



Navigating the Future of Sustainable Sourcing:

Strategies for Securing Resilient Supply Chains in Our
Complex Global Agrifood Systems



CONTENTS

3	INTRODUCTION
5	A QUICK HISTORY AND DEFINITION OF SUSTAINABLE SOURCING
6	THE CONTEXT BEHIND THE EVOLUTION OF SUSTAINABLE SOURCING
7	TODAY'S CHALLENGES
9	ACTIONS AND COLLABORATIONS FOR PROACTIVE COMPANIES
11	CONCLUSION
11	CALL TO ACTION



INTRODUCTION

The global food system is both complex and critical. It plays a dual role as both a driver of and solution to climate change and biodiversity loss. While the agricultural industry supports millions of livelihoods and provides food to the world, it is also vulnerable to climate and nature-related risks. On one hand, it contributes significantly to deforestation, nature degradation, and biodiversity loss. On the other hand, agriculture has the potential to be crucial in keeping the global economy within Earth's safe and just planetary boundaries.

The next five years present a singular moment in the food and beverage industry. Companies must secure a sustainable supply of critical ingredients to remain viable, protect their corporate reputation, and improve environmental, social, and economic conditions in the communities and landscapes they rely on. This is a challenging balance, as even those companies with the best sustainability reputations and ethical practices find themselves targets of activist campaigns and mainstream media scrutiny. At the same time, they cannot shield themselves from systemic risks that imperil their business models and the economic futures of communities worldwide.

Over the next decade, we can expect significant environmental, economic, regulatory, and cultural changes, requiring a paradigm shift and transformative interventions. Resilient companies will be well-positioned to thrive in a changing environment and enhance the well-being of the communities and landscapes they rely on. These are the companies that will be more likely to survive. Sustainable sourcing strategies are essential for enacting positive and systemic transformation for food and beverage companies. Based on DT Global's experience in this market, a sea change is underway in these strategies.

This paper summarizes:

1. the meaning of sustainable sourcing,
2. the drivers behind the evolution of practices, and
3. the challenges companies face in meeting this moment.

We then recommend how individual companies and the industry can move forward individually and collaboratively.

UNDERSTANDING THE IMPACT OF AGRICULTURE ON A SAFE, JUST, AND HEALTHY PLANET

In a recent update to the planetary boundary framework, environmental and social scientists introduce the concept of the [safe and just Earth System Boundaries \(ESB\)](#).

This framework emphasizes the critical link between the stability of the Earth's systems and human well-being, providing a scientific underpinning to the sentiment that [all flourishing is mutual](#). The proposed safe and just ESB concept points to significant implications for the food and beverage industry given its substantial environmental footprint. Figure 1 below shows these implications.

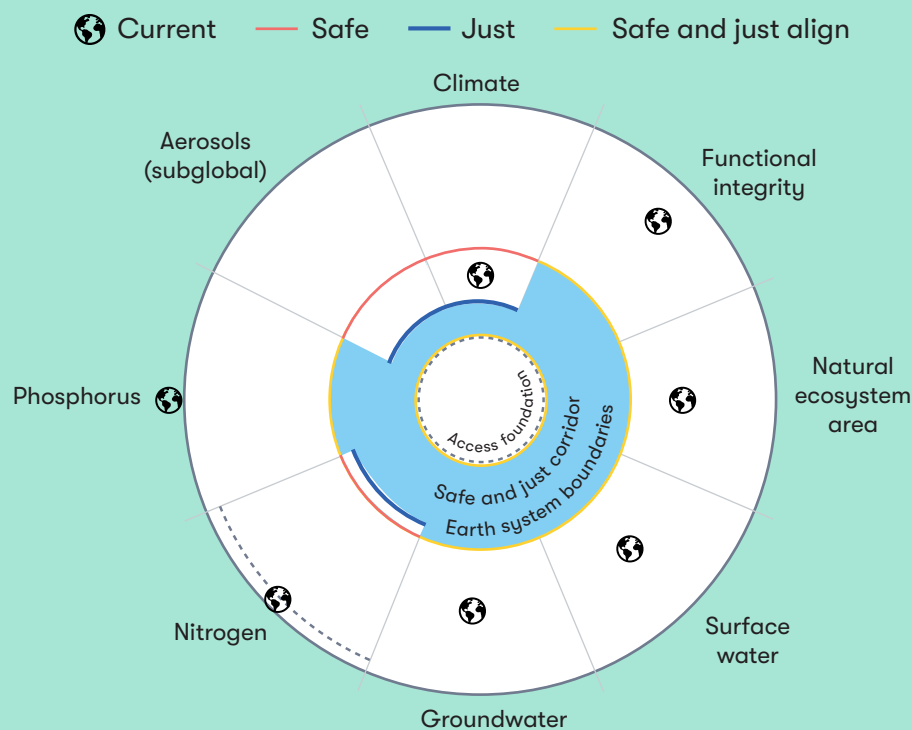


Figure 1: Proposed safe and just (NSH) ESBs. (via [Nature](#))

