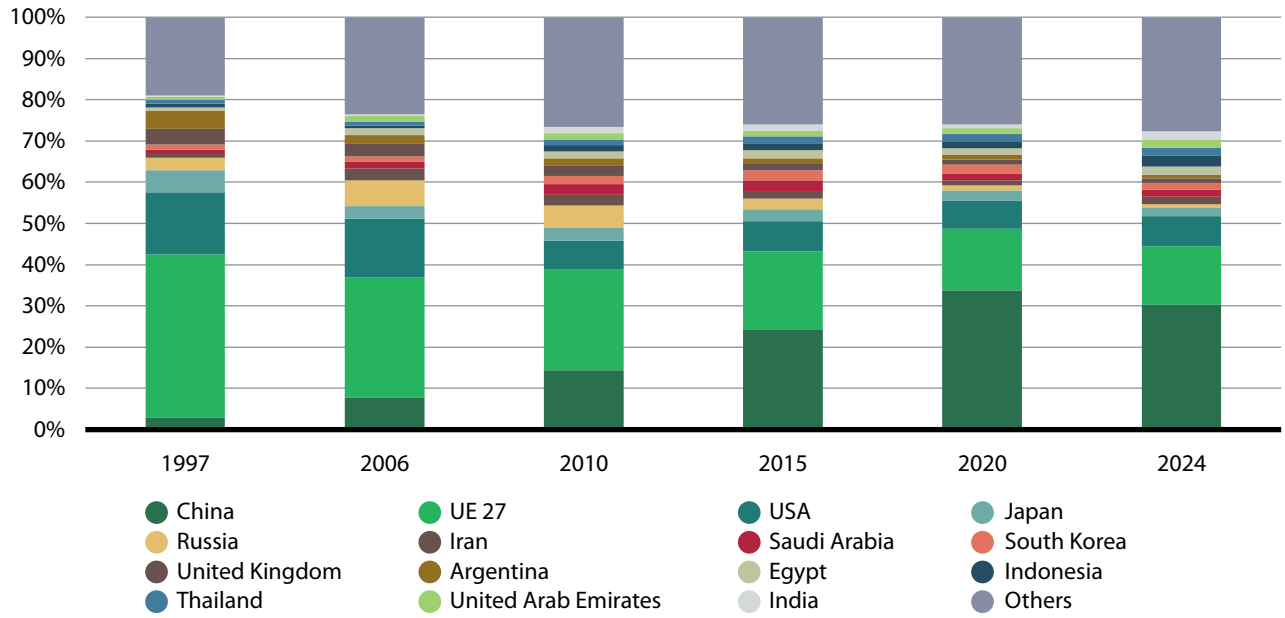


**Figure 8: Importers market-share in the total Brazilian agribusiness exports measured in US$ FOB (%), for selected years.**
Source: own composition based on Agrostat (2025) data

Another enduring characteristic is the concentration of export destinations: although Brazil maintains trade relations with a large number of countries, three of them – China, EU and USA – imported roughly 51% of the total Brazilian agribusiness exports, according to estimates from Agrostat (Figure 8).

## Navigating Geopolitical Tensions in Agri-Food Trade

Geopolitical and geoeconomic factors are increasingly relevant when considering Brazil's role in the global landscape, particularly its comparative advantages in agriculture and food production, as well as the expansion of farming and livestock activities in the frontier regions of the Cerrado and the Amazon. Greater international concerns over the impact of agricultural expansion on forest conservation have raised over the past two decades and have intensified further with the emergence of climate change as a global priority, prompting urgent actions for adaptation and mitigation.

For Brazil, these concerns have arisen in parallel with the consolidation of an international trade pattern centered on mineral and agricultural commodities, largely driven by surging Chinese demand. Agricultural and environmental issues are thus deeply interconnected and they have become strategic for maintaining the country's trade competitiveness and continuing to attract foreign investments.

At the same time, large-scale global events have shaped this context, presenting multifaceted challenges for Brazil. These include the rising costs of inputs and energy due to armed conflicts in the Middle East and Ukraine; shifts in the US trade policy; political divergence and economic instability in South America; and a perceived return to a bipolar world order inferred from current alliances and hostilities, which confronts the traditional Brazilian Universalist foreign policy and diplomacy. As military conflicts force countries to take sides, the geopolitical environment – previously evolving toward multipolarity – now appears to be reconfiguring along bipolar lines. A form of bipolarity distinct from that observed during the Cold War, given that other strong and middle-income economies – some of which are key powers in specific arenas (like food security, energy, and climate issues) now face greater constraints in offering unconditional support to either pole. These constraints stem, among other factors, from domestic pressures within those nations, which today are more visible and influential than during the bipolar world from the 1950s to the late 1980s.

