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Strategic Food Marketing as a Catalyst for Food Security and Supply Chain Resilience During Geopolitical Disruptions: A Review

Nurul Amira Zainudin, Wong Hui Lin, Naili Nahar*

Azman Hashim International Business School, Universiti Teknologi Malaysia, Jalan Sultan Yahya Petra, 54100, Kuala Lumpur, Malaysia

*Corresponding Author Email: naili.n@utm.my

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Abstract

Global geopolitical events have completely impacted food systems, through affecting production, logistical services, international trace, and market stability, which brings unprecedented difficulties for global agribusinesses. Dominant countries historically weaponized food access and hunger to maintain their power during the geopolitical wars resulting in decreasing available food sources and subsequently increasing the prices. Many studies focused on the food supply chain resilience strategies and food security outcomes, however, there is limited studies focusing on the roles of food marketing in building resilience and food security. Using PRISMA guideline, a total of 62 papers were used in this review, integrating theoretical frameworks from food marketing strategies, agribusiness, supply chain resilience, dynamic capability theory, along with the Food and Agriculture Organisation (FAO) food security framework to create an integrated conceptual perspective. Food marketing strategy was proposed as a transmission mechanism through which geopolitical shocks disrupt the food security pillars: availability, accessibility, utilization, and stability. The marketing decision aspects regarding product reformulation, pricing, distribution, promotion as well as supplier diversification was critically investigated by considering the evidence provided by the five conflicts: Arab Spring, Syrian Civil War, Russia-Ukraine conflict, Red Sea shipping crisis, and US-Israel-Iran war. The review also described the built-in tension between the commercial resilience and equitable access to food, whereby marketing policies to ensure business continuity could also worsen the food security of vulnerable population. Findings added to the body of agribusiness literature by broadening the understanding of marketing as a strategic capability that contributes to resilient food systems and is utilized in managerial decision-making as well as public policy in times of ongoing global uncertainty.

Keywords: Agribusiness Resilience, Food Security, Geopolitical Disruption, Strategic Food Marketing, Supply Chain Resilience

Introduction

Background: Global disruption and the return of geopolitical conflict

The term “The Great Fragmentation” coined by Institute for Economics & Peace (IEP), started after the 2008 Global Financial Crisis due to imposing of tariffs, banning of exports, investment restrictions, as well as new migration and capital controls (Institute for Economics & Peace, 2026b). In recent years, this structural transformation has escalated by state actors as a strategic recalibration their positions towards greater national autonomy and decentralized influence. The transformation catalyzed by both political and structural reasons including the accelerate of rival power competition, the rise of nationalism, monopoly control over new technologies and natural resources (Institute for Economics & Peace, 2026a).

Since 2011, a succession of overlapping shocks has been the hallmark of the world’s food system. The results have been a series of political unrest that triggered by skyrocketing food prices, prolonged civil wars exacerbated by drought and afterwards declining in agricultural output, pandemic that disrupted the normal movement of labor and logistics services, and climate changes shortened harvest periods.

Among the overlapping shocks, geopolitical disruptions remain the main cause that drive global hunger because the food access and hunger have historically been weaponized to maintain the power. Dominant countries increase such weaponization through military blockades, the restriction of humanitarian aids, destruction of agricultural infrastructures, and provision of essential food supplies. Besides that, the food production, trade, and distribution channels of conflict-affected countries are severely impacted during the crisis times (Arghiroiu et al., 2025). As a result, the food supplies decrease and prices increase. This situation had been reflected in Russian-Ukraine war, where global regions experienced economic instability regarding commodity prices during the time. It is believed that there is a strong correlation between energy supply and food price as different sectors use energy resources for power, heat, and raw materials. access to affordable energy influences food price, and thus, food security (Sohag et al., 2023). The sudden initiation of large interstate wars disrupted the important trade routes, triggered energy price spikes that subsequently destabilized the downstream food supply chain.

"Farm-to-fork" supply chain is a complex network of linked activities that transfer food from agricultural cultivation and production to end consumer's plate. Supply chain resilience helps the food business firms to recover quickly from the unforeseen disruption or sustain a long-term operational performance, thereby safeguarding the food security (Zhao et al., 2024).

The situations such as blockage of ports, visa restrictions of the trade partners, or limited access to the fertilizers directly reflected in the procurement, product formulation, price determination, distribution, and brand communication. Therefore, understanding, analyzing, and applying food marketing strategies during crisis time and within highly volatile environment move beyond commercial enquiry, but rather, it provides core insight about food security by understanding which populations access to food, the nutritional composition, quality, and safety of available supplies, and the price of supplies at times of crisis.

Importance of food marketing in ensuring food security

Marketing is often perceived merely as a promotional function rather than a strategic capability that shapes food system resilience. At its core, marketing is a set of processes in converting production output into utilization while adjusting the supply and demand through strategic decisions such as marketing 4Ps (product, price, place, and promotion) (McCarthy, 1960). These essential elements dictate the consumer segments, product forms upon delivery, distribution channels, and pricing strategies. Ultimately, each of these marketing activities directly influence the various dimensions of food security

Product design including product formulation, packaging used and dimension, and quality attributes determines the application and consumption pattern of food, thereby ensuring the nutrient adequacy and mitigating the risks of food safety. Affordability, the bridge between economic supply and individual access, is governed by the strategic price setting and promotional activities. The element of "place" determines the physical availability and accessibility at the point of need through suitable distribution channels and inventory. When supported by correct sourcing strategies and strong supplier relationships, these activities ensure long-term supply stability. Ultimately, marketing functions serve as a mechanism to translate economic shocks triggered by the wars to consumer experiences. Depending on the strategy execution, it can either intensify the disruptions through opportunistic pricing and silent product degradation or mitigate the situations through diversified sourcing and transparent labelling.

Research gap

Although existing literatures focused on the economic development and analysis of FAO food security pillar framework encompasses availability, access, utilization, and stability at macro-level, however, it often overlooks the internal dynamics of commercial enterprises. Currently, extensive theory of resilience and dynamic capability developed in the supply chain or operational literatures focused more on optimizing firm survivability and cost rather than on the level of national nutrition. Besides that, the current marketing literatures focused heavily on the discussion of strategy and consumer responses during COVID-19 pandemic crisis, but considerably less emphasis on war-induced supply shocks. There is still a limited comparative analysis of how strategic food marketing transforms geopolitically-driven conflicts and wars into different food security outcomes as well as the contexts to which this relationship applies.