The following critical environmental data points highlight the profound impact of agriculture on climate, biodiversity, water use, nutrient management, and air quality:

Climate Impact: The industry contributes up to [37 percent](#) of global greenhouse gas emissions, highlighting the urgent need for carbon reduction and sequestration strategies in food production and distribution.

Biodiversity Loss: Agriculture is the primary threat to wildlife, endangering [86 percent](#) of species at risk of extinction.

Water Use: Agriculture consumes [70 percent](#) of the world's freshwater resources, underscoring the necessity of water-efficient practices.

Nutrient Management: A staggering [80 percent](#) of inorganic phosphorus, a critical fertilizer component, pollutes the environment and watersheds, and less than [two percent](#) of urban food nutrients are recycled.

Aerosol Pollution: Excessive use of nitrogen fertilizers and animal waste, when combined with combustion emissions, form the largest share of [aerosol pollution](#).

A QUICK HISTORY AND DEFINITION OF SUSTAINABLE SOURCING

Sustainable (or responsible) sourcing gained significant momentum in 2015, coinciding with the signing of the Paris Climate Agreement and the launch of the Sustainable Development Goals. These global agreements sparked conversations about businesses' role in sustainable development within corporate boardrooms, ushering in the first era of sustainable and responsible sourcing.

The most common definition can be summarized as:

Sustainable (or responsible) sourcing is when an organization actively and consciously sources products and services in an ethical, environmentally sustainable, and socially conscious way.

Although you can now find language about sustainable and/or responsible sourcing in most food and beverage companies' sustainability and environmental, social, and governance (ESG) reports, each company has a different definition. This is because the industry has not defined a practical or shared metric, and government regulations are only slowly being enacted. The best-known definitions provide an ideological or theoretical direction that each company can interpret independently. The result is an economy where too many companies aim for a 'green sheen' through a cacophony of incremental projects and pilots in a landscape where institutional organizations and government donors are also prominent.

Most companies focus their sustainable sourcing commitments on the upstream supply chain and sustainable production, i.e., the creation of goods and services using processes and systems that are non-polluting, conserve energy and natural resources, and focus on worker conditions and performance. While there is a spectrum of company performance and maturity on sustainable sourcing, the majority of public commitments have been launched after 2015.

Immediately following the Paris Climate Accords and the launch of the Sustainable Development Goals (SDGs), companies pursued sustainable sourcing commitments by acquiring externally 'certified sustainable' ingredients under a "do-no-harm" philosophy. While these approaches are an essential foundation, it's clear to [outside observers](#) and sustainability leaders in food and beverage companies that they have never been enough. Most agree that we can't just sustain the status quo since it is built on an extractive foundation, further undermining long-term success with every passing harvest. To succeed in the future—and even to remain viable—more companies are realizing they must embrace a planetary systems perspective focused on ecological and social regeneration.



Figure 2: The evolution in sustainable sourcing

THE CONTEXT BEHIND THE EVOLUTION OF SUSTAINABLE SOURCING

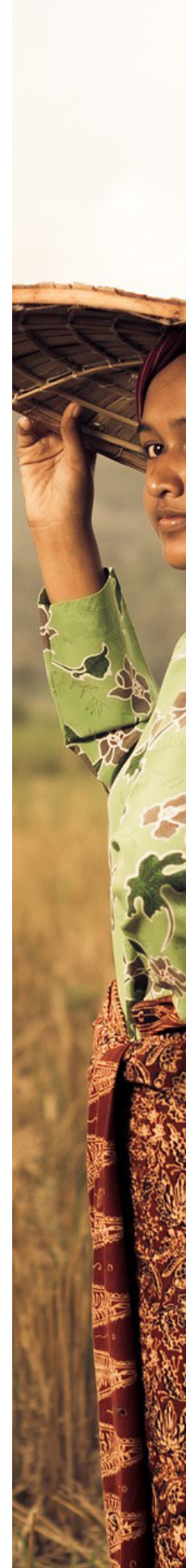
The sustainable sourcing landscape is rapidly evolving, driven by regulatory, scientific, and societal shifts. This marks a critical beginning of the second era of sustainable sourcing. Global food and beverage companies must adapt to this changing environment, complying with new regulations and meeting the growing expectations of consumers and stakeholders who demand greater transparency and accountability.