Some reflections absent from earlier sections are essential to completing the picture of current geopolitical and geoeconomic instability. First, major food-importing countries are increasingly adopting protectionist policies. Second, China's economic slowdown is weakening import demand, raising concerns for exporters like Brazil. Third, political transitions in several EU countries have empowered parties focused on jobs, local production, and tighter immigration – raising the risk of protectionist trade measures and reduced support for new liberalisation agreements. Lastly, US trade policy has shifted again, with new tariffs announced in early 2025 and an expanded trade war with China, now encompassing broader disputes between the two powers.

Various factors identified in the economic literature, besides those already mentioned here, are heightening uncertainty in global trade policy. One key indicator already reflecting this is international food prices. While similar trends affect minerals, energy, and manufactured goods, this paper focuses on food prices, given Brazil's prominent role as a major global supplier.

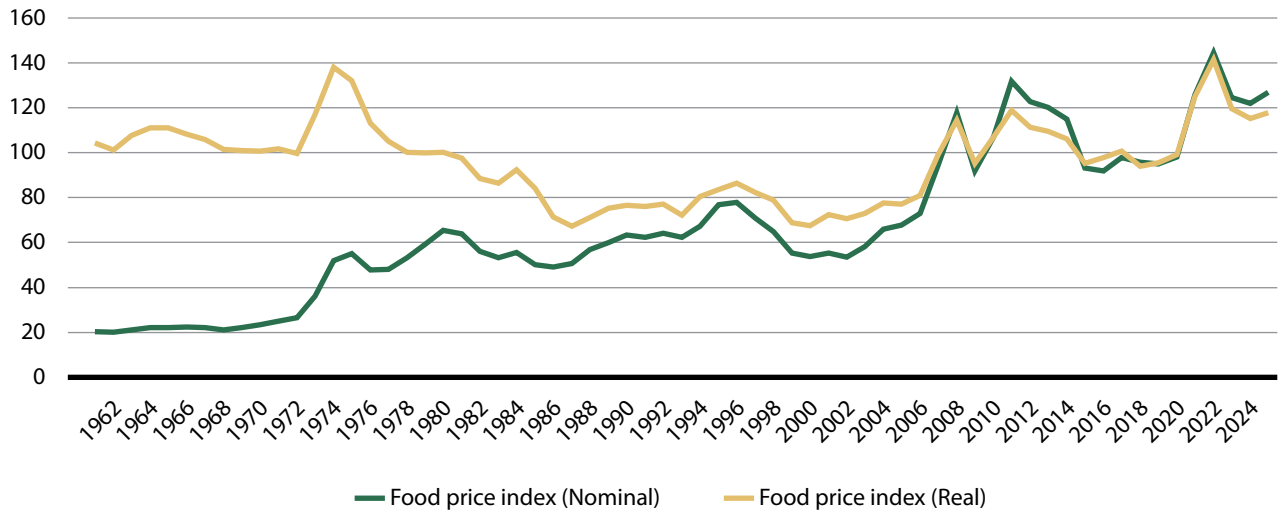


**Figure 9: FAO Food Price Index. 1963–2024.**
Source: own composition based on FAO (2025) data

Rising food prices worsen social vulnerability and food insecurity, especially in low-income countries, heightening the risk of unrest and migration. Figure 9 shows the FAO Food Price Index, supporting Headey and Ruel's (2023) view that the long decline in global cereal prices reversed in the 2000s, with sharp increases after the 2007–2008 crisis and another spike during the Covid-19 pandemic. Russia's invasion of Ukraine in February 2022 further disrupted energy, input, and food markets, pushing the Index to a record high in March 2022, matching the real price peak of 1974.

In Brazil, despite a broad domestic food supply, international price pressures are transmitted to the domestic market, affecting both exported and imported products. Adami (2024), based on the International Price Parity analysis, explain that agricultural prices in Brazil are significantly influenced by international price fluctuations and the exchange rate, considering this concept applies to open and competitive markets. When exports become more attractive due to favorable international prices, domestic supply tends to decrease, exerting upward pressure on local prices until they converge with parity levels (Adami, 2024). In fact, the evolution of the IPER-Agro index shown in Figure 3 illustrates this situation.