This article addresses the existing gap by introducing a conceptual model of food marketing as a mechanism of transmission across five distinct disruption scenarios and how does the food security pillars be affected by these mechanisms.

Review Methodology

The method of this review followed PRISMA guidelines to synthesis a systematic literature review. PRISMA flow diagram was shown in Figure 1.

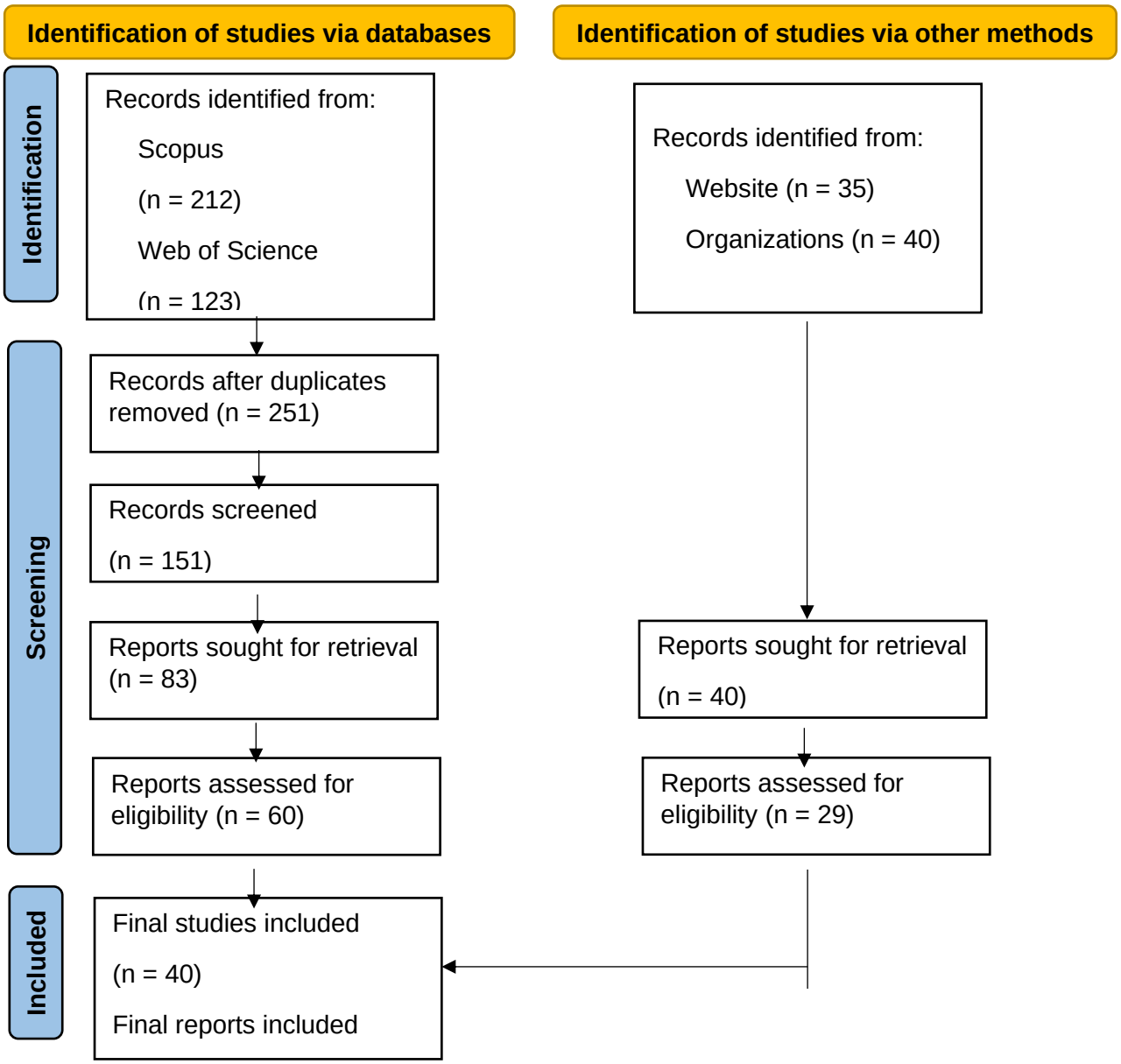

Figure 1: PRISMA flow diagram of this review

Search strategy

In this review, databases including Scopus and Web of Science were used to search the peer-reviewed journals in English language.

A selection of food sector- and supply chain-related keywords and Boolean operators used in the search strategy included: ("food marketing" OR "agrifood marketing" OR "agribusiness marketing" OR "marketing mix" OR "marketing strateg*" OR "dynamic capability*") AND ("food security" OR "food availability" OR "food access" OR "food utilization" OR "food stability" OR "food supply chain*" OR "food value chain*" OR "food system*" OR "agri-food system*" OR "supply chain resilience") AND ("geopoliti*" OR "sociopoliti*" OR "warfare" OR "conflict*" OR "disrupt*" OR "maritime chokepoint*" OR "interstate warfare" OR "civil war" OR "sanctions" OR "armed conflict*" OR "trade embargo*" OR "geopolitical shock*" OR "Arab Spring" OR "Libya" OR "Syria" OR "Russia Ukraine" OR "Red Sea" OR "Strait of Hormuz" OR "US-Israel-Iran").

The gray and institutional papers were sourced from Food and Agriculture Organization (FAO), United Nations (UN), World Bank, Institute for Economics & Peace (IEP), Organization for Economic Co-operation and Development (OECD), Euromonitor International, JustFood, and company websites. News articles were searched from reputable news platforms such as Reuters, British Broadcasting Corporation (BBC), Al Jazeera, and Voice of America (VOA). The sources were deemed necessary to gain accurate data and insights about the studied topic to increase the comprehensiveness and timeliness of this review.

Inclusion and Exclusion Criteria

The predefined peer-reviewed literature inclusion and exclusion criteria to achieve this review were presented in Table 1. Literature that meets the inclusion criteria were selected for further assessment.

