



**WBCSD's COVID-19  
Response Program  
Vital Supply Chains:  
issue brief**

- ① **Executive summary** | 3
- ② **Introduction** | 5
- ③ **Food system analysis:  
The short-term impacts of COVID-19 on supply chains** | 7
- ④ **The business community's rapid responses to COVID-19** | 10
- ⑤ **Building forward better:  
Long-term solutions for food system transformation** | 16
- ⑥ **Advocating for change** | 18
- ⑦ **Conclusions** | 20
- ⑧ **Annex: Results of the full analysis** | 21

# 1 Executive summary

**The effects of the pandemic have varied across industries and geographies. While some companies have managed to continue their operations with only a few logistical adaptations, many have experienced great supply chain disruptions – sometimes with a total collapse in demand.**

Overall, the impacts of COVID-19 have been overwhelmingly negative and destructive, hurting the world's poor and hungry most. There are some silver linings: the pandemic has compelled business to act in an urgent, coordinated and creative way; some companies are demonstrating what is possible

through collaborative innovations built on public trust and in the spirit of stakeholder capitalism.

To be able to build on this new mindset and situation, WBCSD analyzed the food system before and after the outbreak of COVID-19 to see where the biggest opportunities are and how businesses can take steps to build a more resilient, sustainable and fair food system for all. This Vital Supply Chains issue brief is the outcome of the extensive work done by the team from March through September as part of [WBCSD's COVID-19 Response Program](#). This analysis and resulting recommendations are based on

an extensive literature review and unique insights from our project teams, members and partners across the food and agriculture value chain in geographic hot spots. The issue brief identifies the weaknesses COVID-19 has exposed in an often already fragile food systems and highlights the need for greatly improved resilience. It further focuses on resilience and how business can lead food systems transformation to achieve healthy people and a healthy planet, while delivering on the [Sustainable Development Goals](#) by 2030, considering the main disruptions exposed by the COVID-19 pandemic.

*"Amid the economic recession resulting from the Covid-19 pandemic, a further 50 million people risk falling into extreme poverty as lockdowns and restrictions continue to decimate incomes, spike unemployment and put nutritious food out of reach for many people. Business has an urgent, critical role to protect people's livelihoods and nutrition in the face of COVID-19 and advance collective efforts to build an equitable, sustainable and resilient food system for all."*

**[Diane Holdorf, Managing Director, Food & Nature, WBCSD](#)**



**The objective of this issue brief is to guide companies through the disruptions and systemic risks arising from COVID-19.**

This is of particular importance, as there is growing awareness and recognition that future shocks to food supply chains will continue, whether caused by a pandemic or another systemic issue, such

as rapid climate change. It also provides an overview of the main attributes of resilient systems, their importance, and a resilience framework to apply to food system recovery. This issue brief provides business with areas of improvement, supporting the enabling environment for food systems transformation and creating connections to innovative initiatives and partnership opportunities.

By highlighting the opportunity to address these challenges through collective action, we encourage businesses to accelerate building forward more resilient and sustainable food systems. These topics complement ongoing WBCSD work on [Vision 2050](#) and the [Food and Nature Program](#).



## 2 Introduction

In 2019, WBCSD released the [CEO Guide to Food System Transformation](#), a foundational piece from WBCSD's [Food and Nature Program](#) built on member insights and in alignment with milestone science reports from partner organizations. The *CEO Guide* highlights the business leadership needed for a deep, rapid and systemic transformation of food systems to better absorb future shocks and provide healthy diets for a growing global population within planetary boundaries. It sets out seven pathways across the value chain where business must lead action to achieve positive impacts, leveraging opportunities for risk mitigation and strategic advantage.

Speaking at the launch of the CEO Guide, WBCSD President and CEO said:

*“There is no doubt about the need to act now; we have seen a flurry of science and reports highlighting the need for urgent action... Because we are either in to lead or we will let the world fail.”*