Regulatory Changes: Environmental, social, and governance (ESG) regulations have experienced a rapid rise worldwide. The European Union's Corporate Sustainability Reporting Directive (CSRD) and Deforestation Regulation (EUDR) mandate more detailed sustainability disclosures, pushing companies to disclose their efforts using a [double materiality assessment](#) and greater traceability for high-risk commodities. Similarly, the Securities and Exchange Commission (SEC) in the United States has published its Climate Risk Disclosure rules, requiring companies to detail their climate-related risks and impacts. Nevertheless, it is worth noting that court cases currently hold up the American rules, and it does not extend to Scope 3 emissions. These regulatory shifts necessitate a robust response from companies to align their operations with these new standards to avoid legal and financial repercussions.

Science-Driven Cultural Evolutions: Increasingly, consumers and media better understand two key food system elements. On the environmental front, increasing press coverage has highlighted the negative externalities (GHGs, water, biodiversity, etc.) of a modern, Western diet high in animal-based protein. Concurrently, many consumers now understand the potential health hazards of diets enriched with highly processed ingredients. The upshot of these two trends is a [building consensus](#) of scientific studies demonstrating that regenerative and climate-smart farming practices increase the nutrient density and, therefore, the human health benefits of crops grown in these systems (as long as the beneficial nutrients are not stripped away during processing).

Environmental Imperatives: The need to address ecological degradation has never been more urgent. Research shows agriculture is a primary driver of biodiversity loss, contributing significantly to environmental degradation. Practices such as monoculture farming, excessive use of fertilizers, and deforestation for agricultural expansion are under increasing scrutiny. As demonstrated above, the modern food system is a major driver of environmental damage. However, companies can position themselves to create resilient value by being willing to take the long view. Consider the following three economy-wide data points from [CPD](#), a leading voluntary global environmental disclosure system for corporations:

- **Climate:** Over \$1 trillion at risk, with financial companies noting \$1.2 trillion in revenue from low-emission products and services,
- **Water:** \$392 billion at risk, with \$436 billion in potential water-related business opportunities, and
- **Forests:** \$78.6 billion at risk, while the costs to fully address forest risks are estimated at \$5.9 billion.





TODAY'S CHALLENGES

As global food and beverage companies strive to enhance their sustainable sourcing practices in the second era of sustainable sourcing, they face several significant challenges that can hinder their progress toward building more sustainable value chains.

Diverse Regulatory Environments: As regulations evolve, companies must navigate an increasingly complex web of regulatory and reporting environments. Companies must comply with many country-specific laws and international standards, with varying levels of stringency and enforcement. This regulatory diversity makes it challenging to implement a uniform global strategy, complicating efforts to streamline operations and ensure compliance across all markets.

Varied Definitions and Standards: There is no universally accepted definition of sustainable sourcing. Different stakeholders—from governments to non-governmental organizations (NGOs) and even other industry sectors—have created their own criteria and benchmarks for sustainable practices. This inconsistency can lead to confusion and difficulty in measuring and comparing sustainability efforts in the first mile of supply chains. Additionally, it can make it challenging to communicate the company's sustainability achievements to consumers and investors.

Practice Versus Impact Measurement: Traditional metrics for evaluating sustainability often focus on immediate outputs rather than long-term impacts. For example, companies might report on the volume of sustainably sourced materials, as defined by practice-based certifications, without assessing the broader ecological or social consequences of sourcing decisions. These metrics can overshadow deeper issues, such as the long-term viability of agricultural landscapes and the social implications for communities involved within the supply chain. To better assess impact, it is important to evaluate outcomes such as greenhouse gas emission (GHG) reductions, hectares with improved biodiversity, water quality, and farmer livelihood improvements.

Technological and Data Gaps: While technology can enhance transparency and tracking in supply chains, the impact of advanced technologies, such as artificial intelligence (AI), is still developing. Many companies struggle with the cost of implementation and the challenge of integrating new systems with existing operations. Additionally, gaps in comprehensive data, particularly in developing countries, can impede efforts to understand and fully manage supply chain sustainability.