Table 1

Inclusion and Exclusion Criteria Used for Literature Selection

Criteria	Outcome
Predefined keywords exist as a whole or at least in article title, keywords, or abstract	Inclusion
Papers published between 2008 and 2026	Inclusion
Papers published in peer-reviewed journals, online books or book chapters, and reports from reputable institutions	Inclusion
Papers written in English language	Inclusion
Papers available in full text	Inclusion
Publication stage of paper that is final	Inclusion
Studies present pieces evidence on marketing strategy; dynamic capabilities; supply chain resilience; or food security frameworks; agribusiness discipline examining firm and individual responses to food system shocks, specifically the 2011 Arab Spring / Libyan civil war; Syrian civil war; Russia–Ukraine war; Red Sea/Houthi shipping crisis; or 2026 Iran war	Inclusion
Papers that are duplicated within the search document	Exclusion
Papers that are not accessible	Exclusion
Papers published by a form of editorial, note, letter, conference paper, short survey, erratum, retracted, data paper	Exclusion

Quality Assessment

To ensure the reliability, validity, and quality of the peer-reviewed articles, they were assessed using a quality assessment checklist with scoring metrics. Each criterion in Table 2 was scored on a 3-point system: 0-Unmet; 1-Partially Met; 2-Fully Met.

Table 2

Quality Assessment Criteria used to Evaluated the Articles

No.	Assessment Criteria
1	Is the study grounded in marketing strategies, supply chain resilience, and dynamic capabilities theories or models?
2	Are the data collection, sampling method, and analytical methods transparent?
3	Does the study highlight geopolitical disruptions influencing food systems or food security?
4	Does the study provide practical or policy contribution for food security or food supply chain management?

Food Marketing Strategy: Theories and Models

Marketing mix

McCarthy's (1960) 4Ps framework including product, price, place, and promotion reconfigured the marketing mix into a management tool to translate strategy objectives into actionable execution. Booms and Bitner (1981) included human, process, and physical evidences, given the 7Ps framework applied differently to the food service and retails sectors. Later, Lauterborn (1990) reconfigured the marketing mix that prioritize consumer-centeredness, transformed the framework into the 4Cs comprising customer value, cost, convenience, and communication. The analysis of the strategic mixes plays an important role, as each distinct strategy represents a mechanism for either disrupting or absorbing disruptive marketing elements.

Market Orientation

Market orientation is a business strategy that prioritizes customer satisfaction at the centre of business' operations. In highly competitive market environment, food firms that practice this strategy aim to deliver great value to customers, through collecting information about their customers' needs and preferences, competitors' actions and activities, and inter-functional coordination, thereby achieving better operational performance (Fakhreddin & Foroudi, 2022; Okello & Luttah, 2022). Pang et al (2026) applied dynamic capabilities framework to demonstrate how companies build and sustain digital transformation, an organizational-level process where it drives the ongoing, value-creating reconfiguration of processes, business models, and corporate culture through the application of digital technologies, rooted in market orientation that balance insights from both consumer and competitor to achieve market competitive advantage. Market orientation capabilities are recognized as an organization's intangible resource and corporate possess this capability enable them to respond to market environment effectively, allow business in gauging the marketplace requirements (Hidayati et al., 2025; Kautish et al., 2025). Extended to firm's market orientation capabilities, digital marketing capabilities provide modern tools and methods to improve routine engagement with customers, prior knowledge, and analyse market trends. Together, these actions turn the raw data into customer value (Hidayati et al., 2025).

Dynamic Capabilities

Academic research within the strategic management emphasizes that long-term organizational resilience is valuable, non-duplicable, and irreplaceable asset that serve as the critical driver of sustained organizational performance. In crisis marketing, product modification or rerouting in response to the unexpected infrastructure closures showed a dynamic capacity. As highlighted in Marketing 4.0 and Marketing 5.0 models explained by Kotler, Kartajaya and Setiawan (2017, 2021), digital paths and data-sensing technologies offered significant usefulness. When the digital tools used to align with human-centric goals, they often serve as highly effective tools, particularly during periods of significant, and unplanned disruptions (Barney, 1991; Teece et al., 1997).

Supply Chain Resilience

The literatures on supply chain resilience (SCRES) established a linkage that integrate the sales functions and operational processes. Resilience was widely defined as the ability of a system to recover to an optimal state following an unplanned disruption (Christopher and Peck,

2004). In the context, resilience strategies including redundancy, diversification, collaboration, and digital traceability are often viewed as general practices and always combined to transform shocks into safe networks. However, when applying supply chain management in food security context, product integrity, safety and quality, and compliance should be considered and guaranteed to ensure safe, nutritious food is available and affordable to all individuals. For instance, a disruption affecting shelf-stable food and perishable food products may yield a different consequence, primarily in terms of product losses and immediate threats to food security in local market (Soundja & Afif, 2026).

New researches integrated SCRES with dynamic capabilities, highlighted how organizations develop capabilities to address disruption caused by unexpected events (Ali & Mahfouz, 2025). These capabilities reflected in marketing decisions. Unlike less competitive rivals, an organization with marketing advantages can maintain high physical inventory and stable pricing, this is achieved through sustaining diversified supplier networks and consumer preference research. Furthermore, the implementation of new marketing strategies such as amendment to pricing, distribution channels, and promotion directly drive changes in inventory and better meet consumer demands. Ultimately, all of these significantly influence how goods move through the supply chain network (Huma & Ahmed Siddiqui, 2026).

Food Security Framework: FAO Pillars

The 1996 World Food Summit defined food security as a situation which exists “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.” According to the FAO framework, four core pillars of food security encompass availability, access, utilization, and stability were explained as below (High Level Panel of Experts on Food Security and Nutrition, 2020).

- Availability - the supply side: sufficient quantities of appropriate food through domestic production, imports, and stocks.
- Access - physical and economic access, including affordability and purchasing power.
- Utilization - the nutritional outcome: dietary quality, diversity, food safety, and the biological capacity to make use of nutrients, conditioned by health, water, and care.
- Stability - the temporal, cross-cutting dimension: the constancy of food availability, access, and utilization over time and the absence of acute or cyclical risk of losing access.

While the four pillars of food security remain fundamental, to ensure the food systems actively align with Sustainable Development Goal (SDG) 2 (zero hunger), agency and sustainability were incorporated by High Level Panel of Experts (HLPE) to further expanded the four pillars of food security into six-dimensional framework (Ben Hassen & El Bilali, 2022; High Level Panel of Experts on Food Security and Nutrition, 2020; United Nations Department of Economic and Social Affairs, 2026). Agency is defined as the ability of individuals and groups to make choices regarding their own food systems, while sustainability is defined as the ability to perpetuate systems that sustain food security in a way that does not compromise the triple bottom lines including economic, social, and environmental bases (High Level Panel of Experts on Food Security and Nutrition, 2020). Both agency and sustainability are important in commercial study. Agency, acts as a bridge that translate the structural conditions and governance arrangement into food security outcomes (Oliveira & Lucas, 2026). They focus on buyer autonomy when facilitated by the market transparency and clear food product

labelling. Moreover, product substitution can be a strategic trade off among different environmental impacts to adapt to the market demands.

