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## **Unveiling Qatar's Hungry Strategies in the Corporate Food Regime Following the Blockade**

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### **Citation**

Salmon, C. (2023). *Unveiling Qatar's Hungry Strategies in the Corporate Food Regime Following the Blockade*.

Version: Not Applicable (or Unknown)

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Downloaded from: <https://hdl.handle.net/1887/3636591>

**Note:** To cite this publication please use the final published version (if applicable).



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# Unveiling Qatar's Hungry Strategies in the Corporate Food Regime Following the Blockade

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June 2023

14.715 words

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**Abstract**

This paper explores the corporate food regime in Qatar. Existing discussions on food regimes have primarily focused on analysing corporations, the regime's neoliberal features and limitations. However, they have largely overlooked the influence of state-led capital, particularly in the Gulf, where it is gaining prominence. Qatar is developing as a prominent state actor in a multipolar global food system, challenging traditional Northern actors with considerable capital influence and supporting agribusiness acquisitions, new trade flows and innovation. This research argues that following the 2017 diplomatic crisis, the government strategically used the private sector to ensure food security in its arid country and reduce reliance on imports. These measures enabled Qatar to establish itself as a strong, innovative and legitimate state. This research aims to understand the changing relationship in the corporate food regime in light of state-led capitalism, agro-security mercantilism, and the role of agribusinesses. It analyses various dynamics, such as the Gulf region's geopolitical context, agribusiness political economy, and food consumption's social dimensions. It aims to shed light on how these factors shape the Qatari corporate food regime and its implications for food security.

*Keywords: Qatar, corporate food regime, food security, state-led capital, agro-security mercantilism*

## I. Introduction

Qatar occupies approximately 11,628 km<sup>2</sup> in the Arabian Peninsula, with only 1.1 per cent of its land arable due to extreme aridity, deficient topsoil, and light rains (Karanisa et al., 2021; Miniaoui et al., 2018). Fishing, traditional livestock rearing practices of Bedouin communities, date cultivation, and small-scale vegetable production were historically the mainstays of food supply in Qatar. However, the country's natural gas and oil discovery in the early 20th century transformed the country's economy and society (Hussein & Lambert, 2020). While Qatar's newfound wealth has led to the development of modern infrastructure, urbanisation, and improved living standards for its citizens, this prosperity has also increased water and food demand per capita due to the country's changing lifestyle. Today, Qatari's average daily energy (kcal) per capita is 4275 kcal (Al-Thani et al., 2017), almost double the number that health institutes recommend (NHS, 2022). Moreover, the growing number of expatriates, representing over 80 per cent of the population, has been associated with changing dietary preferences towards water-intensive foods such as meat, dairy products, and processed foods (Al. Hamad, 2019). As a result, Qatar's present-day diet predominantly relies on imported food due to its harsh desert landscape, which significantly constrains opportunities for agriculture and limits freshwater availability necessary for crop cultivation. The growing dependence on external sources for food and water in Qatar contributes to the country's reliance on global markets, raising substantial concerns about food security (Ben Hassen & El Bilali, 2022). This situation makes Qatar vulnerable to potential disruptions in food supply chains and fluctuations in prices in the international markets, thus presenting a multifaceted challenge in meeting the needs of its population.

Alarmingly, food shortages and price spikes have materialised during the Blockade. In 2017, Saudi Arabia, the United Arab Emirates (UAE), Egypt, Bahrain and other neighbouring nations and allies in the region cut diplomatic and commercial relations with Qatar on June 5 by enacting a land, sea, and air embargo. The countries alleged that Qatar supported terrorism, had ties to Iran, and meddled in their domestic matters (Karanisa et al., 2021). Ultimately, the blockade had considerable consequences for Qatar, which shares its only land border with Saudi Arabia and relied on it for approximately 40% of its food supply (Miniaoui et al., 2018). Moreover, Saudi Arabia accounted for 60% of Qatar's dairy shipments, and the UAE was responsible for 27.4% of its overall food import (Ben Hassen & Bilali, 2019). Consequently, Qatar's food security has become a pressing concern, given that the nations responsible for the blockade were also its primary food sources (Collins, 2018).

In response to the challenges posed by the crisis, Qatar has undertaken various measures to ensure a stable and sustainable food supply. One notable initiative was the establishment of the Global Dryland Alliance in 2017. This collaborative effort involved 11 countries, aiming to address issues related to dryland agriculture and strengthen bilateral relations (Henderson, 2022). It served as a means for Qatar to demonstrate its commitment to finding innovative solutions to agricultural challenges and fostering international cooperation by engaging in such alliances. Furthermore, Qatar proactively tackled food security concerns by implementing the National Food Security Strategy 2018-2023 (QNFSP). This strategic vision enabled Qatar to secure the 24th position globally out of 113 countries and the leading Arab nation in the Economist Intelligence Unit's (EIU) Global Food Security Index for 2021 (The Economist Group, 2021).

However, despite Qatar's achievements in addressing food security through the QNFSP, the success of food security goes beyond this single program's efforts. It is a multifaceted process encompassing various factors, including food production, distribution, consumption, and the complex interplay of social, economic, and environmental considerations. Notably, the role played by Hassad Food, the nation's strategic investment arm, has been instrumental in driving initiatives and investments to enhance Qatar's self-sufficiency and reduce its reliance on external food sources.

### **Research Question and Relevance**

The increasing dominance of multinational corporations in all facets of food provision - including their influence on market prices and trade regulations - since the late 20th century necessitates a comprehensive understanding of the larger system at play that Phillip McMichael (2005) coined the *corporate food regime* framework. Underpinned by principles of neoliberalism such as financialisation and marketisation, it essentially delineates strategies for securing food supplies. It captures the extent of corporate control over key segments of the food system: from production and processing to distribution and retail, determining the availability, nature, and cost of food for consumers. Hence, the corporate food regime can help illuminate both the challenges and opportunities presented by the increasing dominance of corporations in the global food system and how these dynamics play out in the specific context of Qatar's food security.

In the field of International Relations, particularly within the specialised domain of Global Political Economy, examining food security and its linkages to broader power dynamics is of

utmost relevance. Firstly, food security directly affects Qatar's political stability and international relations. The nation's independency on food imports could alter power dynamics. Secondly, economic factors deeply intertwine with food security. Qatar's capacity to secure enough food for its people is connected to international trade policies, fluctuations in global commodity prices, and its own domestic economic development. Thirdly, the unique environmental challenges, including water scarcity, can have significant impacts worldwide. Such circumstances necessitate robust understanding to arrive at sustainable solutions. Consequently, examining food security becomes imperative, offering valuable insights to guide strategies for ensuring food security and overall stability. This research seeks to contribute to this field by investigating the strategies and measures employed in Qatar following the 2017 blockade to secure food. It addresses the research question: *In the context of the corporate food regime, how have the Qatari state and agribusinesses reshaped the dynamics of the food system to ensure food security following the 2017 blockade?* This thesis argues that the narratives and practices around food security enabled the Qatari state and agribusinesses to further challenge the traditionally Northern-dominated-food regime by introducing new state-led capital flows. It claims the state had social, economic and political motives to support the corporate food regime.

The research begins with a literature review that places food regimes within a broader academic debate, identifies areas lacking understanding and develops a conceptual framework rooted in existing research on the corporate food regime. Despite the Gulf government's extensive control over every aspect of life, one potential reason for the limited exploration of the state's involvement in the corporate food regime is the scarcity of available data and information. Gulf governments may not offer transparent access to relevant data and research, impeding scholars from thoroughly examining and comprehending the state's role in the food system. Furthermore, political and economic factors, such as the close connections between the state and corporate entities, could discourage critical analysis and investigation into this subject matter. As a result, these factors collectively contribute to the knowledge gap concerning the state's role in the corporate food regime within Gulf countries, which this thesis intends to investigate. Then, the research delves into the empirical findings. It explores the state's capacities to leverage its capital, agribusinesses, and logistics capabilities to pursue its food security objectives. The study argues that due to the pressing need to sustain its 2.6 million inhabitants, Doha was compelled to establish alternative supply lines swiftly, boost local production of essential commodities and services, and forge new partnerships. Leveraging its

strong financial position as a petroleum-rich economy, Qatar employed new technology, increased foreign agro-investments, established long-term arrangements for food imports, and promoted changes in consumer habits all through entities such as Hassad Food. Thus, the research highlights the pivotal role played by companies in the country's food policy development, as supported by the QNFSP. It shows that the Qatari state has allocated resources and supported food and agriculture businesses, expanding corporate influence over food production. The state's economic, social and political motives unravel the intricate details of the relationship between the states and the corporate food regime. Lastly, the discussion provides an understanding of Qatar's achievement within the context of the overarching hegemony of the corporate food regime. Based on critics that this regime prioritises profit over sustainability and social equity, potentially undermining both national and global long-term food security goals, the research intends to provide a deeper understanding and the implications of such dynamics.

