Gallagher

How Compounding Risks Are Reshaping Food and Agriculture Supply Chains

Key Insights

93% of food and agriculture companies experienced supply chain losses in the past year. Business leaders identify the rising costs of materials, trade disputes and workforce-related challenges as top loss drivers.

As disruption becomes structural, many organizations are adopting just-in-case approaches. Stockpiling and nearshoring are gaining traction, though both introduce new concentrations of risk that need to be actively managed.

Simultaneity intensifies impact. Climate events, labor shortages, trade barriers and cyber incidents are increasingly occurring at the same time, converging on already stressed supply chains and amplifying both operational disruption and financial loss.

For many US food and agriculture business leaders, what was already a difficult operating environment has become even more complex as new geopolitical pressures ripple through global supply chains. Rising material costs, cyberthreats, sanctions and export controls, natural disasters and climate volatility remain among the most significant sources of disruption; increasingly, they're occurring at the same time.

Recent events in the Middle East illustrate how these risks converge. As seen during the prolonged disruption of Black Sea grain exports in 2024 and climate-driven bottlenecks at trade routes such as the Panama Canal, pressure at a single chokepoint can ripple across the entire food system, tightening supply, raising costs and testing operations continuity.

In this more volatile landscape, the challenge for food and agriculture leaders is to understand how interconnected risks compound, rather than just responding to individual shocks. Building resilience, then, requires a more integrated and strategic view, enabling organizations to anticipate disruptions, optimize decision-making and align risk management with their actual operations.

Geopolitical tensions cause price volatility in fertilizers

The escalation of armed conflict in the Middle East has brought renewed attention to the Strait of Hormuz, the channel linking the Persian Gulf to global markets. Through this passage, roughly one-fifth of the world's natural gas exports, one-third of global crude oil exports and a significant share of the world's exportable fertilizers pass through.

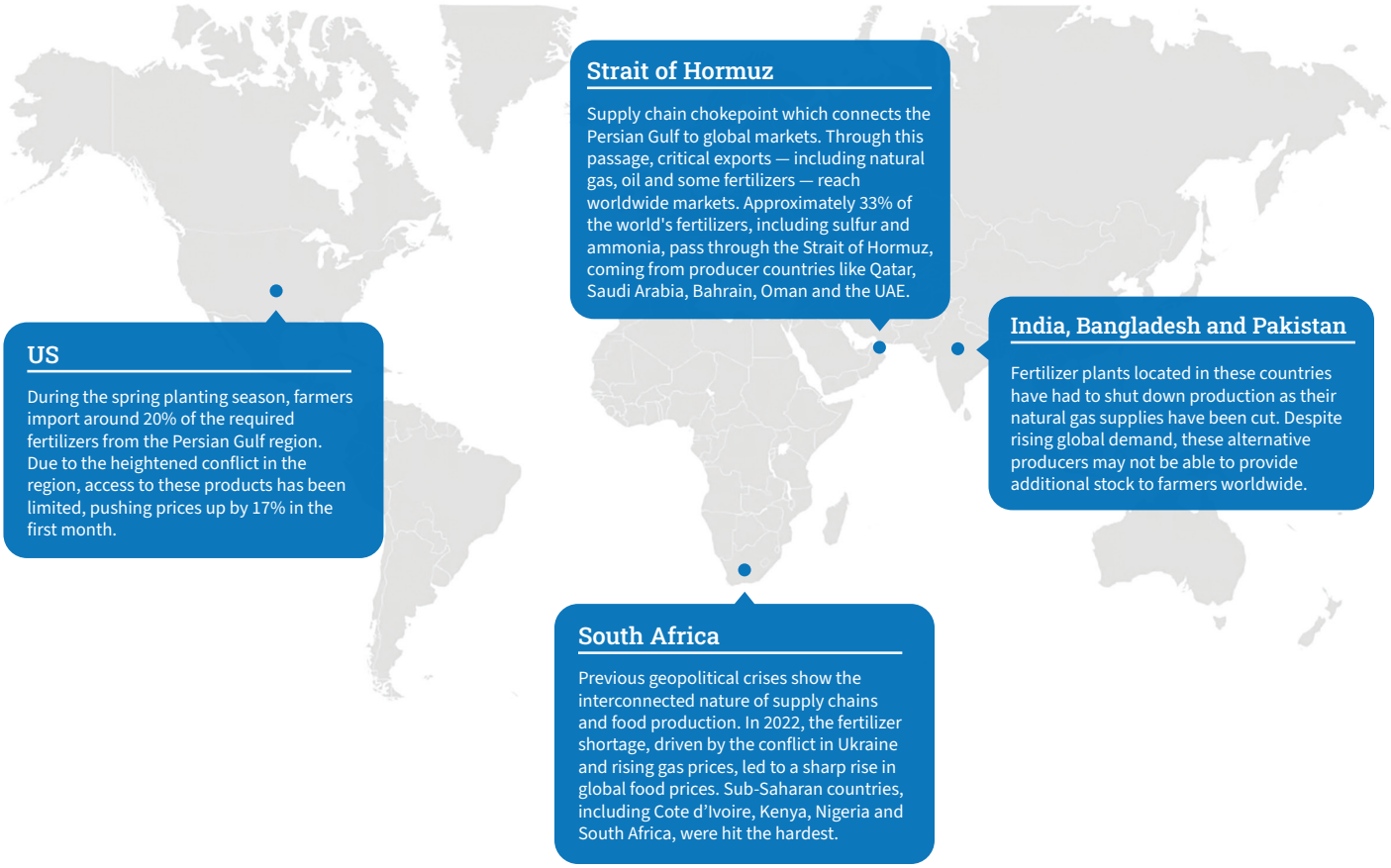
Its recent closure has disrupted the movement of critical inputs at a time when agricultural margins were already under strain — and just ahead of the Northern Hemisphere's spring planting season.[1]