These pillars are mutually reinforced, and characterized by bidirectional and ranked, where availability served as the fundamental for access, and access dimension depends completely on availability. Access and utilization were conceptually distinct, as the occurrence of one did not mean one caused the other. The bottom line relied upon the food system stability. The marketing is not operated sequentially, but it is functions concurrently. Failure in any single component can comprise the entire food system.

War and Geopolitical Conflict as A Disruptor of Food Systems

Between 2010 and 2011, the occurrence of "Arab Spring" triggered by the increased of global food prices due to wildfire and drought in major grain exporting country such as Russia. Thus, Russia banned the exporting activities. In Libya, about 80% of their food were imported before the civil war. The crisis disrupted the heavily subsidized distribution of wheat, cereals, and cooking oil whilst they were not well prepared to withstand such shock (Decapua, 2011).

In 2011, Syrian civil war took place as a result of several multi-year of worst drought in the greater Fertile Crescent. The climatic event destroyed the agricultural crops and resulted in internal migration due to broke down of the rural life of Syrians. The climatic event, together with political and socioeconomic grievances such as unemployment, food prices, and corruption led to the political uprising (Dinc & Eklund, 2024). Syria was once self-sufficient in wheat supply among the Arab countries. Following the commencement of hostilities, the land area dedicated to wheat cultivation decreased from pre-war level of 1.7 million hectares to a lowest recorded level of 900,000 hectares during 2015–2016 (Costantino, A et al, 2016; Mohammed et al., 2020). Over 14 years conflict in Syria had severely compromised on the health of children, with 48% of the children faced malnutrition, and this subsequently led to both physical and cognitive development problems. In response to the food insecurity, Syrian families adopted survival strategies such as reducing daily food consumption, transitioning to affordable and less nutritious food, sending children to work, or utilizing child marriage to ease financial burdens (United Nations Development Programme, 2025).

Geopolitical conflicts and wars attack the agricultural production, trading infrastructure, and market confidence. The Russian invasion into Ukraine in February 2022 provided one of the most redefining instances of this sort of disruption. In the pre-war era, Russia and Ukraine accounted for approximately 30% of wheat and barley global trade, while large trading share of the sunflower oil was contributed by the Black Sea region, also, Russia was the main exporter of the fertilizer (Ben Hassen & El Bilali, 2022; UN Trade and Development, 2022). The invasion paralyzed the freight shipment of grains from the Ukraine ports, disrupted the planting and harvesting activities, and restricting access to fertilizers. The supply shocks further compounded by preemptive restrictions in export and panic buying (Jagtap et al., 2022). The FAO Food Price Index reached record high in March 2022 and this demonstrated the regional instability can translate into global commodity price and supply shocks, especially compromising the import-dependent economies in Middle East and North Africa (MENA) (Food and Agriculture Organization of the United Nations, 2022; Gatti et al., 2023). The Black Sea Grain Initiative (July 2022 – July 2023) was mediated by Türkiye and the United Nations (UN) to enable the safe transportation of approximately 33 million metric tons of grains and

other foodstuffs to multiple nations to attempt to address a worldwide food crisis and food price spike observed in March 2022 (UN Trade and Development, 2022).

In late February 2026, the war involved United States (US), Israel, and Iran severely disrupted an important transportation corridor, a maritime handled for the transit of 20%-45% of traded fertilizer, 20% of global oil and liquified natural gas (LNG) supplies. Iran is moderate to high reliance on imports for essential staple foods, especially grains, while achieving only self-sufficient for a few staple foods. The onset of the warfare has exacerbated nation's fragile economy, and intensified the exposure to the trade disruption and food security risks. Even if the domestic reserves of the staple foods remain adequate, the population in the country may be threatened by the food affordability crisis as the food prices increase (Food and Agriculture Organization of the United Nations, 2026).

Integration and the Residual Gap

The presented conflict cases in different countries over 15 years revealed that geopolitical conflicts and wars act as disruptors across the entire food systems, transformed the nation or regional vulnerabilities into global food crisis and subsequently drastically threaten food security dimensions. From the climatic-induced agricultural damage to political uprising and governance failures that ultimately provoked the Arab Spring and Syrian civil war, Russia-Ukraine war in 2022 and recent disruption in Persian Gulf, the geopolitical wars converted the localized supply vulnerabilities into global food shock by disrupting the agricultural production supplies and important maritime trade corridors. Consequently, both historical and modern geopolitical conflicts proved that the war at any point in the food supply chain threatens the long-term resilience and stability of food supply and the distribution channel.

While the existing food system is still function well, however, it is highly vulnerable to the major geopolitical disruption strikes and subsequently be stripped of its redundancy because of the cost-cutting during peacetimes. Diversification sourcing and the application of digital technologies were proven to be useful in building a resilient food supply chain and dynamic capabilities.

This review extends dynamic capabilities theory beyond firm-level resilience by demonstrating how strategic marketing capabilities influence societal food security outcomes through the food security dimensions. Previous research on food security prioritized the study of impact on the overall population while less focused on the firm's business continuity and operational costs. In the realm of marketing, studies focused primarily on the consumer responses and firm's decisions instead of highlighting marketing adaptation. In addition to the organizational challenges facing the brand, marketing adaptation actively influences the food security outcomes while current literature lacks of comprehensive framework to analyze the impact of war-induced supply shock through four food security pillars.