This research contributes substantially to the Middle Eastern political economy field by arguing for a more integrated view that centralises the Gulf region in food studies instead of existing scholarship that often silos this region from other countries. Furthermore, it aims to weave together political economy and ecology theories within the context of food security, reflecting on the complex relationship between capitalism and food security in environments constrained by resources. This understanding encompasses power dynamics, the consequences of market liberalisation, and resource management. In addition to the Gulf region, this research methodology holds potential for application in other regions confronting similar geopolitical and environmental obstacles. This research's potential policy implications should help policymakers be better positioned to devise strategies that recognise the dynamics of globalised markets, the power structures inherent in corporate food regimes, and the geopolitical nuances that may impact a nation's food security.

## **Methodology**

Methodologically, the researcher, a social actor, analyses phenomena and their significance within the framework of constructivism theory to acknowledge the subjective nature of truth (Viljoen, 2016). It also implies that the account created may be updated at any moment. Furthermore, as the researcher interprets knowledge, it suggests interpretivism from an ontological perspective. In line with these theoretical underpinnings, the choice of qualitative



research method and design further strengthens the study's methodology emphasising a comprehensive and nuanced understanding of the subject matter. Using Qatar's corporate food regime as a case study is appropriate for an in-depth exploration of a specific phenomenon within its real-world context. Indeed, a case study approach is particularly suitable for providing in-depth insights into specific events or issues (Crowe et al., 2011). It strategically examines the period from the blockade in June 2017 until 2023, allowing for a focused and comprehensive analysis (Rebolj, 2013). In terms of data collection, the research adopts a semi-systematic literature review. The selection of this method over a full systematic review mainly stems from the interpretive and constructivist theoretical foundation that forms the basis of the study. It offers greater flexibility in the research process while maintaining a structured methodology to search for, select, and critically analyse pertinent literature (Grey, 2014). Hence, it ensures a thorough and unbiased examination of existing scholarly works, an essential step in comprehending the intricacies of Qatar's corporate food regime. The researcher identifies inclusion criteria to guide the search process (see Table 1).

<b>Criteria</b>	<b>Description</b>
<b>Time Frame</b>	Sources published from 2017 onwards
<b>Search Terms (used and combined)</b>	"Food security" "Qatar" "Agri-food" "Self-sufficiency" "Food consumption" "2017 Qatar diplomatic crisis" "Food imports" "Hassad" "Qatar food policy" "Agriculture" "Innovation " "Agribusiness" "Food Trade flows" "State-Private sector relations"
<b>Geographical Scope</b>	Qatar
<b>Type of Sources</b>	<ul style="list-style-type: none"> <li>- Official and government reports (Qatar Ministry of Public Health, Ministry of Foreign Affairs, Ministry of Commerce and Industry, Ministry of Municipality and Environment, Qatar National Food Security Programme, Food and Agriculture Organization of the United Nations, World Bank, United Nations, World Health Organization).</li> <li>- News articles from reputable sources (Al Jazeera, Gulf Times, The Peninsula, Al Raya, Al Sharq, Doha News, Qatar Tribune)</li> <li>- Company reports (Hassad Food, Agrico, Baldana)</li> <li>- Relevant book chapters and academic journals</li> </ul>
<b>Language</b>	English

**Table 1:** Extensive but non-exhaustive list of inclusion criteria.

The research attempts to make sense of a body of academic literature, government reports, and media sources by aggregating, interpreting, explaining, or integrating existing research (Xiao & Watson, 2017, p.94). The screening process involves reviewing the title and abstract of each source to determine its preliminary relevance to the research. Any source that does not meet

the pre-established inclusion criteria, such as publication date after 2017, relevance to Qatar, or pertinence to the agri-food sector, among others, is excluded from further consideration. The eligibility of the screened sources is then assessed through a more detailed examination of their entire content. A source's relevance to the themes of food security, the corporate food regime, state-led capitalism, the security-mercantilist strategies of Qatar's agri-food sector, and the impact of the 2017 diplomatic crisis on food, among others, is evaluated. Those sources that successfully pass the evaluation stage form the final selection for the literature review. The collected data is then subjected to a manual thematic analysis approach. This analytical method involves identifying patterns and themes within the data to uncover the underlying dynamics and impacts of the state's involvement in shaping the corporate food system and the interplay between state and non-state actors in achieving food security.

However, data might be incomplete or biased as the study relies on publicly available data. It is conceivable that Qatar has used coercion to not publicly disclose knowledge for various reasons. In addition, the scholar is not Arabic-speaking. Nonetheless, this limitation does not jeopardise the study, given the wide range of researchers who have examined the phenomenon in English. Lastly, due to the dynamic nature of the subject, political and economic contexts can change rapidly, potentially impacting the relevance or accuracy of the analysis.

## II. Literature Review and Theoretical Implications

### **Food Security**

Food is one of the most fundamental needs of humanity. It is a vital energy source for maintaining human life that cannot be substituted (Friel & Ford, 2015). Its importance extends to numerous other aspects of our lives. It plays a significant role in cultural traditions and social interactions, as it is often used to bring people together and celebrate important events (Fischler, 1988). Moreover, the food industry is a significant economic growth and development driver, providing employment opportunities and generating substantial revenue for countries worldwide, accounting for approximately 12% of the global Gross Domestic Product and over 40% of all jobs (Strauss, 2022). Therefore, the issue of food security is crucial in national and foreign politics.

Notwithstanding its extensive use, the concept of food security has shifted meaning and objectives over time. The UN World Food Summit in 1996 provided a broad definition: "When all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO, 2006, p.1). Academic studies have enriched this concept's understanding into various food security discourses, a term referring to the dialogue, narratives, and arguments regarding food security, its determinants, and how it should be achieved (Graver & Fishhendler, 2021; Mooney & Hunt, 2009; Winders, 2009). Since the 1970s, these discourses have underpinned how food is supplied in modern capitalist economies and legitimised socio-economic disparities in access to food (Koc, 2013). They have impacted the acceptance or resistance towards contemporary food systems influenced by globalisation and neoliberalism (Jarosz, 2010). According to Nally (2015), these discourses justify controversial practices such as land grabbing, defined as large-scale acquisitions of agricultural land in foreign countries (Nally, 2015). Such literature explain why Gulf states, including Qatar, have shifted towards finance-driven food security strategies (Larder et al., 2015).

Zurayk et al. (2011) highlight how the necessity to mitigate food insecurity is leveraged to rationalise land grab acquisitions, presenting them as strategies for nations to ensure long-term, stable food supplies for their populations (p. 130). On the one hand, food security is a particularly salient issue for the Middle East and Gulf Cooperation Council (GCC) region due to the anticipated impacts of climate change, including rising temperatures and changing

rainfall patterns, which will likely impede local food production (Al-Ghamdi & Al-Thani, 2021; Mamoon et al., 2016). Such environmental changes are expected to disrupt the Food, Energy, and Water (FEW) systems (Hamed et al., 2021).

On the other hand, food security also presents a challenge for countries reliant on markets, especially for critical commodities such as food, which carry inherent risks due to various factors. Economic instabilities in markets affect food prices, influenced by long-term trends as well as short-term shocks like oil price fluctuations and crop failures (Godfray et al., 2010). The global crisis of 2007/08 exemplifies the dangers of market dependence for countries heavily reliant on food imports due to limited domestic agriculture (Patel & McMichael, 2009). In 2008, Qatar experienced a 17% increase in commodity prices (Gangal, 2009), which had not just economic consequences but also political and societal risks. High food prices can lead to social upheaval, threatening government stability and legitimacy as necessities become less affordable (Barrett, 2013). As a result, countries, particularly those with limited local agricultural capacity, are leveraging foreign land purchases to hedge against their restricted natural endowments and unstable global food markets (Nally, 2015, p.341). McMichael (2013) termed this process *agro-security mercantilism*, referring to the overseas agricultural investments intended to override the northern agro-exporter dominant food regime. The traditional food regime, characterised by the dominance of agro-exporters from the Global North and the concentration of power in multinational corporations, has been confronted by new actors and strategies seeking to establish alternative agricultural production and trade modes.