For US agriculture, the impact has been particularly acute. The Gulf region is a dominant source of urea, the most widely used nitrogen fertilizer and one of farmers' most volatile input costs. Experts estimate that up to 20% of these fertilizers may be sourced from a single production facility in Qatar.[2] Since the conflict intensified in early March 2026, prices have surged, with increases of up to 25% reported in the benchmark US market of New Orleans.[3]

Rising fertilizer prices increase the cost of production for farmers, often forcing difficult trade-offs: using fewer inputs or shifting to less resource-intensive crops. The result is frequently lower yields for staple crops such as corn, soybeans and wheat.

These impacts tend to surface months later, as smaller harvests move through the supply chain. Food manufacturers then face higher ingredient costs, while retailers contend with rising procurement prices and more price-sensitive consumers.

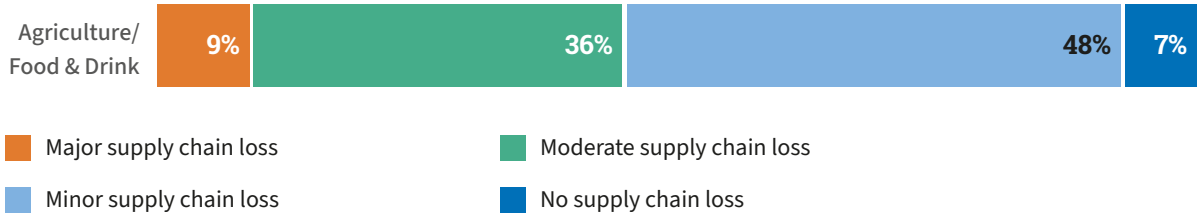
How Supply Chain Chokepoints Amplify Risk Across Food Supply Chains



When Disruption Becomes the Baseline:
Key risks affecting the industry

Overall, 93% of food and agriculture companies experienced supply chain losses in the past year, ranging from direct financial impacts and operational disruptions to missed delivery windows and reputational damage.