Conceptual Discussion and Thematic Analysis

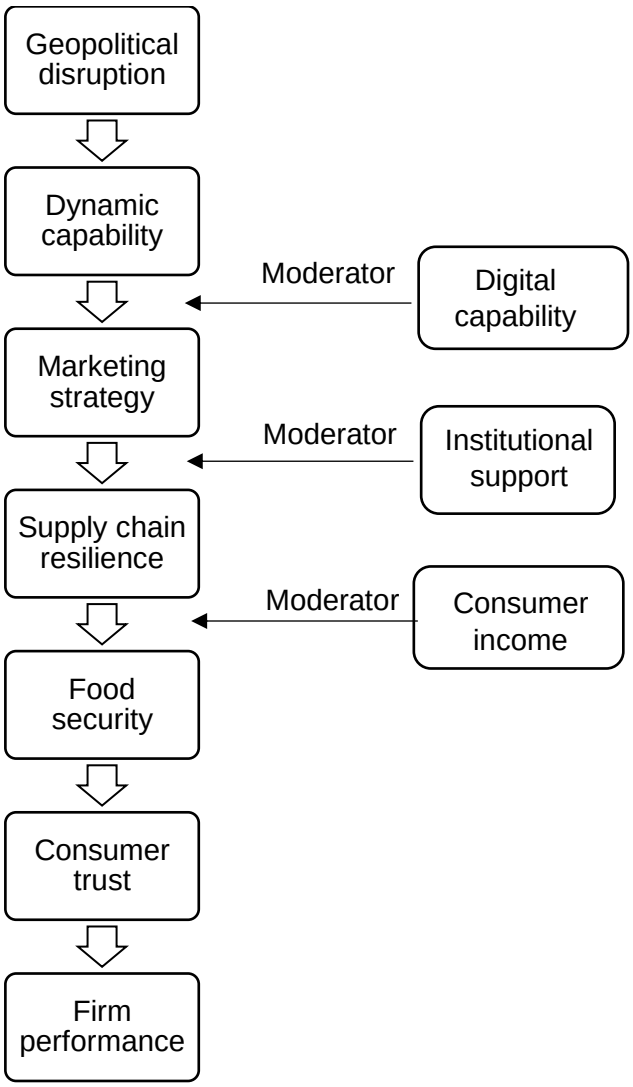

Figure 2: Conceptual Framework of This Study

Strategic food marketing as a transmission mechanism

As shown in Figure 2, this article proposed that the strategic food marketing as transmission mechanism between geopolitical disruption and food security, for example, the closure of ports during wartime (Ben Hassen & El Bilali, 2022). When the geopolitical conflicts trigger the closure of ports, the consumers may not immediately be impacted by the shocks. Rather, the shocks are mediated through a sequence of marketing and procurement decisions on product availability, sourcing availability and alternatives, pricing strategies, and distribution channels. As the shocks can bring different outcomes, the flexible food marketing strategies should be adopted by the food business firms to ensure the long-term supply chain resilience and safeguarding the specific pillars of food security under such shocks.

According to Teece et al. (1997) and Sezer et al. (2024) frameworks, the dynamic capabilities of a food business firm can be observed from three aspects, including sensing, seizing, and transforming. In sensing, digital tools are used to collect data regarding consumer's needs and

perspectives. As the firm transitions into the seizing phase, production methodology is reconfigured to produce finished products, thus, the pricing structure change. During transforming phase, the firm formalizes these changes to ensure long-term and permanent organizational adaptation. This suggests that food business firms, especially multinational corporations having these capabilities and skills experience accelerated advancement, however, the performance outcomes are varied across individual firms.

The Resilience-Equity Trade-Off as a Testable Proposition

Proposition 1 (P1): Firms that lack of capacity to rapidly adapt to the marketing environment exhibit lower resilience compared to those that have dynamic marketing capabilities within their commercial operations. For a firm to build organizational resilience without excluding price-sensitive, low-income consumers, the operational and financial impacts of adapting to the market and economic disruptions must be absorbed by the firm instead of shifting such burdens to the consumers.

Proposition 2 (P2): The relationship outlined in P1 is conditional on the degree of firms' transparency maintained during the period of geopolitical upsurge. Firms that actively communicate the adaptation strategies such as product modification or shrinkflation build and sustain a long-term brand equity compared to those that implement structural adjustments without consumer engagement.

Proposition 3 (P3): Geopolitical disruption triggers systematic responses within states or firms, primarily through disrupting the pillars of food security. Depending on the nature of geopolitical disruption, it determines which pillar is at greatest risk. For example, the socio-political legitimacy crises demonstrated by Arab Spring and Libyan Civil War impacted the food access. Conversely, prolonged internal conflict such as in Syrian war, compounded by severe climatic event, tend to destroy the agricultural production, thus, higher risks on food availability and stability. In Russia-Ukraine war, it disrupted the food production, which ultimately threaten the food quality, safety, and nutrition worldwide.

Proposition 4 (P4): A robust food system includes digital competency and socio-economic status of consumers. Preservation of resilience of companies happen when they are exceling in translating digital technology, complex data, and corporate goals into human-centric, meaningful, and strategic brand realities. Nonetheless, regulations or requirements should be enforced to govern the behaviors of those high digital capabilities companies and to protect consumers' rights and benefits, especially the low-income consumers with limited choices of food source.

Linking Marketing Strategy to Food Security Outcomes (Pillar-By-Pillar Conceptual Model)

There are four stages of sequential chain: "geopolitical shock", "marketing mix responses" (product, price, place, promotion, and sourcing), "pillar impact level" (availability, access, utilization, and stability), and "food security outcome at household level". The digital capability level of firms and consumers' income status act as each respective moderators at each of these stages. Unlike traditional framework, this model evaluates the vulnerability and resilience of individual marketing mix in response to the specific geopolitical shock, while strategizing the directional trade-off in different food security pillars. As a result, this model

tests the propositions without giving a simple and general statement that food marketing functions merely as a key component in ensuring food security.

The fundamental of food marketing strategy is structured around food security pillars, highlight the trade-offs of wartime interventions. The specific responses against each food security pillar, highlighting which pillars are protected and which are compromised by the disruption response were summarized in Table 3.

Table 3
Food Marketing Strategy as a Transmission Mechanism Between Geopolitical Disruption and Food Security Pillars

Marketing strategy	Typical disruption response	Pillar(s) protected	Pillar(s) at risk / displaced
Product (formulation, packaging, quality)	Substitute scarce supplies; reduce packing size; simplify product ranges	Availability; short-run access	Utilization (nutrition / safety / quality); agency (transparency)
Price	Shift operational costs; tiered or protective pricing of staples; promotion on substitutes	Firm business continuity; availability	Access (affordability), especially for low-income consumers
Place (channel, inventory)	Re-route logistics; build buffer stock; expand e-commerce and local sourcing	Availability; stability	Access (affordability); smaller players excluded
Promotion / communication	Reassurance messaging; reformulation disclosure; purpose and provenance claims	Stability (confidence); agency (transparency)	Availability; access (affordability), triggered by panic buying
Sourcing / supplier relationship	Diversify suppliers; nearshore; strategic reserves; collaboration	Stability; availability	Access (affordability); utilization (quality variation)

The relationships showed two distinct patterns, (i) the translation of market adaptation risks into accessibility (affordability) or utilization is virtually absolute as the adaptations safeguard the availability; (ii) transfer of operational and financial burdens to consumers to maintain firm business continuity, conversely, compromise consumer access. Shrinkflation happens while maintaining a stable headline price and preserving perceived access. During disruption, strategic marketing decision is essentially a practice in determining which food security pillar to prioritize as the pillars often come into direct conflict.