### **Food Regimes**

Food regime theory, a Marxist understanding of food systems, is frequently utilised to theorise land grabbing (McMichael, 2009, 2013; Schneider, 2014). This theory critically explores the relationship between food and agriculture, politics, and global economic systems, shedding light on the power dynamics within the food and agricultural sector and their influence on worldwide food production, consumption, and distribution patterns. Friedman and McMichael's (1989) influential work, *Agriculture and the State System: The Rise and Decline of National Agricultures, 1870 to the Present*, argues against a simplistic view of food security as merely a technical problem solvable through policy and practical means. The authors argue that the state and political landscape deeply intertwines food and agricultural systems. They emphasise the state's role in shaping and controlling farming practices and production,

highlighting national agriculture's historical rise and decline. Hence, in response to the then-dominant dependency theory, they presented a world-historical perspective, contending that understanding food regimes requires scrutinising the historical shifts in agricultural practices and their relationship with forms of capitalist accumulation and hegemonic power (Bernstein, 2016; Friedman & McMichael, 1989, p.93). Friedman and McMichael distinguished between the first food regime, under British imperial dominance (1870 to 1914), and the second, which existed from 1945 to 1973 during US primacy in the post-war global economy.

However, as the dynamics of globalisation evolved, criticisms of the capitalist nature of global food systems intensified (Bernstein, 2016). Discussions emerged in the 1980s surrounding the establishment of a new food regime characterised by integrating transnational corporations, with states assuming a more ambiguous role (Friedman & McMichael, 1989, p.112). Several frameworks have been proposed to understand the current state of the global food environment, including the *corporate-environmental food regime*, as well as more established frameworks such as the *neoliberal food regime* (Pechlaner & Otero, 2008) or the *financialised food regime* (Burch & Lawrence, 2009). Some academics argue that corporate capital and neoliberalism dominate the modern food system, while others suggest that the system is in a state of flux and instability, transitioning rather than adhering to a fixed regime (Friedmann, 2009; Pritchard, 2009; Winders et al., 2016; Jakobsen, 2021). McMichael's corporate food regime is chosen for this research as it considers the challenges Gulf states face. This framework emphasises the role of corporate and non-Western capitals in shaping the food regime (Belesky & Lawrence, 2018; Dixon, 2014; Pritchard et al., 2016), reflecting the new multipolar distribution of economic and political power in the global economy. Further exploration is needed to understand how corporations implement these strategies and how they affect food security. This thesis intends to bridge this gap by focusing on specific initiatives and narratives taken by Qatari agribusinesses and the government in ensuring food supplies following the 2017 blockade. In doing so, it offers a new perspective on the relationship between the role of finance and the framing of food security in the Gulf states.

### **The Corporate Food Regime**

McMichael (1992) conceptualised the current corporate food regime as an evolution of earlier food systems, marking a new phase in capitalism's political history. This regime is characterised by the prioritisation of transnational capital over national sovereignty and reverses the political gains (welfare and development states) associated with the period of U.S.

hegemony, a shift made possible by neoliberal globalisation policies advanced in venues such as the GATT's Uruguay Round (McMichael, 2005, p. 273). Notably, during the Third World debt crisis of the 1980s, the move towards financial tools over productive investments significantly altered the landscape of global agribusiness. International organisations such as the IMF and the World Bank, founded on free market competition and increased foreign trade, created a fertile ground for the dominance of multinational corporations within the global food chain. In 1995, the Agriculture Agreement signed within the WTO institutionalised this corporate food regime, allowing corporations to navigate and exploit the regulatory structures to their advantage. Hence, this framework provides a comprehensive perspective on the global food system's power dynamics, political shifts, structural factors, and historical context. It offers a valuable lens for analysing and understanding the complexities, inequalities, and opportunities for change within the contemporary food system.

While the corporate food regime signifies a spatial reconfiguration that allows for the free flow of goods and services (Coles, 2013, p. 208), it simultaneously disrupts the traditional, state-centred paradigm of international relations, an observation that challenges the prevalent state-system theories (Henderson, 2022; Pechlaner & Otero, 2008). Moreover, this paradigm shift contests the northern-dominated corporate food regime (McMichael, 2013). The first and second food regimes were characterised by a one-way flow of resources from the South to the North, with the North exerting significant control over the South's food production and distribution. In contrast, the corporate food regime is characterised by a multipolar distribution of power and resources, as countries in the global South seek to assert their own interests and develop their capacities for food production and distribution (McMichael, 2012).

As theorised by Arrighi (1994), the rise of financialisation has had significant implications for the rise of the Global South. The emergence of New Agricultural Countries (NACs), including economies like Thailand and Mexico, is a prime example of this phenomenon (Henderson, 2019, p.601). They built state-led export agriculture sectors, taking over markets previously controlled by US and European exports that characterised the second food regime (McMichael, 2000). However, the rise of new capital within the global food regime often receives scholarly attention focused on prominent players such as the BRICS (Brazil, Russia, India, China and South Africa) countries while overlooking the Gulf states as less prominent actors. This research addresses this oversight and delves into these states' significant roles in the current food system.

It is highly relevant to investigate the Gulf countries as their agribusiness sectors not only compete with those in the Global North but also serve an implicit political role (Henderson, 2022). As these states integrate into the global financial system, they perform a pivotal role as intermediaries for Northern capital, allowing them to fortify their regional circuits of accumulation and foster food production and distribution capacities by purchasing Northern technologies and aligning with international agricultural firms (Henderson, 2019, p.5). By strategically positioning themselves with international agricultural firms and acquiring cutting-edge technologies, Gulf countries can position themselves as key players in the global economy.

Nevertheless, this integration into the global food regime raises essential questions about their strategies' social and environmental implications. Henderson (2022) highlights the importance of scrutinising the regional circuits of accumulation and the global system to grasp the corporate food regime in the Gulf region fully. The process of accumulation by dispossession, as defined by David Harvey (2003), unfolds within the context of corporate globalisation. It involves structural adjustment mechanisms that lead to the devaluation and privatisation of assets in the global South for accumulation (McMichael, 2005). As such, Northern food stockpiles' dumping, the transformation of the agricultural industry into a supermarket-like system, and the appropriation of land for agro-exporting all exert pressure on local food supplies, leading to the displacement of small farms and their replacement by casual labour within new food circuits. Bernstein (2016) argues that this system, built on a state-financed capital nexus, fosters new frontiers of accumulation, areas or sectors where capital can be invested and accumulated. It implies that there are constantly new opportunities or spaces for capital to expand into and generate profits. It prioritises exchange values over use values and private interests over those of the general public in food production, leading to significant consequences for local communities and the environment. As these states continue to navigate their role within the global food security landscape, it is critical to understand the impacts and potential countermeasures to these adverse effects. This study aims to fill this research gap, scrutinising the unique contributions and challenges these less conspicuous capitals pose to the global food regime.

### **Role of the State**

Recent scholarship has underscored the significance of the state within the contemporary frameworks of food regimes, though some critiques suggest a relative neglect or insufficient



theorisation of the state's role (Jakobsen, 2021; Keulertz & Woertz, 2015). However, as Friedmann (2005) astutely observes, states retain a central role in regulating aspects of food and agriculture that private capital cannot, such as production conditions—land use and labour markets—and consumption considerations, including food safety. This observation challenges the existing critiques and will be exemplified in the case of Qatar's response to the blockade. McMichael (2009) further advances this argument by considering the institutionalisation of corporate power, wherein states enable corporate agribusiness through mechanisms such as sovereign wealth funds, which facilitate large-scale food production for home consumption, aligning with the concept of agro-security mercantilism (p.125-8). Thus, the intersection of agro-security mercantilism and the corporate food regime can be seen in several ways. A partnership between the state and an agribusiness can provide the state with access to advanced agricultural technology, capital, and expertise, enabling it to enhance its food security.

However, this intersection can also create tension. While agro-security mercantilism aims to ensure food security for a state's population, the corporate food regime often prioritises profit maximisation, which may not align with food security objectives. Larder et al. (2015) caution against positively viewing agri-finance investors' emergence in food production. The article finds that Qatar's pivot from a *food-for-food security* narrative to a *food-for-profit* model, particularly regarding land purchases in Australia, underscores the prevailing neo-liberal logic that profit is paramount, even at food security's expense. It is, therefore, crucial to validate this assertion with adequate evidence. The corporate food regime has other limits. It can promote monoculture farming for export, undermining food security by reducing agricultural biodiversity and local food availability (Howards, 2016). Indeed, characterised by industrialised agriculture, the system has significant ecological implications such as biodiversity loss and greenhouse gas emissions, for which the state's policies and regulatory frameworks are deeply intertwined in managing these environmental outcomes. States are also pivotal in fostering innovation within this system, as manifested in promoting and developing genetically modified crops and precision agriculture to increase productivity and profitability. Furthermore, the state's authority extends to the governance of private property rights, controlling essential components of biological products like seeds and animals. The implications of these innovations, both beneficial and potentially problematic, deserve careful consideration within the context of Qatar. This research aims to delve into the motives driving Qatar's innovative food security approaches.