In recent decades, Brazil has not only consolidated its position as a major global food producer but has also established strong connections with other key international players, largely due to the integration of global value chains. The integration of global value chains promotes cooperation while simultaneously increasing vulnerabilty to financial and political crises, which can result in disruptions or reorientations of global trade.

As previously discussed, environmental issues are among the most critical factors for Brazil when analysing the current geopolitical and geoeconomic context, given the growing pressures exerted through trade restrictions, international financing conditions, and the negotiation of international agreements. In this context, the EU emerges as a strategic partner due to its ambitious environmental policies and goals, and as highlighted by Thorstensen and Prado (2025), its leadership in global climate change policy.

The Farm to Fork Strategy for 2030 (European Commission, 2020), part of the European Green Deal launched in December 2019, seeks to transition the EU food system to a sustainable model. Complementing this, Regulation (EU) 2023/1115 – the EU Deforestation Regulation (EUDR), enacted in May 2023 – bans agricultural imports linked to deforestation or forest degradation. Aimed at reducing the EU's environmental footprint, the regulation impacts trade in soy, rubber, beef, palm oil, timber, cocoa, coffee, and related products such as leather, charcoal, chocolate, and paper (European Commission, 2024).

Although most of Brazil's soy and meat exports currently go to China, both public and private sectors are working to build the infrastructure needed to meet EUDR requirements. While simplified procedures apply to low-risk countries or pre-assessed products, full compliance is still required. In high-risk cases, authorities can immediately block imports or exports. To meet EUDR requirements, companies must collect extensive data on their products, including geolocation of production sites and supplier information, ensuring complete product traceability. They must assess the deforestation risk associated with their products, guided by the EU's risk classification. Gomes (2025) notes that the regulations provide some flexibility, particularly for small and micro-enterprises.

Gomes (2025) highlights tensions between sustainability policies and the economic realities of producing countries, warning that environmental burdens could shift to regions with weaker regulations. As such, the EUDR may significantly impact global trade and may not fully align with multilateral rules. Prazeres (2024) adds that it could act as a trade barrier, potentially triggering tensions between the EU and exporters – making continued dialogue essential to avoid punitive unilateral measures that threaten trade agreements.

If Brazil is classified as a high-risk country, the impacts could be significant. As reported by Gomes (2025), the commodities regulated by the EUDR accounted for 29% of Brazil's total exports and 36% of its exports to the EU in 2020. Hence, beyond the direct economic risks, there is a potential reputational impact, which may affect Brazil's trade performance.

Sá and Jank (2022) identify potential impacts in the Matopiba region, Brazil's agricultural frontier that remains vulnerable to legal deforestation. They warn that although Europe has reduced its share in Brazilian soy imports, it continues to influence market standards. Another issue raised is Brazil's objection to the classification criteria for deforestation risk, which the government considers arbitrary. This classification could lead to retaliatory measures and additional costs for exporters, directly affecting the Mercosur-EU trade negotiations.

In response to environmental demands on soy and meat exports, Brazil's agricultural sector has long invested in certification processes. Voluntary certifications ensure product quality, safety, and sustainability, meeting consumer expectations and promoting innovation. By adopting certified standards, agribusiness gains economic advantages while advancing sustainable and efficient production.

The Soy Moratorium, launched in 2006 and extended indefinitely in 2016 (Soares, 2016), halted soy expansion in the Amazon. Silva Junior and Lima (2018) found that while 65% of soy farms in Amazonian Mato Grosso violated the Forest Code, they complied with the Moratorium, which helped establish the Round Table on Responsible Soy (RTRS), setting socio-environmental standards across the soy value chain.

Although environmental requirements from importers aren't strictly trade barriers, they are often shaped by developed countries, whose dominant role in setting standards has drawn criticism for overlooking the realities of developing nations.

In February 2025, the European Commission released Vision for Agriculture and Food, a guidance document aimed at enhancing the long-term competitiveness of the agri-food sector. Based on Eurobarometer data showing public support for food security, the roadmap emphasises stable supply, access to healthy food, fair remuneration, combating unfair practices, youth engagement, and innovation. Whether the implementation of the policies outlined in the Vision for Agriculture and Food will have positive or negative consequences for the EU's environmental agenda – and, in turn, for food exports from Brazil and other supplying countries – remains to be fully analysed.