Industry supply chain loss in the last year



Source: Gallagher Redrawing Global Supply Chains Survey

What makes these losses so widespread is the way multiple pressures act on the same supply chain at the same time. A tariff increase that raises fertilizer costs hits harder when a climate event has already reduced yields. A labor shortage at harvest compounds when port congestion delays the shipments that were supposed to compensate for lower domestic output. A cyber attack on a distributor causes far more damage when inventory buffers are already thin from stockpiling delays upstream.

Infrastructure Pressure on Time-Sensitive Chains

Food and agriculture supply chains are time-critical and depend on strict conditions. The movement of crops, inputs and finished products relies on tightly coordinated transportation networks, cold chain capacity and reliable port access, often within narrow windows tied to harvest cycles, planting seasons and product shelf life.

When extreme weather, aging infrastructure or congestion at critical trade routes cause delays, consequences can escalate quickly. Perishable goods are more likely to spoil, export commitments can be missed and disruptions can ripple across regional and global food markets.

> We have noted steep increases in the cost of fertilizers, pesticides, herbicides and equipment parts, driving concern across the sector and reinforcing the value of strong maintenance programs to manage rising operational pressure, explains Gina Ekstam, Director of Operations, Food and Agriculture at Gallagher.

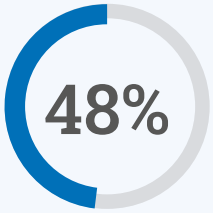
Workforce Risks in a Labor-Intensive Industry

Labor availability is another defining vulnerability. Heavy reliance on seasonal and migrant labor, including H-2A visa workers in the US, exposes businesses to workforce shortages, regulatory shifts and rising compliance costs at critical points in the production cycle.

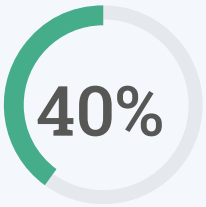
As many agricultural activities are tightly tied to planting, harvesting and processing windows, even short-term labor disruptions can have large consequences. Reduced yields, delays and bottlenecks can affect the supply chain.

While labor risks appear less immediate than climate or geopolitical threats, business leaders are increasingly understanding workforce availability and cost as key factors shaping supply chain decision-making, showing how human capital constraints are tied to long-term resilience planning.

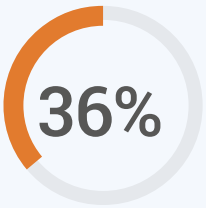
Top people-related risks identified by agriculture, food and drink business leaders



Labor costs



Regulatory compliance related to employment



Worker availability

Source: Gallagher Redrawing Global Supply Chains Survey

Geopolitics and Trade

Tariffs, sanctions and export controls have already been driving up the cost of agricultural inputs and finished products, raising baseline expenses for producers and processors even in a period of relative supply stability.

Uncertainty stemming from last year's trade environment has carried into 2026, complicating sourcing decisions and increasing cost volatility. For food and agriculture companies operating across borders, limited alternative suppliers or shipping routes amplify the impact, leaving businesses exposed when new trade tensions escalate or chokepoints close.

Day-to-day planning now considers geopolitical risk as a main factor, influencing where companies source their materials, how much risk they can absorb and how resilient operations can become.

Climate Risks Threaten Food Security

For food and agriculture businesses, climate volatility acts as a force multiplier, compressing production windows, increasing variability in output and magnifying downstream disruption across supply chains in processing, storage and distribution.

Droughts, flooding and extreme weather events are increasingly disrupting crop yields, harvesting timelines and transportation reliability, often across multiple regions at the same time.

A 2025 global analysis found that rising temperatures are reducing productivity for some of the key crops for food production, including corn, wheat and soybeans, even as farmers invest and change production practices to adapt. This change is contributing to higher food prices and adding pressure to food availability and overall security worldwide.

Cyber Risks with Physical Impact

At the same time, cyber risk is emerging as a growing — yet often underestimated — exposure. Digital systems underpin inventory management, pricing and logistics, meaning cyber incidents can halt operations at critical moments.