Taking a broader perspective, it becomes apparent that the corporate food regime assumes a fundamental role in the reproduction of global capital, thereby serving as a reflection

of the underlying political structures (McMichael, 2009). States are instrumental in modulating international food networks and supporting wage relations, vital for maintaining equilibrium in this corporate food-dominated world (McMichael, 2009). Lang & Heasman's (2015) and Clapp's (2017) studies address the global environmental and social limits associated with state-led food regimes. By doing so, they also navigate the dynamics of accumulation endemic in capitalism. Understanding these processes provides insight into how states like Qatar can maintain food security in the face of a blockade and other international challenges.

Furthermore, the examination of state-led capitalism and neomercantilism by Belesky and Lawrence (2019), along with the exploration of China's impact on the neoliberal food system, reveals the inherent paradox in economic liberalism, as highlighted by Polanyi's (1944) claim that a free market necessitates continuous state intervention. In addition, Young (2017) underscores the importance of the state's involvement in land acquisitions, emphasising the Gulf's profit-driven approach to agribusiness investments and its role in shaping bilateral relations. Henderson (2022) notes that government actions like aid provision and high-ranking official communication reinforce bilateral ties and endorse land investments. Therefore, this discussion highlights the need to recognise states' nuanced role in the corporate food regime, contradicting scholars' contention of their under-conceptualization, and underscores Qatar's unique position as a new player in the food regime.

In addition to the economic rationale, the Gulf countries' involvement in the food regime can be understood from a social and political perspective. Due to their substantial oil wealth, the Gulf states play a significant role in driving both their economies and societies. As part of the social contract within these authoritarian states, governments must provide affordable food (Ben Hassen & El Bilali, 2019). Indeed, the revenue generated from oil exports forms a crucial foundation for economic development and public services. As such, they address the potential for dissent by offering citizens public sector jobs and welfare payments. They also implement subsidies for essential items such as food, water, fuel, and electricity. In the context of agricultural investment strategies, Qatar and Saudi Arabia stand out among the Gulf states, having the most structured approaches. Saudi Arabia, in particular, actively targets a conducive environment for its private sector. However, state support goes beyond explicit measures and encompasses more subtle forms of assistance. For instance, the governments of the Gulf fostered relationships with royal or prominent business families (Hanieh, 2018). Thus, the governments actively helped these families in their initial stages of accumulating wealth and building their businesses in exchange for their support.

## Techno-politics

Although international relations scholars typically emphasise military capability or economic might as primary indicators of state power, controlling agricultural resources is frequently overlooked. Agricultural investment policies pursued by the GCC countries and China highlight the significance of food in the current global order (Keulertz & Woertz, 2015). For emerging economies, the *supermarketization* of distribution networks and the *meatification* of diets, previously experienced by the developed world, have given rise to new actors and connections. Hence, investing in food is increasingly seen as a politically advantageous and effective way for states to exert influence. This approach can be linked to the global shift in economic priorities, where food security discourse allows capitalist actors to justify their actions (Koc, 2013). Within this context, capitalist interests are driven by profit maximisation and resource optimisation, which are aligned with adopting new technologies and farming methods to enhance yields and ensure food security. However, technological innovations in the food sector also have a political component which serves to bolster the legitimacy of the ruling elite in the Gulf (Mitchell, 2002). First, technological innovation emerges as a powerful tool in the face of environmental challenges such as aridity and climate change. Such advancements encompass innovative sectors such as desalination, renewable energy (particularly solar), and climate-resilient agriculture. These technologies enable the ruling elite to exhibit their ability to adapt and respond to environmental adversities. Ultimately, they position themselves as capable and visionary leaders by controlling and managing the environment. Second, becoming a technological innovation hub elevates a country's international standing and underscores the capability of its ruling class, effectively projecting its influence on a global scale (Günel, 2016). For instance, financial actors usually identify new frontiers of agriculture in developing countries, where allegedly untapped land can increase food production by bringing cutting-edge management and production techniques to overcome yield gaps and boost food output (Deininger & Byerlee, 2011). Hence, positioning themselves as key players in an increasingly technology-driven world can bolster their popularity. Third, technological advances directly contribute to the enhancement of living standards. These innovations span sectors, improving healthcare, education, infrastructure, and connectivity. The ruling elites leverage these improvements as tangible demonstrations of their effective leadership and governance, thereby securing public support and reinforcing their position. Lastly, investments in technology-centric sectors such as artificial intelligence, renewable energy, and IT services are essential strategies for diversifying economies (Günel, 2016). By creating jobs and lessening oil

dependence, these sectors signify a proactive and adaptable approach towards sustainable economic growth. The ruling elite and associated capitalist actors solidify their roles by showcasing this foresight and commitment to long-term economic stability. Hence, as demonstrated by the UAE, which has turned to knowledge production as a crucial strategy, ecomodernism narratives can have significant political gains, including sustaining legitimacy.

Nevertheless, large-scale technical projects can lead to the displacement of local populations and the misuse of techno-politics to legitimise capitalist hegemony. Such processes are shaped by professionals such as scientists and engineers, potentially promoting the misleading perception that development and progress are neutral processes, not influenced by capitalist interests. Henderson's (2022) argument about the corporate regime in the UAE demonstrates the complex ways in which food security has become a form of governmentality in the Gulf, involving the use of various strategies and practices by the state and corporations to exert control over the population and maintain power relations in the global food economy. Through media coverage, academic research, political discourse, and other forms of communication and representation, this governmentality shapes and manages the discourse around food security, again, including questionable practices such as land grabbing. In summary, food security in the Gulf states is more than just a societal imperative; it is a facet of techno-power and capitalist interest that maintains power dynamics within the global economy and order.

Therefore, the rise of state-led capital in the food sector is a prime example of how state capitalism can be leveraged to achieve multiple objectives, including meeting a country's needs while generating profits. However, this phenomenon extends far beyond agro-security alone, encompassing a broader role for the state in corporate food production. It includes legitimising a food investment regime for political purposes, termed neoliberal governmentality (Peters, 2006). Under this approach, the state delegates power to the market to serve its sovereign interests. This is particularly relevant in the context of the GCC countries, which are particularly vulnerable to the impacts of climate change. It prioritises short-term benefits over long-term sustainability and environmental responsibility through techno-power narratives. Following the 2017 blockade, the Qatari government likely leaned on state capitalism and governmentality neoliberalism to ensure food security and mitigate potential geopolitical vulnerabilities. Further exploration of how this plays out in the corporate agribusiness sector in Qatar can offer crucial insights into the dynamics of the global corporate food regime and its potential future trajectories.

### III. Analysis

#### **Domestic Measures**

Establishing the National Food Security Programme (QNFSP) in Qatar, with an initial capital base of US\$1 billion, directly responded to the global food crisis in 2007-2008 (Sippel, 2013). This crisis, characterised by skyrocketing food prices and supply disruptions, raised concerns about food security worldwide, despite the nation's fiscal solid power rendering it less vulnerable to price fluctuations than other countries (Ben Hassen et al., 2020). By allocating significant financial resources to the program, Qatar aimed to bolster its domestic food production capabilities, enhance self-sufficiency, and safeguard the availability and accessibility of essential food supplies for its population.

The QNFSP operates within the evolving landscape of the Gulf states' food system, which has experienced significant changes due to increasing wealth, consumer culture's prevalence, and advertising's influence (Booker & Daraiseh, 2019). These factors have contributed to the rise of the corporate food industry, influencing Qatar's lifestyle and dietary habits (Al-Thani et al., 2018). Consequently, there has been a shift from fibre-rich diets to increased consumption of animal proteins, fats, and processed carbohydrates, leading to a high prevalence of obesity among Qataris (41.4%) (Qatar Ministry of Public Health, 2012). Large food corporations actively contribute to these dietary trends by promoting their heavily processed and conveniently packaged meals as substitutes for minimally processed options (Scrinis, 2020). Hence, the infiltration of big corporations' food, aided by advertising, has further contributed to the popularity and dominance of corporate food within the Gulf states. This interconnectedness illustrates one facet of how corporate food entities influence and control the overall food system in Qatar.

