

Looking back at 2024: how will global food supply evolve in 2025?



For many years, the food sector has faced profound challenges that demanded resilience and innovation; 2024 was no exception. Over the course of the year, businesses faced economic turbulence, heightened regulatory scrutiny and increasing sustainability expectations.

As we reflect on the last 12 months, industry leaders, Kimberly Coffin, Supply Chain Assurance Technical Director at LRQA and Christophe Boulais, Food Safety Auditor and Certification Manager at Danone – a world-leading food and beverage company – share their insights and perspectives on the lessons of 2024 and how they foresee the industry evolving in 2025. Their insights paint a compelling picture of a sector undergoing significant transformation, offering guidance on the work that lies ahead.

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2024 in review

When we think about the driving factors of change in the food sector in 2024, increasing costs, recalls, geopolitical tensions and ongoing climate change impact are at the fore, testing the resilience of the food and beverage sector.

With commodity prices surging to record highs, regulatory scrutiny intensifying and product recalls rising at an alarming rate, businesses were compelled to adapt at pace. Importantly, these challenges start to show the interconnected nature of food sector risks, where economic, environmental and technological pressures collide.

Rising costs

The rising cost of commodities is exerting pressure across the food supply chain, affecting everyone from producers to retailers and ultimately consumers. Reflecting on 2024, Kimberly Coffin described the year as dominated by cost pressures.

“Cost increase is an unavoidable reality for everyone in the food supply chain,”

she said, referencing the FAO Food Price Index, which reported a 5.3% year-on-year increase. Basic commodities like sugar, wheat and corn reached their highest price levels in nearly two decades, squeezing margins and forcing companies to reconsider pricing strategies (FAO). These surging costs are creating a ripple effect throughout the supply chain, highlighting concerns about not just food safety but also food security. “The fundamental baseline has increased dramatically,” Coffin remarked. “When the raw materials that underpin the entire food supply chain are at record highs, the pressure is felt at every level.”

Governments around the world are responding with increased scrutiny, questioning whether producers and retailers are unfairly inflating prices. Regulatory bodies in various countries have launched investigations into alleged price gouging, forcing retailers to justify their pricing practices. In Australia, for example, the Australian Competition and Consumer Commission (ACCC) is currently investigating two major retailers, examining whether their pricing strategies are fair or exploitative (ACCC).

This regulatory scrutiny adds another layer of complexity for the industry, who already face mounting input costs. “Producers and retailers are getting pressure from both ends,” Coffin explained. “On one side, you have the rising costs of raw materials. On the other, regulators are increasingly holding the supply chain accountable for how those costs are passed on to consumers, which bring additional financial burdens to businesses who must allocate resources to defend their practices.”

Recalls

Further exasperating financial and regulatory strains is the continued rise in product recalls, as early reports suggest that the upward trend is continuing. In the first quarter of 2024, the U.S. Food and Drug Administration (FDA) issued 46 food and beverage recalls in January alone, representing a 31% increase from the monthly average in the fourth quarter of 2023 (Sedgwick). “While improved detection systems mean we’re identifying risks faster, we’re still seeing increases in product recalls year-on-year, many of which are preventable. Whether it’s allergen mismanagement or new microbiological threats. One death, one recall, is still one too many,” Coffin commented.

The rise in recalls is not just a regulatory or operational challenge; it’s a human issue. Behind every statistic are individuals whose health and safety have been compromised. For Coffin, the solution lies in a return to basics. “We need to slow down, refocus and prioritise the measures that truly keep consumers safe,” she concluded.

But what is causing these rising costs and escalating recalls? One obvious factor is geopolitical tensions and the economic volatility that occurs as a result. Christophe Boulais of Danone highlighted how factors such as the ongoing Russia-Ukraine conflict are driving market instability, inflation and currency depreciation in some regions.

“These pressures have forced us to adapt quickly,” Boulais explained. “We’ve had to navigate price sensitivity by optimising our product portfolio and pricing strategies, while also embracing new channels like e-commerce and discounters to maintain market share.”

Financial pressures and supply chain disruptions are pushing businesses to pivot fast, often onboarding new suppliers and embedding new processes with unknown risks. While agility is vital for long-term success, it’s far from easy – and can come with a hefty price tag. For many, inflationary pressures in emerging markets have not only eroded purchasing power but also forced them to rethink how they deliver value without compromising on quality or accessibility.

Climate change disruptions

The final – and for many, the most obvious – challenge that will continue to dominate discussions in the food sector is climate change. Its effects are becoming increasingly evident in the assurance of a safe and secure global food supply. From the emergence of new microbiological pathogens to challenges in sourcing materials from traditional regions, the repercussions are broad and deeply felt.

A key concern is the need to adapt sourcing strategies by exploring alternative materials and locations as climate conditions shift. Additionally, there is growing recognition of the critical role transportation plays in maintaining food safety and security; extreme weather events and rising global temperatures are disrupting supply chains, raising questions about how to effectively and safely move food around the world. “Transportation is often overlooked in the conversation,” Coffin noted. “We can manage production beautifully and retail can excel in delivering to consumers, but if we can’t get food from one point to another safely, and sustainably, what is the point?”