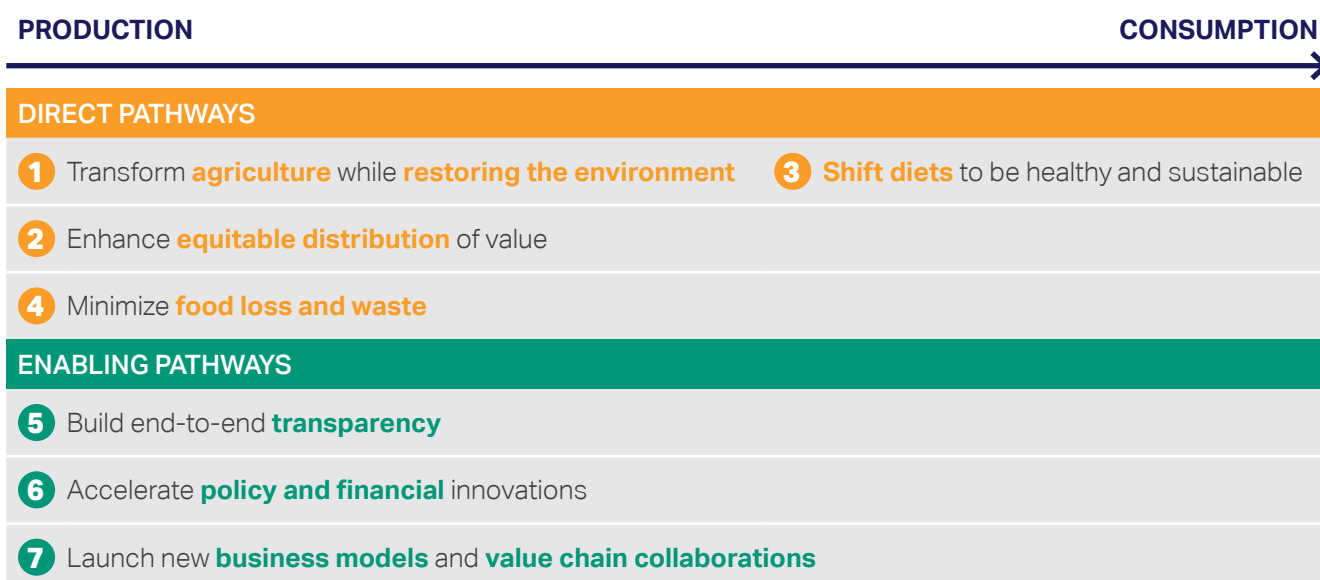
**Peter Bakker, President and CEO, WBCSD**

Four months later, with the spread of COVID-19 and a public health emergency of global concern, that mandate became even more urgent. Increased resilience and the ability to withstand future system shocks require immediate

actions. The pandemic's economic, health and societal implications have created unprecedented food systems challenges that are still growing in severity as government stimulus resources dwindle and cases continue to increase around the world. The UN's [State of Food Security and Nutrition in the World](#) report, jointly prepared by FAO, IFAD, UNICEF, WFP and WHO, estimates that the pandemic will add 83 to 132 million people to the total number of those undernourished worldwide in 2020 compared to 2019.



Figure 1: Seven pathways for business action



Business must take measures now to protect people's food security in the face of COVID-19 and avoid irreversible damage and long-term negative impacts on people and economies. This is an opportunity to build forward a more nutritious, sustainable and resilient future.

As the pandemic started, WBCSD launched a [response program](#), including the [Vital Supply Chains](#) project to understand the challenges arising for food supply chains and to identify ways for business to respond to these challenges collectively. This project has convened member companies, partner organizations and numerous experts to mobilize business towards mitigating the food system supply chain risks arising from COVID-19 – aligned with the pathways in WBCSD's [CEO Guide to Food System Transformation](#).

To address these issues the Vital Supply Chains project was structured in three workstreams:

1. The **Rapid Response Platform** identified and proposed pathways to address systemic risks in the food system supply chain;
2. The **Blueprint for Recovery** provided guidance for long-term food system resilience in the reopening phase and beyond;
3. The **Collective Action** workstream worked with the above-mentioned two teams to ensure a unified voice in shaping recovery efforts and to help drive collective action.

*"COVID-19 has been a great revealer of the inequities of our societies and the weak points in many of our vital supply chains. The pandemic has particularly highlighted the risks and disruptions to our food systems. Chronic hunger and food insecurity are doubling as a result of this crisis, threatening hundreds of millions of lives across the world."*

**[David Nabarro, Strategic Director, 4SD and Special Envoy of the World Health Organization for the COVID-19 response](#)**



## 3 Food system analysis: The short-term impacts of COVID-19 on supply chains

**COVID-19 has been a catalyst for food system transformation and its extended duration has elevated a series of incremental system shocks (political, trade, conflict, financial, and environmental), which greatly influence the shape of change we are all currently experiencing.**

Current trade systems are overly focused on political and economic issues, often failing to integrate the value of externalities around health, equitable distribution of value (livelihoods) or the environment into market prices. Although global trade is recognized as a major force for food security, the COVID-19 pandemic is disrupting trade systems around the world causing internal and external challenges that need to be addressed to ensure the continuous functioning of food systems in all countries. Multi-stakeholder engagement will be critical in advancing bold actions.