Nevertheless, the effectiveness of the QNFSP was compromised by the 2017 blockade imposed on Qatar, which severely exposed its ongoing dependence on foreign food sources. In response, Qatar released an updated QNFSP (2018-2023) that outlined specific targets for achieving food self-sufficiency. While Qatar was dependent on imports for 85% of its vegetable intake, the nation has devised a plan to create a hydroponic greenhouse cluster to reach 70% self-sufficiency in the production of greenhouse vegetables like tomatoes, peppers, cucumbers, zucchini, and lettuce (QNFSP, 2020). Qatar hoped to completely eliminate its reliance on fresh milk and poultry imports by ending specials and redirecting resources to other uses, such as

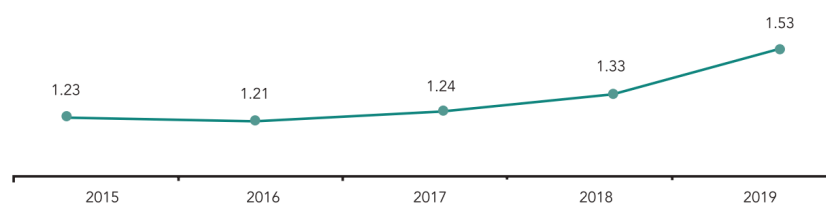
transforming excess chicken into eggs. Furthermore, it intended to increase its ability to produce meat and fish by constructing sheep and goat breeding farms, fattening units, and fish husbandry. The Ministry of Municipality and Environment expected a 30% rise in cattle output and a 65% increase in fish production (The Peninsula Qatar, 2019). To achieve these ambitious goals, the QNFSP relies on the support of Hassad Food, Qatar's agribusiness investment branch.

Hassad Food is owned by the Qatar Investment Authority, the country's sovereign wealth fund with a total value of US\$115 billion, primarily funded through the sale of natural gas. Through Hassad Food, the government has established funding programs to encourage participation from private sector operators and ensure the nation retains control over its food production and distribution processes (Salacanin, 2013). Hassad Food is crucial in securing Qatar's food supply by investing in domestic and foreign farming companies and engaging in various activities, including producing and selling fresh produce, cattle, dairy products, animal feed, and poultry (McSparren et al., 2017). Hassad Food, as the parent company of various Qatari businesses, dominates the food sector by strategically investing in key agricultural industries. It is the parent business of Aswaq for Food Facilities Management, which oversees the major food markets, and Mahaseel for Marketing & Agri, which provides marketing services to more than 400 local farmers (Hassad, 2023). Moreover, Hassad invested in the Arab Qatari Agricultural Production Company (QATFA), the largest plantation in Qatar, and the Arab Qatari Company for Chicken Production (Al-Waha), Qatar's largest chicken supplier. It also owns stakes in the National Food Company "NAFCO" and Aalaf Qatar, which own a major dates processing plant and three large livestock feed fields in Qatar. These investments enable Hassad to diversify its agricultural portfolio and focus on critical food products highly consumed in Qatar, such as produce, chicken, dairy, and livestock feed. Furthermore, Hassad purchased essential shares in the local dairy and livestock companies Baladna Company and Widam Food Company. Baladna is one example of the kingdom's successful partnerships with Qatari agribusinesses. In 2017, Baladna brought 16,000 dairy cows by sea and 4,000 by air to significantly increase domestic dairy output in Qatar (Financial Times, 2022). Baladna's subsequent initial public offering (IPO) two years later for QAR1.4 billion (\$380 million) further demonstrated the success of this partnership and its contribution to Qatar's food security. Now openly traded on the Qatar Stock Exchange, the business supplies 95% of the nation's milk needs. Therefore, corporate agribusiness, led by Hassad Food and its investments in various sectors, has been crucial in enhancing Qatar's food security following the 2017 blockade by increasing domestic production and reducing reliance on imports, particularly in

key areas (see Table 2). Notably, Qatar's self-sufficiency rate for fresh poultry exceeded 100% in 2019, suggesting a surplus for this category. Chart 1 depicts the progression of the agricultural sector through a representation of the growth in its workforce. These numbers indicate a positive development in Qatar's efforts to strengthen its agricultural capabilities and enhance its overall food security.

Category	Before 2017	2022
Dairy	30%	100%
Vegetables	10%	46%
Red meat	13%	18%
Eggs	<20%	25%
Green Fodder	<20%	55%
Fresh Poultry	<20%	>100%
Livestock Production	28%	100%

**Table 2:** Qatar food self-sufficiency rates (Aljazeera, 2020; The Peninsula, 2020;2023; US-Qatar Business Council, n.d.)



**Chart 1:** Qatar Labour Force in Agriculture (% of Total Labour Force) (Qatar Development Bank, 2022)

Changes in food consumption are another facet of Qatar's efforts to achieve food security. Indeed, food consumption, particularly within the context of supermarkets, became a geopolitical battleground as new trade arrangements replaced products made by the blockading countries with those from alternative sources (Monroe, 2020). Supermarkets helped bridge the gap created by the blockade and maintained a steady flow of food items in the market. Nevertheless, the situation both shaped and was shaped by nationalist sentiments to incentivise national production and reduce imports dependence. The state's efforts to increase domestic food production via heavy subsidies and advertising fostered the emergence of a new consumer culture centred on buying locally produced goods. In Doha, Baldana advertisements prominently showcase its dual message of 'Made in Qatar' and 'Made by Nature' (Koch, 2021, p. 124). By promoting fresh and nutritious food options, they encouraged healthier eating

habits. These efforts aimed to ensure access to nutritious food options as well as to minimise wastage in the food supply chain. By addressing food waste, Qatar intended to optimise its available resources and ensure a more sustainable and efficient food system (The Peninsula Qatar, 2020a). The state implemented rigorous standards in its production processes, ensuring that locally produced food met the highest safety requirements to safeguard the quality of food but also to build trust among consumers, assuring them that the food available was safe for consumption (Eltai et al., 2018). Together, their efforts aimed to overcome the challenges of the blockade by consuming locally.

Buying and consuming local products became a patriotic act supporting the nation during a challenging time. First, it helped keep the local economy afloat during the blockade and promoted long-term economic growth by developing domestic industries. Second, showing that it could survive and even thrive under the blockade, Qatar sent a strong message to the international community about its resilience and independence. Furthermore, through food, expatriate consumers could participate in a seemingly less politically charged form of nationalism by purchasing and endorsing locally produced products. Although local food movements are commonly portrayed as resistance against government-backed agricultural programs that favour large multinational cooperations, the case of Qatar demonstrates a shift towards the nation-state. Thus, the state's involvement explains how ideologies and national imaginaries are created and disseminated through food. Together, the state, supermarkets and agribusiness created a new consumer culture and form of nationalism, which sent the international community a strong message of national resilience and independence.

Furthermore, Qatari agribusinesses' involvement in ensuring food security encompasses crisis management and advancing research and development. As an integral part of the QNFSP, the country is committed to enhancing resource efficiency in agriculture, considering its inherent natural constraints (QNFSP, 2022). Qatar's local food production faces significant challenges due to its location in one of the world's driest regions. These challenges include limited water resources, a scarcity of arable land, and high temperatures (Ismail, 2015). Consequently, these factors have led to inefficient groundwater utilisation for irrigation, decreased water availability, increased soil salinity, and a growing demand for intensive land use, water, and energy resources (Bilal et al., 2021). Qatar has embraced innovative technologies such as aquaponics and vertical farming to improve the sustainability and reliability of its water sources, thereby enhancing food resilience and self-sufficiency. The country seeks to explore novel farming techniques that maximise the utilisation of treated sewage and desalinated water



for food production. By 2023, Zulal Oasis, a state-backed agriculture investment arm, hopes to use patented greenhouse technology to provide up to 70% of Qatar's demand for locally grown vegetables (Beer, 2015). Consequently, state-backed corporate agribusiness plays a significant role in mitigating the limitations of Qatar's natural conditions. On the one hand, these initiatives aim to improve production efficiency, increase agricultural yields, and reduce water usage. On the other hand, these technological advancements allow the ruling elite to demonstrate their capacity to adjust and address environmental challenges, thereby reinforcing their credibility and authority. Agrico, a family-owned business that has been buying and shipping food for 70 years, further illustrates such dynamics. Although water shortage is a constant burden in a nation where the average maximum monthly rainfall is only 15mm and summer temperatures surpass 40C, it has not prevented the agritech firm from converting these limitations into a business opportunity (Financial Times, 2022). Agrico engages in what its chairman, Ahmed Al-Khalaf, refers to as agricultural manufacturing. The company aims to increase production after the first harvest of fresh shrimp, which it presently produces at one ton per day, to one thousand tonnes annually by extending its technology and operations into other nations like Oman, Malaysia, and Iraq. According to Agrico's owner: "since the technology is available, there is nothing stopping us from reaching our targets" (AlJazeera, 2020). Additionally, Agrico works with the Finnish agritech firm iFarm to build cutting-edge vertical farms (iFarm, 2021). Ahmed Al-Khalaf adds: "We have modified technology developed in the Western World and adapted it even further to have a very unique system anywhere in the world", (quoted in Aguilar, 2018). Hence, Agrico has made notable efforts to integrate Qatar's capital into the global corporate food regime by acting as a mediator between the Northern capital and the Gulf region. By showcasing its technological advancements, Qatar can position itself as an innovative and influential player in the global food economy, attracting investment, forging partnerships, and strengthening its geopolitical position while dominating traditional North countries.