These effects are distributed in a regressive manner. Lower-income individuals or households allocate large portion of income to food and commodity that highly sensitive to grain and oil shocks, experiencing trade-offs between rising living cost and deteriorating product quality. In contrast, high-income individuals or households often having more food alternatives with premium quality as they possess the flexibility to absorb high cost. Therefore, vulnerable individuals face a limited choices either accept low nutritional value and poor-quality products, or pay more for premium quality, or give up the essential items entirely. This

framework highlighted that socioeconomic inequality by identifying vulnerable groups most impacted by the war-induced food insecurity.

Gaps, Contradictions and Recurring Patterns

A Recurring Pattern: The Resilience–Equity Trade-Off

Policies aim at create commercial resilience such as imposing costs on consumers, diversifying products into premium brands, or rationalizing the product range to prioritize products with highest profit margins are likely conflict with societal food security. These policies and market-driven objectives are intertwined in action but remain distinct in their core priorities. The conflict was framed in Proposition 1 and assessed through disruption case studies. A parallel tension between commercial resilience and food security occurred at state level in Libya and Syria, where pricing mechanisms and government food distribution system functioned similarly to the corporate pricing mechanism detailed later in the study. The acute disruption of food security and basic livelihood sustainability threaten the structural stability of these countries.

A Contradiction: Transparency Versus Reassurance

According to situational crisis communication theory, stakeholders tend to attribute responsibility to the involved parties when crises happen (Jong, 2025). Different crisis response strategies used to align with the nature of crisis significantly affects stakeholders' emotions, reputational evaluations, and word-of-mouth towards organizations. The judgements are made by analyzing covariation information, specifically through consensus, distinctiveness, and consistency information (Schwarz & Diers-Lawson, 2024). Most of the companies implement shrinkflation where the product dimension or volume is downsizing while remain the retail price, without informing consumers. Product modification may boost short-term sales figures, but it may risk compromise consumer confidence. Ultimately, consumers prioritize affordable price products. Therefore, stealthy product modifications are unsustainable for food business firms both in business-wise and ethical standpoint (Euromonitor International, 2023). This was framed in Proposition 2 and evaluated through Egypt and Libya cases. In both Egypt and Libya, government subsidies temporarily safeguarded citizens from market instability by suppressing key commodity prices. However, in 2011, Egypt invested around 8% of its Gross Domestic Product (GDP) on food and fuel subsidies coinciding with approximately 30% increase in grain prices (Lagi et al., 2011). These observations suggested that the transparency and reassurance strategies extend well beyond commercial businesses. Whenever an entity absorbs costs to ensure price stability, it may introduce severe systemic risks if those interventions cannot be sustained.

A Gap: The Missing Micro-To-Macro Link

Limited literature linked the marketing strategy to food security outcomes. Operation research and development economics often fail to incorporate consumer-side marketing decision in their analytical frameworks. Scholars emphasized that measurement challenges occur when food security indicators lack the granularity required to highlight nutrition drift and hidden costs associated with unreported nutritional deterioration.

A Further Pattern: Digitalization as a Double-Edged Capability

Through adoption of data-driven forecasting and advanced sensing technologies, modern retailers and e-commerce are increasingly prepared themselves in facing the disruptions.

However, the connection between digital capacity and food security is complex, as the impact depends highly on how these digital technologies are applied as outlined in Proposition 4. A few geopolitical disruptions illustrated this dynamic. During Red Sea disruption, companies with diversified sourcing and digitalized supply chain systems remained relatively undisrupted (Coyne, 2024). The lacked of e-commerce and digital technologies among both governments and businesses during the crises in Libya and Syria in 2011 primarily driven by governments, state institutions, and multilateral bodies severely restricted households and leaving consumers with limited choices to with the market instability.

Case Insights

Product Substitution / Reformulation

The 2011 Libyan war illustrated that product-level adaptation preceded ingredient substitution. Wheat, cooking oil, maize, and milk amounting to approximately 80% of Libyan's nutritional needs. Libya was highly dependent on food import, and consequently, neither domestic private sectors nor government having the flexibility to substitute the scarce ingredients. Before Syrian war and food crisis occurrence, they maintained self-sufficiency in essential food commodities, specifically, cereal grains. Both disruptions happened in Libya and Syria fundamentally shifted their food production and supply stability.

As outlined by Ben Hassen & El Bilali (2022), wheat shipments suspended by Ukraine, Ukraine labors abandoned agricultural fields due to conscription and population displacement, limited supply of fertilizer for agricultural activity, and crop harvesting remained uncertain were direct impacts of Russia-Ukraine war. The war also indirectly led to increase in global food prices and panic buying of food across different regions. Jagtap et al. (2022) discussed its repercussions across six pillars of the food value chain, and suggested that exchange of ingredients, diversify the supply, and technological innovation in food industry could be the ways to solve the repercussions. The large amount sourcing of sunflower oil from Black Sea region was switched to palm oil, rapeseed or soya bean by European food manufacturers including OLW (Sweden), Iceland (UK), and Walkers (owned by PepsiCo) (Euromonitor International, 2023; Southey, 2022).

The Red Sea and the Bab al-Mandeb Strait crisis in 2023 severely disrupted global supply chain. Food company such as Danone rerouted their shipping and adopted other mitigation strategies to cushion the disruptions caused by the shipping crisis; conversely, other food and beverage companies with localized manufacturing capabilities experienced minimal impacts (Coyne, 2024). Following the global outbreak of hostilities between Iran and the United States in late Feb 2026, approximately 20-45% of global traded fertilizer had been disrupted and the price increased by more than 40% in Southeast Asia, due to the closure and restriction of Strait of Hormuz.

The industry's responses showed dynamic capabilities to safeguard supply availability, however, reallocation posed risks on food utilization and agency. Mass product reformulation raised nutritional and health concerns (Fanzo et al., 2023). Furthermore, the temporary labelling prevented consumers' ability to make fully informed purchase decisions. The lack of transparency reduced informational agency, a pillar of food security.