We have analyzed food systems and the impacts from COVID-19 using a multidisciplinary methodology via a Tipping Point analysis based on a PESTEL (political, economic, social, technological, environmental, legal) framework, a Baker McKenzie outcomes workshop, and an analysis from Bain & Company on six axes of change. The results of these analyses highlight the short-term impacts of COVID-19 on food supply chains and provide insights for business going forward, including through collective actions, to prevent long-term negative implications on People and the Planet. Further, we have listed policy asks and recommendations taken from the outcome paper of the Science to Policy Dialogue (SPD) for a Food and Agriculture Roadmap, convened by the WBCSD's Food and Nature Policy and Advocacy team.<sup>1</sup>

### **STRONG SAFETY NETS AND IMPROVED REGULATORY ENVIRONMENTS**

Our analysis has highlighted the urgency to advocate for the creation of strong safety nets and improve the regulatory environment to promote a predictable and fair rule-based trading system. We recommend that this happens also in partnership with other actors especially in times where government budgets are under stress.

- Strong alignment between governments, investors, suppliers, customers and other stakeholders is critical to enabling food and agriculture companies to make better-informed decisions. At the same time, business, with the support of other key players, can develop an agenda based on what it needs from government and the public sector to build forward better (Tipping Point).

*"COVID-19 has already, and will continue to have, a vast impact across food systems. The crisis has shown the vulnerabilities and at the same time the cruciality of vital supply chains. This brings the opportunity to prove that a systems approach and multi stakeholder collaboration will pave the way to a better future with a more resilient, sustainable and nutritious food system."*

**Gerda Verburg, Scaling Up Nutrition (SUN) Movement**

*"COVID-19 is a tremendous challenge, but also a wake-up call for the private and public sector alike to embed better values into the food system, so that it truly advances nutrition, sustainability, equity, and resilience."*

**Sara Farley, The Rockefeller Foundation**

<sup>1</sup> WBCSD (2020). *Food Systems Policy Dialogue for a food and agriculture policy roadmap – Summary outcome paper for discussion*. Retrieve from <https://www.wbcسد.org/Programs/Food-and-Nature/Resources/Science-to-policy-dialogue-for-a-food-and-agriculture-policy-roadmap-Summary-outcome-paper-for-discussion>

- There is a need to improve the regulatory enabling environment to address the current pandemic, which could be done more successfully through a stronger connection between business and governments (PESTEL).
- Through better alignment and collaboration, business, governments and local and international institutions can address factors that affect the broader enabling environment, including humanitarian issues, income inequality, and development of fair and equitable global standards and certifications. For example, incorporating externalities around healthy and sustainable food into international agreements and future business models could go a long way to supporting the food system transformation (Bain & Company).
- It is critical to encourage the development of initiatives that support cooperation between national and international bodies to preserve trading channels and networks during production shocks so as to limit increases in food prices (SPD).

## INNOVATION AND DIGITALIZATION TO SCALE UP BUSINESS MODELS AND SUPPORT SMES

The COVID-19 pandemic provides a unique opportunity to change approaches going forward and to accelerate transformational innovations across the whole food value chain to achieve more sustainable business behaviors and actions. Disruptions in the food value chain, particularly in small and medium-sized enterprises (SMEs), show the need to scale up new business models through innovation and digitalization.

- Smallholder farmers, especially women, are large contributors to the global food system. Business leadership, governments and other development partners must take steps to support initiatives that address their limited access to land, water, agricultural inputs, markets and price information, credit, improved technologies, agronomic knowledge, risk management tools (including risk sharing pricing models), and representation in economic and political decision making (Bain & Company).
- There is a need for policy incentives, technical assistance and financial support to enable SMEs to scale their businesses and continue to address consumer needs (PESTEL).
- There is an opportunity to identify and scale technology solutions to drive savings and efficiencies, including in improving supply chain transparency, monitoring systems, and assessing supplier compliance (Tipping Point).
- The development of digital trading would help facilitate trade of safer food and integrate small producers into global markets (SPD).
- Enabling greater connections throughout the value chain requires investments in emerging innovations and the scaling up of digital solutions (PESTEL).
- Many companies were unable to pivot to meet pandemic-caused shifts in consumer demand, resulting in food loss and waste. The impact of the pandemic illustrates the value of digitalized supply chains and the urgency to accelerate the

greater use of technology to leverage employee and supply chain resources to avoid the food loss and waste resulting from shifts in consumer demand (Baker McKenzie).