The use of technology to address food security concerns and increase agricultural productivity, coupled with the growing involvement of private corporations in the food system, exemplifies critical attributes of the corporate food regime. These developments further bolster the legitimacy of the ruling elite, particularly considering the essential role played by the government in facilitating this progress. It implemented various programs such as passing new legislation, providing seeds, pesticides, fertilisers, greenhouses, irrigation networks, and marketing assistance (DohaNews, 2023). For instance, the Ministry of Municipality and Environment has provided \$3.3 million to 140 farms with free greenhouses (US-Qatar Business

Council, n.d.) and offered financial assistance in the form of loans from the Development Bank (QDB, 2022). Therefore, the interplay between corporations and the state is characterised by a mutual dependency wherein businesses are supported and facilitated by the state, and in return, they contribute to social, political and economic national objectives.

Although Hassad reiterates its commitment to the nation's long-term food security on its web pages and in public communication, it is essential to note that companies in the corporate food regime also have financial interests in the industry. According to Larder et al. (2015), Hassad's efforts have switched from food-for-food security to food-for-profit, reflecting the neo-liberal logic. The substantial net profits of QR80 million (US\$21 million) recorded by Hassad in 2019 serve as evidence of its alignment with the corporate food regime's emphasis on the efficiency and profitability of the global food system (The Peninsula Qatar, 2020b). A company's inherent goal is to maximise financial returns for its shareholders. When a company invest in technologies or practices that improve crop yields or reduce waste, these investments also increase its profits by reducing costs or increasing production. Similarly, Qatar supports policies and regulations promoting sustainable farming practices, benefiting the environment and food security while also creating a favourable business environment. Such practices align with the idea that the food security complex in the Gulf region is characterised by a combination of security and profit-driven governance that incorporates both sovereignty and governmentality (Henderson, 2022). This complex promotes the notion that food security is primarily a technological issue that can be addressed through technical interventions, such as technology, market power, and efficiency, contributing to the production of the Gulf states' economies. By adopting policies that promote profitability, which is particularly important for Qatar, seeking to diversify its economies away from oil and gas, the government maintains its status as a wealthy nation.

Qatar's last identified domestic initiative is a stockpiling strategy to ensure a steady food supply in emergencies. Following the Blockade, the government created a food reserve, which includes essential food items such as rice, flour, sugar, and oil. The stockpile is maintained at a level that ensures the country has enough food to last for six months in case of an emergency, such as during Covid-19 (The Peninsula Qatar, 2022). There is a system of regular rotations, inspections and quality checks to ensure the food remains safe for consumption. In this project, Hassad Food promotes the expansion of associated services such as cooling and storing, which are essential for maintaining food quality and ensuring that the reserve remains fresh. Through

partnerships with the state and collaboration with Hassad, businesses in Qatar can gain access to funding and receive special treatment from government organisations, recognising their crucial role in achieving food security goals. As a result, the distinction between food security objectives and profit-seeking discourse once again becomes blurred and adaptable. Qatar's state capitalism exhibits a dual effect, reshaping the traditional structure of international agriculture through domestic measures while simultaneously promoting private interests openly.

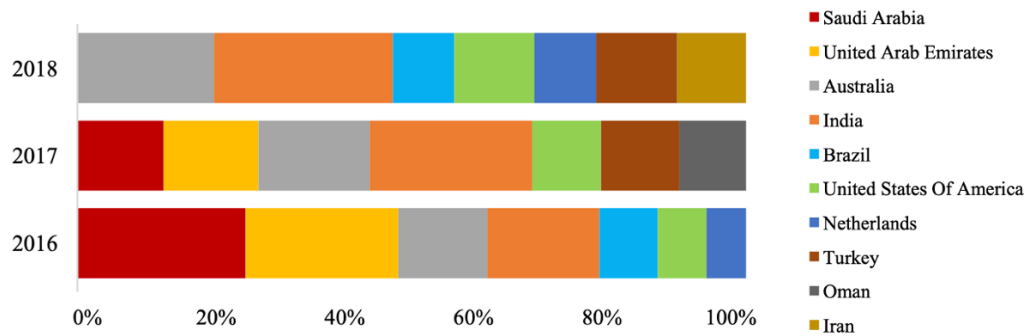
The QNFSP recognises the importance of creating guidelines, including subsidy programs, to encourage the participation of the private sector in the food system. By establishing bid rules, the QNFSP aims to create a favourable environment that attracts private sector investment and involvement in food production, distribution, and related activities (QNFSP, 2020, p. 7). Nevertheless, the state's involvement in fostering private sector participation can have both positive and negative implications for the corporate food regime. These limitations can include inadequate monitoring and evaluation mechanisms, insufficient transparency, ineffective targeting of subsidies, or a lack of coordination between different stakeholders (Plahe et al., 2013). As a state-owned entity, Hassad Food benefits from government support, enhancing its lobbying influence as a crucial contributor to the nation's food security strategy. Moreover, while the government provides subsidies for staple foods like sugar and oil (The Peninsula Qatar, 2016), agricultural goods remain costly in Qatar, resulting in food insecurity among specific population segments. Balancing development-oriented objectives and profit-seeking motives can lead to tensions between the state and private actors. The United Arab Emirates (UAE) pursued a similar program, incentivising agricultural production through subsidies and resource allocation, substantially expanding cultivated land (Woertz, 2013). However, this approach proved expensive and led to the depletion of groundwater aquifers. Moreover, the crops cultivated under this strategy did not necessarily align with the most efficient options for achieving food security, as the focus was primarily on cattle fodder, dates, and vegetables rather than grains. Lastly, the UAE subsidies may have inadvertently incentivised the importation of grains from other countries. Since the subsidies made locally produced grains more financially attractive, some importers took advantage of this by importing grains from abroad and claiming them as domestically produced to receive the subsidies. While collaborations between the state and private entities can yield positive outcomes, it is crucial to carefully consider the goals and consequences of such partnerships, including their economic, environmental, and social impacts that these examples highlight.

## **International Measures: Investments, Trade and Logistics**

Although Qatar has made significant strides towards achieving self-sufficiency in food production, its reliance on imports will continue to account for over 50% of its total food consumption (QNFSP, 2020). This imported food must transit through the narrow chokepoints of the Hormuz and Bab Al Mandab straits, which pose a significant threat to the safe delivery of essential supplies due to the potential risks of Iran's actions, Somali piracy, and the ongoing conflict in Yemen (Amery, 2019). Hence, the QNFSP outlines a critical pillar that centres on establishing sustainable and dependable supply chains over the long term through international trade and logistics. It aims to develop a resilient food import strategy to withstand potential trade shocks and disruptions. Among the initiatives, the government has implemented regulatory measures to incentivise new partnerships and the private sector to seek alternative food sources from various places (QNFSP, 2020). These measures include tax incentives, subsidies, and regulatory frameworks encouraging the corporate food regime while challenging traditional flows.

Qatar's response encompassed the tactical establishment of new relationships with various nations, thus transforming adversity into an opportunity for building new alliances. The situation's urgency necessitated a quick transition to alternative supply sources. It was clear from the onset that a shift towards diversification was not just necessary but a strategic imperative to make allies in the broader geopolitical landscape. The objective is to reduce Qatar's vulnerability to external factors by diversifying the geographical locations of trade partners for essential commodities, with a target of having 3-5 partners per critical item (QDB, 2022). Additionally, it strives to mitigate the effects of trade shocks or other unexpected disruptions by proactively establishing contingency plans. Qatar found willing and able partners in countries like Iran, Turkey, and India, among others (see Chart 2). These nations stepped in rapidly to fill the supply void, sending planeloads of food and other necessities, thus establishing themselves as reliable partners during the crisis. Hence, food became intricately linked with politics (Meneley, 2011). The diversification also saw the establishment of direct trade routes that circumvented the blockade. These new maritime routes were put in place to facilitate the import of food and other essentials directly from countries like Oman, Pakistan, and India (Al-Abdelmalek et al., 2023). It represented a clear break from the dependence on traditional partners and a move towards a new, more diversified, resilient food supply chain. The transition was closely monitored by national news media, which depicted Iranian cargo planes being loaded with food and supermarkets stocking Turkish milk, among other examples

(VOA, 2017). These reports aimed to inform the country's residents about the logistical changes taking place and reassure them that there would be no shortage of food. It also showed the blockading countries that Qatar could withstand their sanctions' impact.