Cultural and Behavioral Change: Embracing sustainable practices often requires substantial cultural and behavioral changes across all levels of individual organizations, value chains, and food systems. However, changing long-standing practices can be met with resistance, especially if the benefits are not immediately apparent or require substantial upfront investments. Moreover, fostering a corporate culture that embraces sustainability as a core value is essential for long-term change but can be challenging if efforts do not intentionally work to activate the three spheres of transformation.



ACTIVATE THE THREE SPHERES OF TRANSFORMATION FOR SYSTEMIC CHANGE

The [three spheres of transformation](#) framework helps focus discussions on how processes that form beliefs and values can reshape farming by activating levers of change across tiers of social systems.



Figure 3: The Three Spheres of Transformation in Regenerative Agriculture

ACTIONS AND COLLABORATIONS FOR PROACTIVE COMPANIES

As sustainability teams within global food and beverage companies devise strategies to enter the second era of sustainable sourcing, it is essential to balance long-term resilience and adaptability with short-term strategic practical considerations. Through DT Global's advisory work and partnerships with global food and beverage companies, we have identified four key solution areas that companies should prioritize. Informed by our experts' research, these solutions should be pursued both independently and through collaborations with peers and partners. The four solution sets are:

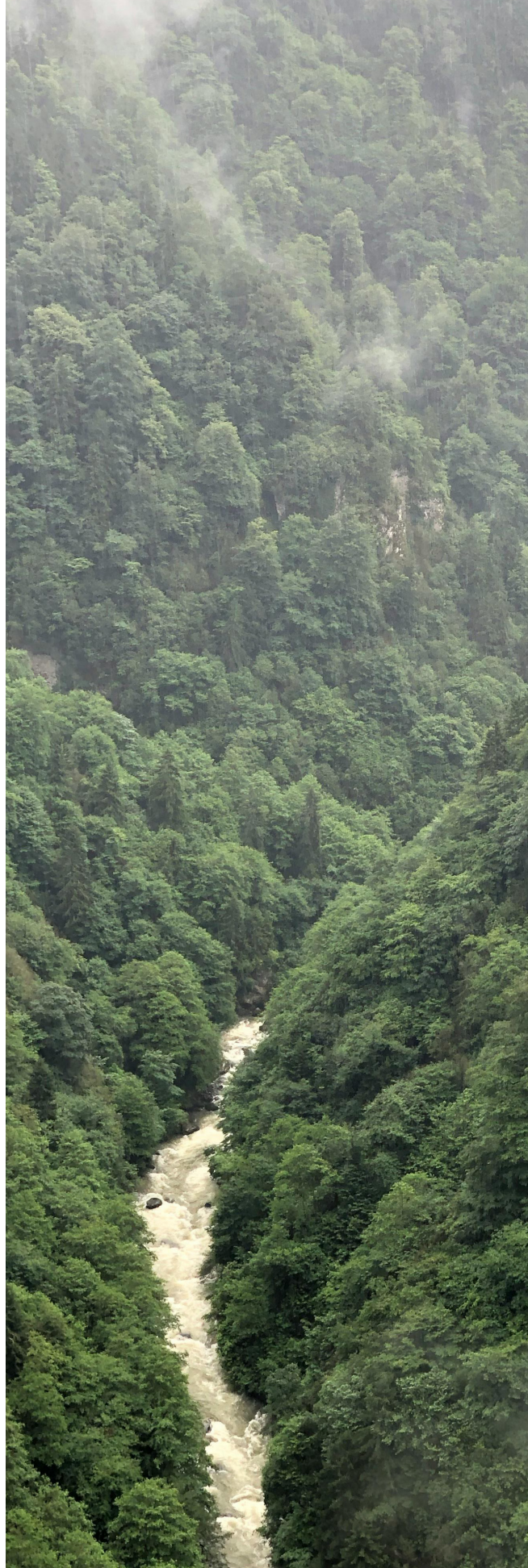
1. *Understand risk hotspots within the company's and industry's supply sheds*

Enhance traceability as the foundation for sustainable sourcing strategies and interventions: Developing robust traceability systems is crucial for transparency and accountability in supply chains. These systems enable companies to monitor and accurately verify the sustainability credentials of their sources. Enhanced traceability—ranging from replacing paper-based documentation to implementing advanced blockchain and Internet of Things solutions—build trust with consumers and stakeholders by ensuring a reliable chain of custody and providing clear evidence of sustainable practices. This reinforces the commitment to sustainability.