"Traditionally, the agriculture industry has been more focused on operational technology and not that much on the information technology (IT) side. This is changing, though slowly," adds Gina Ekstam. "When a cyber attack happens, it's not just the people in the office who are impacted. There are vendors who need to be paid, employees whose salaries need to be processed, products that cannot be measured, and sensitive data that gets compromised. The impact can truly shut down a whole organization."

In June 2025, for example, one of the largest distributors of organic foods in the US and a key supplier to major grocery retailers suffered a cyber attack that forced the company to keep core IT systems offline across its network. This disruption halted distribution activities nationwide and led to delayed and missed deliveries, manual workarounds and product spoilage. The company estimated lost sales of up to USD400 million tied directly to the incident.

This shutdown had ripple effects across the food supply chain, causing shortages in grocery stores and delayed restocking for retailers and manufacturers dependent on its network. Despite production being maintained throughout the whole incident, food availability was interrupted, and the supply chain became a contingent threat to a network of businesses.

Resilience Strategies with Hidden Challenges

Across the sector, long-standing just-in-time models are giving way to just-in-case approaches that prioritize flexibility and continuity. Strategies such as stockpiling, supplier diversification and improved visibility across supply tiers are helping businesses navigate disruption more effectively.

57%

Agriculture organizations are strongly considering stockpiling goods.

50%

Food and drink organizations include stockpiling among their resilience strategies.

Source: Gallagher Redrawing Global Supply Chains Survey

These strategies, however, come with trade-offs. Stockpiling improves supply continuity but can also concentrate significant value in a limited number of storage locations, increasing exposure in these single points of failure.

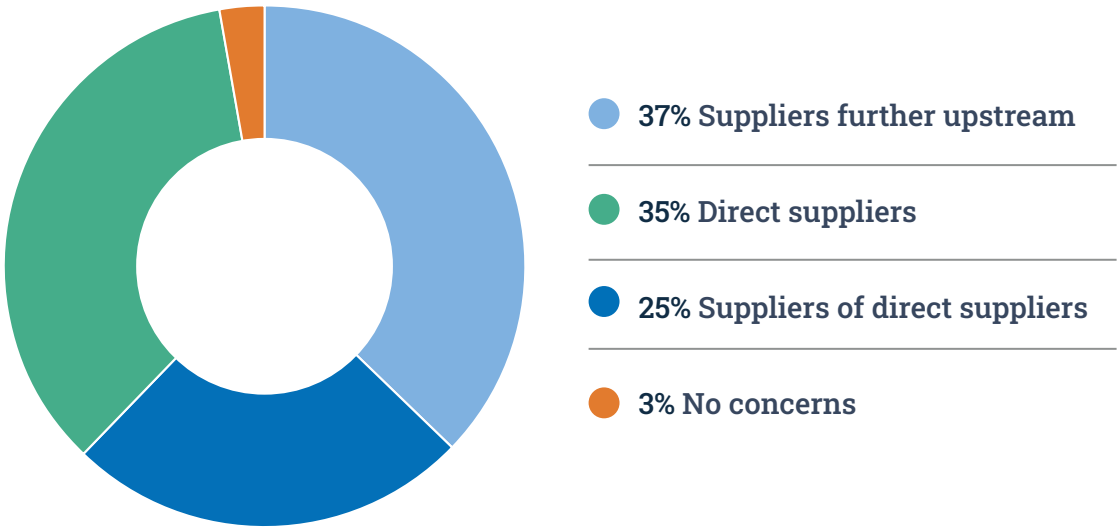
Likewise, when done simultaneously by many companies, higher demand can tighten supply and amplify price volatility, the same pressures resilience efforts aim to reduce.

As a result, the focus is shifting towards how to manage inventory more strategically. "Businesses are expanding and diversifying their storage," says Gina Ekstam. "Investments in climate-controlled and weather-resistant facilities help extend shelf life, reduce pressure to sell immediately, and improve returns by using capacity more efficiently."

Supplier diversification is another core resilience strategy. Organizations are reassessing reliance on single suppliers or regions and exploring nearshoring and regional partnerships to reduce concentration risk.