**Chart 2:** The top ten countries' contribution to the economic value of food trade in Qatar (Al-Abdelmalek et al., 2023)

The QNFSP underpinned these efforts through its proactive role in fostering partnerships with key international players, including initiatives that encouraged the private sector in Qatar to develop relationships with trade missions and entities in target countries (QNFSP, 2020). As a wealthy nation, Qatar can approach food security through asset purchases, management, production and financial mechanisms (Falvey, 2019). John McKillop, CEO of Hassad Australia, suggested in the Financial Review that foreign agricultural investments could potentially result in cheaper goods and other favourable economic outcomes for Qatar (Cranston, 2016). Following this financialisation logic, Hassad Food purchased properties in Sudan and Australia and plans to invest hundreds of millions of dollars in farming initiatives in Kenya, Brazil, Argentina, and Ukraine (Fuchs, 2012). It signifies a spatial reconfiguration of the food regime, reflecting a shift in the dynamics of the corporate food system. It exemplifies how Qatar no longer rely solely on global markets and instead seeks to challenge the dominance of agro-exporting corporations primarily based in the Global North (McMichael, 2013). In the Arab world, Hassad possesses stakes in the Arab Company for Livestock Development (ACOLID) and the Arab Authority for Agricultural Investment and Development (AAID). In addition to its shares in the largest fully integrated poultry project in Oman, A'Saffa Foods, in 2019, Hassad invested in the seafood sector by acquiring the International Seafood Company. Moreover, Hassad expanded its investments in 2020 by acquiring shares in Sunrise Foods International, a leading global processor and trader of organic grains and oil seeds. Sunrise Foods holds a substantial market share in North American

and European markets and has established a broad network of suppliers to source high-quality grains for its customers worldwide. Thus, Qatar's extensive worldwide investments in agriculture can be understood in the context of a broader trend in the global food regime, which is increasingly being shaped by capital flowing from the Gulf states. Another notable point is Hassad ownership of substantial agricultural land in Australia and its strategic partnership with Australian firm MIRA (Sippel, 2013). The fact that Qatar has invested in Australia, considered part of the Global North with reliable production of safe, green, high-quality food, demonstrates a departure from the traditional North-South dynamics, where capital typically flows from developed to developing countries. This shift enables Qatar to diversify its food sources and reduce its reliance on imports, thus increasing its resilience in the face of potential food shortages.

The concept of internationalisation has become increasingly important in response to the broader trend of Gulf capital. In particular, agribusiness firms from the Gulf region have emerged as influential participants in the agricultural value chain (Hanieh, 2018). The significance of this sector extends beyond its economic implications, as it also holds geopolitical importance and is driven by the securitising discourse around food (Koch, 2021). The framing surrounding food security has accelerated the logic of agro-security mercantilism, as illustrated by Qatar's notable ownership of foreign agricultural land. It acquired 3,000 square kilometres of prime agricultural property in Australia through Hassad Food for over \$500 million and government-owned land in Turkey and India (Beer, 2014). Additionally, establishing a 2,000-hectare Qatari farm in Sudan has been viewed as bolstering the country's self-sufficiency efforts (Qatar Tribune, 2017). Thus, the availability of land has played a pivotal role in the expansion of the food industry –for Qatar– and, as a result, has a significant impact on food security (Mitchell, 2002; Dixon, 2014).

The corporate food regime contributes to an institutional framework governed by implicit neoliberal ideas about the hierarchical organisation of global development (McMichael, 2011). However, despite framing their food security efforts, Qatar's agribusiness conglomerates are primarily motivated by profit, similar to their Western and emerging market counterparts. These investments have been made possible by the diminishing affordability of food, a symptom of a larger crisis in capital accumulation, where surging energy costs limit capital's ability to invest in anything beyond speculative purchases, such as low-cost land in developing countries (Arrighi 1996; Moore 2010). This dynamic has contributed to increased inequality in terms of access to food, highlighting the implications of the corporate food regime

on social and economic disparities. Therefore, food security is not simply a matter of technocratic policy but a core aspect of the corporate food sectors' operational and expansionary dynamics.

Agro-security mercantilism is backed by Qatar's direct contact with influential individuals in the host nation. In 2022, during the visit of the Amir of the State of Qatar to the Republic of Kazakhstan, Hassad Food signed a memorandum of understanding with Baiterek National Management Holding JSC, a government institution in Kazakhstan (Hassad, 2022). The agreement, which aims to explore investment projects that will contribute to achieving food security in Qatar, further emphasises the role of corporate entities in global food governance and the importance of political connections in facilitating these investments. The implications of investment by a government-owned company are twofold. First, it is an example of the corporate food regime, where state-financed capital encourages corporations to dominate the global food system. Second, they are often aimed at securing food supplies for the investing country or corporation rather than addressing the food needs of the local population or supporting local food systems. For this reason, Hassad is tasked with managing the sensitivity of land acquisitions and portraying the Gulf countries as benign actors. The former chairman of Qatar's Hassad emphasised the importance of being seen as a responsible investor and promoting the win-win nature of agricultural investments rather than an intimidating image (Wikileaks, 2009). Hence, Qatar's land acquisitions are often presented as a public good, beneficial for both the host country and the investor. Hassad refers to its investments as strategic partnerships for food security. Land grabs are presented as virtuous and even moral, with interviews and promotional materials expressing pride in transforming barren land into fertile farmland (Hassad, 2023). Qatari finance capital is interested in exploring new financial instruments related to crops or land, which could be used for speculative purposes (Akram-Lodhi, 2015). Furthermore, in light of the reputational issues surrounding the treatment of migrant workers in Qatar, the country cannot afford to invest in foreign countries with questionable human rights records anymore, particularly if it involves local farmers' potential displacement and dispossession (Woertz, 2013). While the land may be inexpensive to investors, it has intrinsic value for those who live there. In particular, common areas offer millions of people around the globe the chance of sustenance, socio-ecological resilience, as well as ancestral and spiritual value (McMichael, 2012). Qatar's integration into global commodity chains has multifaceted implications. It leads to various socio-economic disruptions in regions where resources are extracted while concurrently promoting capital accumulation in Qatar. Although these imported goods are critical to Qatar's societal

operations, they can also fuel social unrest due to the region's uneven food distribution. Additionally, it is essential to note that food security issues are intrinsically linked with water security. According to GRAIN (2012), the acquisition of land and the indirect import of water embedded in crops, often called virtual water imports, can be characterised as water grabs. This further exacerbates the socio-economic imbalance, as controlling such vital resources is concentrated within the Qatari corporate food regime. In conclusion, Qatar's participation in global food commodity chains under the corporate food regime has complex socio-economic consequences, leading to an accumulation process through dispossession and contributing to regional disparities in food and water security.

The corporate food regime of Qatar aims to advance its own interests and enhance its capabilities in food production and distribution. This regime's expansion extends geographically, and its logistical operations are crucial. The nation's plan aims to improve its logistics framework, encompassing ports and transportation systems, in order to promptly respond to the absence of trade partners or a decline in self-reliance (Alagos, 2022). It aims to connect new regions to its market and consolidate its role as a food reexport zone. Launched in 2017, Hamad Port Food Security Project spreads over 500,000 square metres; it includes three main factories and three factories behind the processing plants (The Peninsula Qatar, 2022). The project includes specialised facilities for manufacturing, processing, and refining rice, unrefined sugar, and edible oils (The Peninsula Qatar, 2019). The factories' production is said to be enough for three million people and aims to supply products for local, regional, and global use (The Peninsula Newspaper, 2022). Indeed, the stock has a two-and-a-half-year shelf life and may be shipped again outside the nation. Therefore, the US\$ 400 million Hamad Port Food Security Project is poised to put Qatar on the map as a solid food-exporting hub. Such food security programs are political initiatives interconnected with the security of logistical operations, the expansion and strengthening of agro-commodity circuits, and, notably, the control over trade routes and logistical networks (Henderson & Ziadah, 2022). It sheds light on how Qatar, as a new player, is entering the agro-commodity circuits and reorganising the food regime to challenge Northern domination.