Price and Packing: Cost Pass-through And Shrinkflation

Throughout 2022, multinational food companies such as Coca-Cola, PepsiCo, and Nestlé increased their list prices to ensure corporate profit margin against macroeconomic hurdles. This pricing strategy was a response to global supply disruption that caused increasing in costs of critical supplies such as oil, energy, fertilizers, and agricultural commodities like grain (Euromonitor International, 2023). Besides that, shrinkflation had been observed predominantly practiced within Fast-Moving Consumer Goods (FMCG) sectors, notably snack foods, coffee products, and paper products (United States Government Accountability Office, 2025). The measures taken by the firms preserved the company's survival, but affected the food access, particularly for lower-income individuals. Consequently, they switched choices from original brands by buying into private label products and the sales figures of the products surged throughout 2023 (Euromonitor International, 2023). This damage demonstrated that a conflict between maintaining transparency and providing reassurance was not merely ethical dilemma, but a business concern.

Analyst predicted that Red Sea crisis exacerbated global food price inflation by 0.18-0.23% in year 2024-2025, whereas Indian government suggested a rise in food export prices at 15-20% in response to supply chain disruption caused by the crisis (Coyne, 2024; Power, 2024). The shutdown of the Strait of Hormuz also triggered a chain reaction that jointly influenced the prices of crude oil and LNG.

Place: Distribution, Logistics and Reserves

During Libyan civil war, the country ceased to distribute subsidized wheat, flour and cooking oil across the country for over a decade (Lyddon, 2022). As Syrian war intensified from 2012 onwards, the irrigation systems and storage facilities were severely damaged, and estimated 3.5 million tons grain were stored in national silos located within contested areas. Consequently, agricultural infrastructure was set up to align with the military objective to ensure the control and distribution of food resources (Carnegie Endowment for International Peace, 2015).

Russia-Ukraine war, The Black Sea Grain Initiative and the European Union's (EU) Solidarity Lanes successfully restored and re-routed grain trade routes, resulting in distribution of approximately 31.6 million tons of grain to dozens of countries worldwide (Devadoss & Ridley, 2024) India accounts for more than 40% of rice export. The US-Israeli war with Iran disrupted the premium basmati rice export from India to Gulf markets including Iran, Iraq, Qatar, and Saudi Arabia. The delay in shipments caused both exporters and buyers hesitating to continue the new transactions (Jadhav, 2026).

These situations demonstrated that distribution and logistics primarily determine the food availability and stability. To ensure the operational continuity, firms should treat single-corridor transit strategy as a significant liability and strengthen supply chain resilience by diversifying transit corridors and establish buffer inventory.

Promotion: Reputation, Reassurance and Policy Signaling

Failure of provision of basic needs like food during Arab Spring and Libyan civil war demonstrated a loss of public trust and state collapse, this dynamic also observed in Strait of Hormuz situation.

During the Russia-Ukraine war, major Western fast-food chains performed reputational positioning by existing and sold their Russian businesses to local entities, which subsequently rebranded under domestic trade names. By existing the local market, the firms enact values-based positioning designed to satisfy the consumers and stakeholders in their home markets. The McDonald's case clearly demonstrated this point. In 2022, McDonald's Corporation announced it exit and sell the business in Russia due to the war created a humanitarian crisis and chaotic market environment, making the continued ownership inconsistent with company values. They arranged to sell their properties to local buyer, and the restaurants were stripped away the company name, logo, branding, and menu (McDonald's, 2022). Brand reputation shapes dep emotional and psychological attachments between consumers and organization, represents a cumulative, long-term brand's perceived value, reflecting in brand's quality, reliability, innovation, and usability. The positive brand reputation fosters organizational resilience during market instability and secures a sustainable competitive advantage compared to their competitors across both domestic and international markets, ultimately improve financial performance (Açikgöz et al., 2024; Özhan et al., 2025).

During Red Sea crisis, companies adopted a low-profile stance by largely understated the operational disruption and avoided the value-oriented messages to public (Coyne, 2024). In contrast, following the closure of Strait of Hormuz, international organizations such as FAO, World Bank, the Arab Monetary Fund (AMF) announced formal warnings highlighting the crisis and called for coordinated food security initiatives in the Arab nations similar to 2011 Libya and Syria crises (CEDARE, 2026).

Cross-Case Synthesis

The comparison between the five crisis cases were summarized in Table 4 below, to provide insights into how firms' communication was linked to the nature of crises, against the marketing-mix and FAO-pillar lens used throughout, therefore testing Proposition 3.

Table 4

Cross-Case Comparison of Five Geopolitical Disruptions Against the Marketing-Mix/Food Security-Pillar Model

Geopolitical disruption	Geographical scale	Severity	Primary lever engaged (marketing used)	Pillar protected	Pillar displaced / at risk	Most exposed population
Arab Spring / Libyan Civil War (2011) Socio-political legitimacy shock	Regional, across North Africa and the Middle East (MENA) (Veninga & Ihle, 2018).	Temporary breakdown of institutional governance resulted in prices instability, commodity shortages, unemployment, high transaction	Price (subsidy strain); state-led place/distribution	Short-run affordability, via subsidy	Access (subsidy collapse); stability (state legitimacy)	Urban poor in subsidy-dependent, import-heavy states (e.g. Libya, Egypt)

Geopolitical disruption	Geographical scale	Severity	Primary lever engaged (marketing used)	Pillar protected	Pillar displaced / at risk	Most exposed population
		costs, agricultural resources and storage facilities destroyed, and food distribution networks disrupted. Ultimately, the food market stock fluctuation and both the traders and consumers faced high uncertainty (Veninga & Ihle, 2018).				
Syrian Civil War (2011-2024) Climate-compounded civil conflict	Primarily a national scale. Began with localized anti-government protests, subsequently spread across the country	By 2024, the wheat production was only covered 65% of national consumption needs. Food insecurity severely impacted the public health, economic productivity, and social instability. Syria's Human Development Index had fallen to 157th, compared to 115th in 2010 (United Nations Development Programme, 2025).	Product (production collapse); place (aid substitution)	Firm or state continuity not applicable; humanitarian continuity	Availability; stability (multi-year production collapse)	Rural farming households; internally displaced and refugee populations