While some answers to these challenges remain uncertain, it is very clear that businesses must evolve to meet the demands of a changing world.

The role of technology

Technology and innovation will play transformative roles in addressing the challenges facing the food sector and, while the sector has traditionally been slow to embrace digital transformation, there is growing recognition of its necessity. Both Coffin and Boulais emphasised the pivotal role of technology in addressing industry challenges. According to Coffin, the past few years have seen companies grappling with the challenge of doing too much too quickly, often without a clear focus on how technology can best support their goals. Looking ahead, two areas stand out for leveraging technological advancements:

1. Enhancing transparency

Transparency is becoming increasingly vital, particularly in the context of sustainability, recalls and traceability. Leveraging technology to gain real-time insight into the journey of materials – from their origin through production and into final products – is essential. “The only way we can truly achieve transparency across the supply chain is by integrating advanced technologies,” Coffin noted. Enhanced transparency ensures not only compliance but also builds trust with consumers, who are asking more and more questions about the origins of their food.

2. Improving risk management

Using technology to identify, mitigate and control risks across the supply chain, manufacturing processes and transportation networks is another area of focus. Technology provides deeper insights and foresight into potential vulnerabilities, enabling businesses to address risks proactively rather than reactively.

Boulais echoed the importance of digital transformation, highlighting how advances in precision fermentation (the use of controlled microbial processes to transform raw materials into desired products) and aseptic packaging (the practice of sterilising food products and their packaging separately and then combining them in a sterile environment) technologies have been transformative for Danone’s operations.

“These innovations are helping us enhance productivity while meeting evolving consumer demands for stable, high-quality products.”

To achieve these goals, the industry must progress through three key phases:

- **Phase one: Automation**
The journey begins with automation, driven by labour shortages and the need for consistency. By automating production and transportation processes, companies can reduce costs and variability while improving efficiency and reliability. Automation lays the foundation for more advanced digital transformations.
- **Phase two: Digitalisation**
Once businesses get automation right, the next step is how they start digitalising food safety and operational systems. Technologies such as IoT sensors and digital data capture tools can replace traditional paper-based systems, but can only be truly successful if the automation groundwork has been put in place correctly with the right level of human intelligence. This shift ultimately ensures cleaner, more reliable data that enables businesses to understand and remove inadvertent deviations from a food safety and a quality perspective.
- **Phase three: Leveraging AI for insight and foresight**
The final phase is harnessing the power of artificial intelligence (AI) to generate actionable insights from the data collected. “AI is the buzzword of the moment, but it can only deliver value if we’ve already nailed automation and digitalisation,” Coffin explained. Businesses must first understand their risks, the data they have gathered and the specific problems they aim to solve. Only then can AI help predict risks and provide the foresight needed for proactive risk management.

This journey highlights a key point: while some companies have advanced through automation and are now exploring digitalisation, it’s essential to establish a strong foundation before leaping to AI. “There’s no sense in jumping straight to AI if you’re working with poor-quality data or lack robust data capture systems,” Coffin remarked. Without clean, reliable data, the full potential of AI remains untapped and attempting to implement it prematurely could come at a cost.

Sustainability and compliance

Emerging legislation

Sustainability remains at the forefront of industry priorities, with new legislation like the EU Deforestation Regulation (EUDR) shaping the agenda for 2025 and beyond. Coffin highlighted the significant impact

of EUDR on companies operating within or trading with the EU, describing it as “a concrete piece of sustainability legislation with far-reaching implications for the food sector.”

The EUDR targets key commodities – cocoa, coffee, soy, palm oil, wood, rubber, and cattle and their derivatives – many of which are integral to food production. In compliance with EUDR, companies must trace these materials back to their origin, down to specific plots of land, in what Coffin termed “micro-transparency.” This requirement applies to retailers, manufacturers, brokers and agents alike, making transparency an essential, yet complex, challenge.

The compliance deadlines, now extended to 30 December 2025 for large companies, and 30 June 2026 for small and micro-enterprises, reflect the enormity of the task. “The extension demonstrates that this is not a simple process,” Coffin said. Despite the delay, significant challenges remain, particularly around collecting accurate, authentic data and balancing the high costs of compliance with consumer affordability. “There’s no question the intent of the legislation is spot on,” Coffin explained, “but the cost of implementing these measures could impact food prices, raising concerns about food accessibility.” She warned that while sustainability initiatives are crucial, the industry must ensure they don’t inadvertently drive issues of food insecurity.

Sustainability as a business strategy

Boulais emphasised the importance of sustainability as a business strategy, highlighting Danone’s regenerative agriculture programme – an initiative many other food producers and manufacturers will need to adopt in order to demonstrate real commitment to long-term sustainability at a farm level.