Lastly, Qatar Airways played a pivotal role in responding to the blockade imposed on the nation in 2017 by securing essential supplies and improving its logistics network. The company bolstered its efforts by adding five more freighters, successfully implementing the Freighter Centralised Load Control system, and transitioning to fully digital ramp handling across its entire freighter network (AirCargoNews, 2017). As a result, load planning improved,



and on-time performance saw a 30% increase compared to the previous year. Today, Qatar Airways Cargo ranks as the second-largest cargo carrier globally, serving over 60 cargo destinations worldwide, enabling imports from various new countries (Pratap, 2018). Hence, the consequences of the blockade provided an impetus for the airline to expedite its existing five-year plan, which focused on several key areas, including strengthening functionality and soft power, enhancing innovation, broadening brand-building, and defining the relationship between the state and the airline. Ultimately, the country experienced a 160% increase in cargo imports in June 2017, indicating the effectiveness of the measures implemented to respond to the blockade. Furthermore, structural changes to the supply chain were implemented, leading to the complete restocking of food inventory levels. The country's logistics network was also significantly diversified by introducing two key maritime shipping routes from Asia and Oman. On the one hand, the magnitude of Qatar's investments in this sector suggests that its influence on the global food commodities market is growing, transcending its domestic market needs. On the other hand, Qatar's geographical growth through its logistics network has positioned this Gulf nation at the heart of the agricultural value chain. Therefore, the company's efforts positioned Doha as a global hub while strengthening Qatar's corporate food regime through public and private partnerships and geographical diversification.

## IV. Discussion and Conclusion

According to the corporate food regime, the world's food system is increasingly dominated by multinational corporations, marking a significant shift from the traditional, geographically defined agricultural regimes. This theoretical construct help to understand the complex interplay of market forces, corporate strategies, and state policies in shaping global food systems. While previous literature within this framework lacked focus on the state's role, this research addresses the gap by examining Qatar as a case study. The findings reveal that following the 2017 blockade, Qatar's food security was ensured through the involvement of financial entities and agribusinesses, for which the state played a crucial enabling role in this success. The state's ownership of wealth funds and companies enables it to control and regulate the food sector's operations and ensure the country's food security while gaining other significant advantages.

The research highlighted the crucial role of Hassad Food, which occupies a unique position within the corporate food regime due to its operations in the agri-business sector. Nevertheless, Hassad Food combines the characteristics of a business-oriented corporation with the responsibilities and accountability associated with being a state-owned enterprise. As a corporation, Hassad Food seeks to profit by investing in the agriculture and food industries worldwide. This aligns with the profit-driven nature of entities in the corporate food regime, potentially conflicting with food security principles or environmental sustainability, as noted by Al-Ramadan (2015). However, being state-owned means that Hassad Food also operates with public accountability and pursues strategic goals beyond mere profitability. This dual role creates inherent ambiguity in Hassad Food's function within the corporate food regime. In conclusion, Hassad Food, being a state-owned corporation, offers an intriguing case study to exemplify the intricate and multi-dimensional nature of actors operating within the corporate food regime.

The close relationship between the public and private sectors highlights the unique dynamics of food security in Gulf countries. Qatar created a beneficial environment for corporations. It sheds light on the state's motives to collaborate with private enterprises to address food security challenges effectively. Notably, the blockade incident transformed Qatar's food security strategy, showcasing the nation's resilience and adaptability in the face of adversity. These findings align with previous studies by Woertz (2018) and Hanieh (2020), highlighting Qatar's successful diversification of food imports and promotion of local production to mitigate the blockade's effects. However, the novel aspect of this research lies in

understanding the motives behind the state's actions, providing valuable insights for other nations facing similar issues.

Qatar's efforts to expand and diversify its food supply chains have reduced its reliance on imports and created a stable and reliable food supply. It has decreased the vulnerability of its economy to external factors and opened up business opportunities within the country by tremendously increasing domestic production and consumption thanks to technological advances. These initiatives were deeply rooted in discourses surrounding food security, with consumption pattern changes framed as acts of patriotism. This narrative reinforces the national commitment towards self-sustainability and encourages citizens to participate in this transformative journey actively. Moreover, the government's investment in agricultural technologies and practices demonstrates the state's technological prowess, legitimising its authority and reinforcing its power over the population. In turn, it can increase Qatar's global standing and reputation, potentially leading to increased diplomatic support and cooperation from other nations. Through techno-politics, food has served as a means to navigate the geopolitical and environmental challenges of the blockade.

This paper adds to the ongoing food regime debate by examining the influence of Qatar's capital in shaping the corporate food system. Introducing state-led capital flows through infrastructure development and international investments underscores Qatar's potential to influence food systems beyond its borders. These initiatives challenge the traditional dominance of Northern countries in the global food regime, where power and control over food production, distribution, and trade have traditionally been held. Qatar enhances its food security by actively participating in the food system through strategic logistical development and creating a surplus in self-sufficiency. It establishes itself as a powerful player in shaping the global food landscape. This demonstrates Qatar's ambition to contribute to a more multipolar food system and challenge existing power dynamics.

While the Qatari food regime aims to bolster self-sufficiency, it has wider ramifications for global food governance. Its strategic global agricultural investments and the growing sway of Gulf capital in the worldwide agricultural value chain come with drawbacks. Such extensive land acquisitions might have potential implications for indigenous food systems, albeit portrayed as mutually advantageous for both the investor and the host. It underlines the necessity for conscientious investment practices and the equitable treatment of local farming communities. The future of food security will likely necessitate harmony between local and

international food systems, with a focus on sustainable farming methods, varied food sources, and resilience to environmental fluctuations. Encouraging local production and regional food sourcing helps minimise long-distance transportation needs. These endeavours have the potential to foster a more sustainable agricultural sector, reduce dependence on fossil fuels, and mitigate the negative impacts of climate change. Qatar's adoption of agro-security mercantilism, a strategy for pursuing food security through acquiring agricultural resources abroad, might inadvertently deepen global food security inequality. While it may enhance Qatar's own food security, it could potentially jeopardise the food security of the countries where the investments are made, mainly if local needs are overlooked in favour of export-oriented agriculture. Therefore, it is essential to regard food security not merely as a technocratic policy issue but as a crucial aspect of the operational and expansionary dynamics of the corporate food sector. Ultimately, if Qatar fails to prioritise the widespread implementation of circular agricultural technologies and practices, its efforts to enhance self-sufficiency and boost domestic production may eventually hinder its future food security.

When examining the impact of technology on food production in Qatar, it becomes evident that technology can shape and influence the system in both positive and negative ways. While technology has the potential to address and mitigate some of the challenges faced in food production in Qatar, reliance on it can lead to several consequences in Qatar. One aspect is the potential environmental impact. Excessive reliance on technology, such as intensive agricultural practices involving large-scale irrigation systems or the use of chemical fertilisers and pesticides, can contribute to environmental degradation. Furthermore, the overuse of technology may lead to a loss of traditional farming practices and local agricultural knowledge. Qatar has a rich cultural heritage and a history of traditional farming methods adapted to the local climate and conditions. However, adopting modern technologies may overshadow these conventional practices, potentially eroding the cultural fabric and indigenous knowledge associated with local needs and conditions. Additionally, food security doesn't merely hinge on food availability but also its accessibility, making the issue deeply entwined with social disparities. Income inequality, land ownership, education, and access to resources like credit and technology can all create barriers to food security. Therefore, addressing these social disparities will be vital in any strategy to enhance food security.

To conclude, Qatar's method for securing food security is intricate and multi-layered, incorporating domestic food production, international investments, engagement of the private

sector, and infrastructural development. Despite some challenges and criticisms, the strategies implemented by Qatar demonstrate an understanding of the intricate connection between food security, geopolitics, and global food systems. It illustrates how a country with limited resources can utilise its financial capacity to ensure food security through active involvement in the global food regime.

Given the scope of this research, a deeper investigation of the economic, environmental, and social implications of Qatar's food security strategies is needed. Economically, this could involve studying the effects of Qatar's investments on agricultural markets and rural livelihoods in both Qatar and the host countries. Environmentally, it would be necessary to examine the impacts of Qatar's agrarian practices on soil health, water resources, and biodiversity. Socially, future research could focus on the effects of Qatar's strategies on issues like land rights, labour conditions, and rural development in the countries where it has made investments. Comprehensive research in these areas could help better understand the full implications of Qatar's corporate food security approach and inform future policy decisions.

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