Geopolitical disruption	Geographical scale	Severity	Primary lever engaged (marketing used)	Pillar protected	Pillar displaced / at risk	Most exposed population
Russia–Ukraine (2022-ongoing) Production/export shock	Disruption impact: global in scale Military operation: interstate, heavily concentrated Eastern Ukraine (BBC, 2026)	The interstate war led to a global agricultural commodities and fertilizer markets fluctuation, resulted in global economic shock. Production capacity of Ukraine also impacted (OECD, 2023).	Product reformulation; price pass-through	Availability (short run)	Utilisation (nutrition); agency (labelling lag)	Low-income consumers of staple oils/snacks in importing countries
Red Sea (2023 - 2025) Logistics / chokepoint shock	Disruption impact: global in scale. Military operation: regional and global (Liu et al., 2026).	Disruption of maritime transportation led to port congestion and rerouting, severely impacted logistical services and operational activities (Liu et al., 2026).	Place (re-routing); sourcing diversification	Availability; stability	Stability; access for fragile importers (e.g. Sudan)	Import-dependent and fragile states (e.g. Sudan, MENA)
Strait of Hormuz (2026 - ongoing) Energy / input shock	Disruption impact: global in scale. Military operation: global, including US, Israel, and Iran	Disruption of maritime transportation led to energy and oil shortages, resulting in higher energy prices and constraint on global trade.	Sourcing/reserves; institutional promotion	Firm/commercial continuity	Access (compounding fertiliser + energy + freight costs)	MENA, East Africa, South/Southeast Asian farmers and consumers

Discussion and Implications

Implications for Businesses

As discussed in previous sections, geopolitical disruption does not happen as an isolated or localized event, rather, they operate through a systemic network on interdependent vulnerabilities and quickly trigger a domino effect across logistic transport, supply chain, global trade, and food security of population. Panic-buying behavior always observed in consumers during supply chain disruptions, subsequently lead to demand fluctuation that worsen the overall shortage. Mitigation strategies such as limiting the purchase quantity per customer, openly sharing information, and adjusting prices often implemented by businesses and retailers to reduce the irrational buying (Zheng et al., 2025). However, these actions are merely reactive solutions. Instead, the businesses should build a proactive risk assessment including risk sources identification, consequences assessment, and crisis response plan should be developed by businesses during peacetime. It supports the businesses as a real-time detection tool and against environmental turbulence. In the context of supply chain management, both adaptability and transparency assist the businesses recovering from disruption when conventional planning is insufficient. In this framework, transparency consists of two components, (i) visibility, an ability to capture and gather accurate data across all supply chain entities; (ii) disclosure, information share between internal and external stakeholders, and adjust according to the needs and expectations of both parties (Hadid et al., 2026).

Implications for Policymakers

The optimal policies to respond to the disruptions are dependent on the shock to the food supply. If, for instance, the social-political legitimacy of a country becomes undermined, then to rebuild it subsides would have to be done slowly and steadily, with a strong eye on monitoring food prices before reaching the critical point (Lagi et al., 2011). Conflicts that emerge due to climate change require agricultural support to be positioned within a country prior to any climate-related drought conflicts. When food production is disrupted, this means that it is important to diversify sources and have a focus on establishing food reserves for the country. The logistics fragility, in turn, necessitates the development of alternative routes and contingency measures by countries on their ports.

Given that a considerable portion of consumers remain unaware the mechanism of shrinkflation, transparency initiatives and ethical guidelines should be established to balance corporate profitability and consumer welfare. While relying solely on rules and regulations to safeguard the mechanism are insufficient, providing consumers with tools to aware on the market changes during wartimes and make informed decision before any purchasing transform their position from passive to active buyers.

During supply chain disruption, food insecure individual often prioritizes calories quantity rather than food quality and nutritional value. In this case, local food systems assist in shaping the dietary requirements and public health outcomes (Garrity et al., 2024). Community-supported agriculture (CSA), one of the local food system models has increasingly used as a marketing strategy. However, depending on the consumer awareness and how actively their engagement in this market model, it could potentially impact the diversification of other local market channels. To broaden the public participation, it is essential to build stakeholder networks and invest consumer education (Rossi & Woods, 2024).

Implications for Consumers

To navigate war-induced market disruption, consumers are required to develop the pricing literacy against the hidden corporate strategies, thereby safeguard their purchasing ability. Socioeconomic disparities unfairly pass the operational and financial burdens from firms onto vulnerable populations.

Global food systems are characterized by complex and interconnected supply chains, allow the individuals access to the available food sources across different countries. Geopolitical disruptions in food export nations cause a long-term system vulnerability subsequently food scarcity (Ching-Pong Poo et al., 2024). Consumer's awareness towards the importance of local food systems can be enhanced through effective marketing strategies such as the promotion of unique value propositions of local food. This is motivating the consumers to support local agricultures and purchase the local food (Adewojo, 2025). As a result, it builds a strong structural resilience by reducing heavy reliance on food import, long-distance supply chains, and embedding food distribution socially and ecologically that can withstand systemic shocks (Oliveira & Lucas, 2026).

Conclusion

This review reconceptualizes strategic food marketing as a dynamic capability that not only enhances firm resilience but also influences societal food security during geopolitical disruptions. By integrating marketing theory with the FAO food security framework and supply chain resilience literature, the study establishes a new interdisciplinary perspective for international agribusiness research.

Five geopolitical disruptions including Arab Spring and Libyan Civil war, the Syrian war, Russia-Ukraine war, the Red Sea crisis, and the Strait of Hormuz crisis in 2026 had been discussed and analyzed in this review. Four insights can be gleaned from the analyses: (i) Geopolitical shocks disrupt food systems in several different, but interrelated mechanisms. These include the disruption of state subsidy regimes, climate change-induced agricultural production declines, maritime logistical constraints, and energy supply shortages. To respond to these disruptions, both states and firms tend to employ comparable strategies; (ii) As outlined in Propositions 1-4, food insecurity operates as both a primary catalyst and consequence for geopolitical disruption. Specific mitigation strategies implemented by relevant stakeholders and their subsequent outcomes are depend upon the distinct nature of each shock; (iii) The adverse impacts of geopolitical disruptions on food security are unequal. Vulnerable groups including low-income individuals and households, aid-dependent states, and food import-dependent states faced the most severe disruptions across the analyzed geopolitical conflicts; and (iv) The concept of “resilience” must be expanded beyond the state stability and firms’ operational continuity. The comprehensive resilience framework should include equity and nutrition outcomes.

There are extensive studies and literatures in reviewing and discussing the Arab Spring and Libyan Civil war, the Syrian war, Russia-Ukraine war, and the Red Sea crisis. However, during the writing of this review, the 2026 Strait of Hormuz case study has not yet undergone peer review and less peer-reviewed resources could be used for the review synthesis, its findings must be interpreted with caution. To propose future direction, the framework should be

extended to other cross-countries comparison and to evaluate the generalizability of these propositions.

To conclude, food marketing has evolved into a mechanism for safeguarding food security in the turbulent times since 2011. To ensure all individual gain equitable distribution of benefits from food marketing strategies, corporate, governments and regulatory authorities, and consumers should proactively and deliberately grapple with the tensions between systemic resilience and social equity.

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