 **Example:** AB InBev and [BanQu](#)

Leverage common frameworks: Companies that develop common frameworks for measuring and managing sustainability can improve measurement across the industry. These frameworks can include unified metrics for assessing environmental impacts, social equity, and economic benefits. An industry-wide adoption of such standards would facilitate greater transparency and allow stakeholders to make more informed decisions.

 **Example:** The Consumer Goods Forum's [Forest Positive Coalition's](#) shared KPIs



2. Understand business and systemic risks at local scales in supply sheds

Assess social and environmental risks through a double materiality lens and overlay with commercial importance to prioritize interventions: When companies evaluate their operations' impact on people and the planet (impact materiality) and the financial implications of sustainability issues (financial materiality), they will have a more holistic risk assessment. This dual perspective is a foundational principle of the EU's CSRD regulations and helps prioritize interventions aligning with sustainability and business objectives. By integrating commercial importance, companies can strategically address the most critical risks.

 **Example:** [Barry Callebaut](#) and [Ferraro](#) Double Materiality Reports

Generate and utilize granular data: Partnering with the consulting industry and academic institutions to develop and use more granular data collection and analysis tools can significantly enhance companies' ability to assess and manage risks. This can include data on biodiversity impacts, water usage, and local community health. Such detailed data can help companies tailor their sustainability initiatives more precisely and effectively.

 **Example:** [Global Forest Watch](#)

3. Create the practical conditions for climate- and nature-smart farming

Ensure sustainable sourcing strategies focus on continuous improvement of critical outcomes: Companies should emphasize ongoing enhancement of environmental and social impacts in their value chains rather than merely meeting predefined targets set by static certification standards. This approach helps prevent shortsighted actions that overlook the broader sustainability goals. Focusing on continuous improvement ensures companies' long-term resilience and adaptability despite evolving environmental and social challenges.

 **Example:** General Mills' [Climate Transition Policy](#)

Invest in local capacity building: One effective strategy is to build local capacities in key sourcing regions, especially in lower- and middle-income countries. This involves investing in local infrastructure, education, and technology to enhance the capabilities of local suppliers and communities. By doing so, companies can help ensure that sustainable practices are economically viable and culturally relevant, increasing the likelihood that these practices will be adopted and sustained.

 **Example:** The [Trusted Advisor Partnership](#)



4. Provide upside incentives and downside risk mitigation to accelerate transformation

Create ‘practice transition’ incentives and safety nets for farmers: Supporting farmers through incentives and safety nets encourages them to adopt sustainable practices. Providing financial and technical assistance, such as long-term and bankable contracts and access to locally knowledgeable climate-smart agricultural advisors - helps mitigate the risks associated with transitioning to new farming methods. This support ensures farmers can maintain their livelihoods while contributing to more sustainable supply chains.

 **Example:** [Mad Agriculture](#)

Engage with peers in supply shed collaborations: Companies in shared sourcing regions can pool resources and coordinate sustainability efforts. This collaboration might include joint projects focused on regenerative practices, reducing water and energy use, or improving labor conditions. By working together, companies can scale their impact, mitigate risks more effectively, and achieve significant environmental and social benefits.

 **Example:** [Soil and Water Outcomes Fund](#)

CONCLUSION

We have highlighted the urgent need for companies to move beyond mere compliance and incremental improvements toward a holistic approach that integrates environmental, social, and economic sustainability across their entire value chains.

The future success of companies is closely linked to the health of the landscapes and communities they depend on. The steps of transformation include adopting advanced technologies for traceability, engaging in cross-sector collaborations, and committing to continuous improvement in their sourcing practices. Now is the time for bold action. Globally, food and beverage companies must lead the transformation of global food systems by embracing the principles of ecological regeneration and social equity. The path forward requires innovation and a deep commitment to achieving a positive impact.

CALL TO ACTION

To discuss how our tailored solutions can help your company navigate the future of sustainable sourcing, please reach out to us at Commercial.Advisory@dt-global.com or contact one of our experts:

STEVEN BAKER

Practice Leader, Commercial Advisory, DT Global
Steven.Baker@dt-global.com

SETH OLSON

Senior Sustainability Manager, Commercial Advisory, DT Global
Seth.Olson@dt-global.com



DT Global

www.dt-global.com