Resilience also depends on visibility and coordination. Many organizations report limited insight into supplier tiers, reinforcing the need for stronger due diligence, better data sharing and robust business-continuity planning.

Agriculture, food and drink organizations report concerns about their suppliers



Source: Gallagher Redrawing Global Supply Chains Survey

Adapting Risk Coverage

As supply-chain pressures intensify, gaps in risk coverage are becoming more visible. While most food and agriculture companies maintain some level of insurance, 34% report that limited insurance capacity or a lack of suitable products is now a key constraint, highlighting a growing disconnect between how supply chains operate and how they're insured.

This challenge is emerging as operations evolve rapidly. Regulatory requirements, natural disaster exposure, trade uncertainty and workforce pressures are all influencing where companies invest, store inventory and source inputs, often faster than traditional insurance structures can adapt.

In response, organizations are reassessing their risk-transfer strategies. Demand is increasing for more flexible solutions, including supply-chain-specific coverage extensions, parametric insurance and captives. At the same time, better use of data, modeling and scenario analysis is helping align insurance strategy with supply-chain design, supporting resilience that is built in rather than bolted on.

Rethinking insurance as stockholding grows

Consider a cooperative that once assumed its inventory would be sold within 90 days. Today, that assumption no longer holds; products may remain in storage for six to nine months, exposed to new risks as ownership, location and storage conditions change over time.

As inventory lingers, traditional insurance expectations break down. Coverage needs to extend beyond fixed locations and short timeframes, following stock as it moves between warehouses, ports, trains and vessels. The challenge is finding a way to insure longer holding periods without destabilizing an organization's broader insurance program.

The solution lies in flexible approaches that align coverage with how inventory is actually held and handled, protecting value across extended timelines while supporting operational resilience.

The Road Ahead in a Volatile Future

Food and agriculture supply chains are unlikely to return to an era of predictability. Ongoing trade fragmentation is driving shifts toward regionalization, alternative import markets and, in some cases, renewed focus on domestic production, reshaping how goods move and where risk concentrates.

The implications are already clear. Nearly half of food and drink businesses expect geopolitical risk to affect operations, while rising material costs remain a concern for 94% of agriculture organizations.

At the same time, consumer expectations continue to evolve. Demand for fresh, sustainably sourced and traceable food is rising, adding pressure to supply chains already balancing resilience with efficiency. Sustainability considerations are also influencing packaging decisions, as more consumers favor recyclable materials and move away from single-use plastics, one additional challenge for sourcing and logistics.

Overlaying these trends is climate change and together, these forces signal a clear shift: resilience is no longer a response to discrete shocks, but a strategic capability that shapes decisions across operations, procurement, risk and investment.

Why Strategic Partnerships Matter Now

The organizations best positioned for what comes next are treating supply chain strategy, insurance and financial planning as a single integrated discipline.

This is where partnership matters. As Glenn Drees, area Managing Director at Gallagher explains: "The risks that affect the food and agriculture business today don't arrive one at a time. Input costs, trade disruptions and extreme weather can all hit the same operation in the same season. Our role is to help clients see those connections early, structure coverage that reflects how their supply chains actually work now and ensure that when multiple pressures converge, they're not discovering gaps in the middle of a crisis."

RESOURCES

[1]Parum, Faith. "Middle East Tensions Raise Spring Planting Concerns," *American Farm Bureau Federation*, 9 Mar 2026.

[2]Munch, Daniel. "Middle East Tensions Threaten Global Farm Input Flows," *American Farm Bureau Federation*, 24 Jun 2025.

[3]Gordon, Noah, and Lucy Corthell. "The Other Global Crisis Stemming From the Strait of Hormuz's Blockage," *Carnegie Endowment for International Peace*, 12 Mar 2026.

[4]Garthwaite, Josie. "Climate Change Cuts Global Crop Yields, Even When Farmers Adapt," *Stanford Doerr School of Sustainability*, 18 Jun 2025.

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