“Our goal is to reduce methane emissions from dairy farms by 30% by 2030 and source 30% of key ingredients directly from farms engaged in sustainable practices by 2025,”

he explained. In addition, Danone is focusing on decarbonising its supply chain and adopting lower-carbon packaging materials.

Looking to 2025, Coffin and Boulais agree that sustainability must evolve beyond compliance to become a fully integrated business strategy. “This isn’t just about compliance; it’s about futureproofing your business,” Boulais said. “Consumers and regulators are paying attention and the companies that lead in sustainability will also lead in market share,” echoed Coffin.

In addition to compliance with legislation like EUDR and the adoption of innovative sustainability practices like regenerative farming, two areas are set to dominate sustainability efforts in 2025:

1. Water management

The food sector is one of the largest consumers of water and are being increasingly scrutinised for their practices. Optimising water use and demonstrating positive water management actions will become a central focus, driven by both regulatory pressure and public demand for accountability.

2. Packaging innovation

Packaging optimisation will remain a key priority as companies explore new and innovative ways to reduce unnecessary packaging while maintaining product safety. Efforts to strip out non-essential materials and adopt smarter, more sustainable packaging solutions will continue to evolve.

As the food sector navigates these challenges, the extension of EUDR deadlines highlights the complexity of achieving enhanced supply chain transparency. While the intent is clear and necessary, Coffin emphasised the need for balance: “We’re moving at warp speed, but embedding process changes requires thoughtful execution to ensure that accessibility and affordability aren’t compromised.”

With a focus on water management, packaging innovation and regenerative farming, alongside meeting evolving legislative requirements, 2025 will be a pivotal year for embedding sustainability into the core of the food sector’s operations.

The future of safe food supply

The food sector faces an increasingly complex and unpredictable landscape. Both Coffin and Boulais have identified critical trends that will shape the sector in 2025:

1. Fresh produce risk and regulatory shifts

Coffin predicted that whole, fresh produce – traditionally considered low-risk – could become a focal point for regulators due to its growing link to recalls caused by pathogenic contamination. “The frequency of recalls shows that agricultural practices need closer scrutiny,” Coffin said. “This isn’t just about marketing regenerative agriculture; it’s about fundamentally improving soil and water management at the source.” Regulatory changes in countries like the U.S., U.K. and Australia are also driving a re-evaluation of food safety frameworks, with increased attention on transparency, sustainability and human health. These changes are expected to address issues such as ultra-processed foods and high levels of sugar, salt and fat in consumer products.

2. Evolving consumer preferences driving innovation

Boulais highlighted the rapid evolution of consumer habits, which are reshaping the food sector. “We’re seeing a greater demand for health-conscious and environmentally friendly options, which is driving innovation across our product range and supply chain,” he said. Danone is responding by developing hybrid dairy-plant products and functional foods aimed at an ageing population, aligning with the growing interest in personalised nutrition and sustainability.

3. Reframing risk and hazard assessment

Both Coffin and Boulais emphasised the importance of adopting risk-based thinking to address emerging challenges. Coffin called for a re-examination of hazard and risk assessment practices, arguing that they have become too procedural. “We need to ask tougher questions about the controls we have in place and be willing to innovate where gaps exist,” she said.

Boulais agreed, highlighting Danone’s use of data analytics to guide decision-making and compliance strategies. This shift allows the company to better predict risks, optimise operations and adapt to changing regulatory landscapes.

4. Sustainability strategies

The push for sustainability continues to redefine the food sector, with companies like Danone leading the charge. Boulais described the company’s regenerative agriculture programme as a cornerstone of its efforts, aiming to reduce methane emissions from dairy farms by 30% by 2030 and source 30% of key ingredients from sustainable farms by 2025. “Decarbonising our supply chain and shifting to lower-carbon packaging materials are also priorities,” Boulais said.

The way forward

The lessons of 2024 demonstrate the need for agility, transparency and innovation. As Coffin noted, “The challenges we face are interconnected and the solutions must be too. From adopting advanced technologies to embedding sustainability into every aspect of operations, businesses need to take bold, proactive steps.”

For Boulais, the future lies in balancing short-term adaptability with long-term vision. “We’re not just reacting to change; we’re positioning ourselves to lead it. Whether it’s leveraging precision fermentation or pioneering regenerative agriculture, the opportunities for innovation are immense,” he said.

To get there, the food sector must:

- Invest in foundational technologies to establish clean, reliable data systems.
- Embrace sustainable practices that align with both regulations and consumer expectations.
- Strengthen supply chain transparency and accountability.
- Adopt risk-based, data-informed approaches to the evaluation of food safety hazards
- Foster collaboration across the value chain to address interconnected challenges.

As the sector looks to 2025, experts like Coffin and Boulais remind us that the path forward is about more than just responding to immediate challenges. By embracing transformation and collaboration, the food sector can shape a sustainable, secure and innovative future for the global food supply chain.

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