Nonetheless, this document appears to reinforce a narrative that has emerged in the EU over recent years, in favor of prioritising local production over imported goods. For example, it questions the rationale of using soybean meal for animal feed when EU member states could produce their own animal feed, thereby reducing dependence on foreign imports and lowering the carbon footprint associated with transportation.

Another factor driving instability in international markets is the new North-American trade policy. Although initially focused on China, it has evolved into a broader strategy of increasing tariffs on several other trading partners. This shift represents a breach of longstanding tariff commitments established under GATT and the WTO, raising concerns about additional measures, including non-tariff barriers of sanitary, technical, anti-dumping, and even environmental nature. One might consider noting that this instability is further exacerbated by the stagnation of the WTO and the paralysis of its Dispute Settlement Body as an effective forum for resolving trade disputes.

Further uncertainty arises from President Trump's policy of involvement in the armed conflict between Israel and Iran. An escalation of tensions in the Middle East, potentially extending to Iran's allies, could trigger further instability in oil and derivative markets and cause new price shocks, with inflationary pressures reverberating globally. For Brazil specifically, a widespread conflict in the region could jeopardise agri-industrial exports to the Middle East, which accounted for approximately 9.7% of the country's exports in 2024, according to ComexStat data (Agrostat, 2025).

Brazil's agri-food exports saw significant gains during the US–China trade war, as Chinese demand for Brazilian soybeans, poultry, and cotton rose sharply between 2016 and 2018, while USA exports declined (Miranda *et al.,* 2020). By 2025, the expected gains for the US competitors remain uncertain, as tariff hikes extended beyond China. While short-term effects may seem positive, medium- and long-term impacts are unpredictable, especially given the likelihood of further trade actions under President Trump. This North-american strategy violates multilateral rules, threatening the WTO's integrity. Thorstensen and Prado (2025) argue that the US tariff policy represents a rupture that undermines the multilateral trade system. These authors suggest that the United States retrenchment projects a scenario of multipolarity, potentially increasing the geopolitical influence of China and other medium powers, thereby intensifying global competition for hegemony. Thorstensen and Prado (2025) note that such a scenario could lead to new regional dynamics and a possible reconfiguration of international trade rules.

According to Mair (2025), although the liberal world order and globalisation have been in crisis for about two decades, Trump's disruptive approach to international trade, his preference for bilateral agreements, and his disregard for common values contribute to the potential fragmentation of the global system into rival blocs or competing spheres of influence.

From Brazil's perspective, environmental geopolitics – especially with the EU – have increased pressure on agri-food trade, foreign investment, and environmental funds like the Amazon Fund. The US policy disruptions, along with scenarios presented by Mair (2025) and Thorstensen and Prado (2025), may alter how Brazil is approached in trade and environmental negotiations, potentially raising external expectations and pressures.

On the other hand, the declared intention of the current North-American administration to withdraw from the Paris Agreement may facilitate closer political and economic ties between the EU and medium powers, including Brazil. This

could serve as an incentive to accelerate the ratification and implementation of the EU-Mercosur Agreement.

Amid rising US–China rivalry – both parties being major Brazilian trade partners – Kallout and Guimarães (2022) suggest Brazil should adopt a "hedging" strategy, blending bandwagoning and balancing tactics. They argue Brazil should strengthen formal and informal agreements to mitigate risks and seize opportunities, noting its potential role in this bipolar context as both a BRICS founding member and OECD candidate.

While recent wars, new North-american trade policies, and associated reactions are reshaping trade flows, it is essential to recognise that the current global context, though increasingly polarised, features a more diversified distribution of economic and trade powers compared to the Cold War era.

According to Miranda *et al.* (2020), both China and Brazil have assumed roles as global players in the agri-food sector in recent decades. China has actively proposed various forms of trade and partnership agreements, such as the Belt and Road Initiative (BRI) and the Economic and Trade Agreement between the United States and China (Phase One), signed on January 15, 2020. The authors suggest that this latter agreement could significantly influence Brazil's agri-food exports to China. Food security and trade policies are major priorities for both countries, though Brazil has not been as proactive as China in negotiating bilateral and regional agreements.

Indeed, Thorstensen and Ferraz (2014) emphasise Brazil's isolation in the preferential trade agreement landscape and the resulting loss of market access. This difficulty in securing regional and bilateral agreements appears to be a broader Latin American trend. For example, according to Moreira *et al.* (2016), as of October 2015, China had signed 13 free trade agreements, only three of which were with Western Hemisphere countries: Chile (2005), Peru (2009), and Costa Rica (2011).

As countries grow more reliant on a few trade partners for key imports or exports – especially in agriculture and energy – these ties become tools of influence and geopolitical repositioning, as seen in Brazil–China and US–China trade dynamics. Miranda *et al.* (2020) link Brazil's early 21st-century export boom to rising Chinese demand. Cepea data show that, despite the 2008 crisis and a strong real currency, Brazil's agricultural exports remained competitive, unlike its struggling manufacturing sector – largely due to Chinese demand.

However, Brazil's current dependence on China, concentrated in a few commodities (soybeans, meat, timber, pulp), is a concern. Shifts in global trade could have major impacts. Although Chinese investment in Brazil has grown, the agricultural sector has not been a primary focus over the past decade, yet remains relevant in geoeconomic analysis.

According to Cariello (2021), between 2007 and 2020, Chinese companies executed 176 projects in Brazil, totaling USD 66.1 billion – 47% of total Chinese investment in South America. Nearly half (48%) of this investment went to the electricity sector, followed by oil and gas extraction (28%), metal mining (7%), manufacturing (6%), infrastructure (5%), and just 3% to agriculture, livestock, and related services.

Brazil's Center-West region attracted 4.6% of Chinese investment projects, including significant resources in agriculture and related services. Notably, COFCO – a Chinese state-owned enterprise – acquired global trading companies Nidera and Noble, both of which operated in Mato Grosso (Cariello, 2021). Additional port, transportation, and logistics projects could attract more investment, given Brazil's ongoing infrastructure needs and the strong capacity of Chinese firms in this domain.

## Final comments

This decade began with the Covid-19 crisis and a wave of political and economic instability across multiple countries which encompassed migration flows, food insecurity, extreme weather events, political shifts in several Western nations, rapid technological disruption, and the rise of mid-level global powers like India. Together, these factors are driving ongoing geopolitical and geoeconomic multipolarisation.

These dynamics also present new challenges for agri-industrial and food production systems. There is an urgent need to develop and adopt technologies that are less environmentally harmful and more resource-efficient, supporting the transition to sustainable production and consumption. Simultaneously, 21st-century food systems are being reshaped by rapid technological advances and disruptive innovations impacting the entire supply chain, affecting both emerging consumer groups and segments of producers.

The rapid and often overwhelming flow of information – some of it inaccurate or manipulated – demands careful attention from both governments and food-producing companies, which must manage their communication strategies and public image. Despite potential shocks from geopolitical turbulence, a large share of global food trade remains concentrated in the hands of transnational corporations operating across nearly all countries.

Despite ongoing armed conflicts, rising protectionism, and signs of de-globalisation, nations – especially major powers – cannot overlook the risks of climate change. In this context, food production and distribution remain critical. Securing affordable food or providing income support for vulnerable groups is as strategic as ensuring energy supply. According to the FAO, agricultural output must rise by 60% to feed the global population by 2050.

Brazil has made significant contributions and holds valuable experience in these areas. Despite ongoing socioeconomic and environmental challenges, its role as a food and energy supplier, advances in agricultural technology, rich natural resources, large yet underutilised consumer market, and universalist diplomacy position the country for leadership in food security and environmental conservation – reinforcing its status as a mid-level power in an increasingly multipolar world.

Brazil's greatest challenge, in light of geopolitical turbulence, the need to remain a global food supplier, and, above all, the imperative of securing a sustainable development process, lies in adopting appropriate governance models that promote stronger public-private interaction and the consolidation and strengthening of institutions.

Despite commercial gains, Chinese investment in Brazil, and seemingly beneficial cooperation, several geopolitical factors could disrupt current strategies and spark debate over future trends. Recent developments – such as the Russia–Ukraine war, Middle East conflicts, US–China tensions, and international pressure on Brazil's environmental policies – further complicate the geopolitical landscape. Although multipolar in nature, some of these developments suggest that the world may once again be shifting toward a new form of bipolarity. In Brazil's case – a country with significant economic ties to the United States, China, Russia and the EU – this scenario presents major challenges.

All these factors may have far-reaching impacts not only on the economic outcomes of agricultural production and trade but also on food security, climate change mitigation efforts, and, specifically for Brazil, on the delay in resuming a sustainable development trajectory.

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