- Business should urgently scale up new business models to increase resilience and adaptability to withstand future systemic shocks. (Bain & Company).

## ACCESSIBLE, AFFORDABLE, HEALTHY AND SUSTAINABLE DIETS

Prior to the onset of this pandemic, more than 820 million people were already identified as chronically food insecure. The latest data shows that the food security of 135 million people was categorized as crisis level or worse.<sup>2</sup> The COVID-19 pandemic has exacerbated this situation and it is severely impacting access to healthy and sustainable food for a large portion of the global population.

- There is a need for collective action across the private sector, governments and NGOs to provide the population with accessible, affordable, healthy food produced responsibly within planetary boundaries (PESTEL).
- In particular, multi-stakeholder collaboration to improve food fortification in order to provide sufficient nutritious food will be key in markets most at risk of malnutrition (PESTEL).
- Business needs to bring consumers along to achieve long-lasting behavior changes by raising awareness about diverse, convenient, rich food products produced in a sustainable way (PESTEL).

<sup>2</sup> <https://www.fsinplatform.org/global-report-food-crises-2020>



- As home-based cooking is increasing along with demand for plant-based items and for local foods in many developed economies, businesses can seize the opportunity to provide ideas for seasonings and recipes that promote the consumption of healthy and sustainable meals (PESTEL).

## INCREASED CONSUMER ENGAGEMENT AND BEHAVIOR CHANGE

Consumer's dietary choices have drastically changed as a result of restaurant and school closures as well as income losses since the start of the pandemic. Declines in incomes and an increase in poverty is leading to a switch to cheaper and less nutritious foods amongst a wider share of the global population.<sup>3</sup> In addition, the disruptions in the supply of non-staple foods such as fruits and vegetables are reinforcing the higher consumption of staple foods, often reducing dietary and nutritional diversity. The current situation offers an opportunity for businesses to step in and increase access to healthy and sustainable diets.

- COVID-19 exacerbated the lack of transparent and clear information available for consumers to make informed choices on healthy and sustainable food. It is critical to create more traceable and transparent supply chains in order to address food insecurity and malnutrition and orient consumers towards healthier and more sustainable choices that they can trust (PESTEL).
- There was already the need to reduce food waste and scale up circular practices that can help preserve nutrients across the value chain and improve shelf

life. This is an opportunity for business to act now by seeking to engage other value chain actors in supporting consumers on the required behavior change (Bain & Company).

## CROSS-BORDER COOPERATION

Overall, the COVID-19 pandemic has exposed that the drive to maximize efficiency in food system supply chains has come at the cost of diversity and resilience.

For example, border disturbances and import/export restrictions have disrupted trade flows for staple foods with an impact on food prices. Businesses can create cross-border cooperation necessary to support many food system supply chains.

- Critical increases in food loss due to border disruptions call for the improvement of logistics processes and increase in collaboration across the value chain, including post-harvest infrastructure, food transport, processing and packaging (PESTEL).

- Border disruptions and the restriction on movements of people are harming the ability of workers from poorer countries to earn income and leaving seasonal workers without livelihoods. These restrictions affect food production and food security. It is critical to enhance rural workforce livelihoods by supporting income diversification and creating jobs through sufficient remuneration for farmers (PESTEL).

- Many multinationals seeking efficiency have structured operations in such a way that they have become wholly dependent on one or a few suppliers in a single region for mission-critical materials or components, limiting response options available during disruptions. Supplier diversification could help prevent bottlenecks in food system supply chains. In addition, technology solutions are game-changing resources to improve supply chain transparency, monitor quality and assess supplier compliance (Baker McKenzie).



<sup>3</sup> D. Laborde, W. Martin, J. Swinnen, R. Vos (2020). *COVID-19 risks to global food security. Economic fallout and food supply chain disruptions require attention from policy-makers*. Retrieve from <https://science.sciencemag.org/content/369/6503/500.summary>

## ④ The business community's rapid responses to COVID-19

Since early 2020, the world has been witnessing and experiencing the consequences of what a global pandemic and the related mounting economic downturn can do. In a matter of months, millions of people have been hospitalized and economies around the world have shrunk due to quarantine measures, leading to job losses, rises in hunger, and potentially long-lasting issues.

It has been estimated that between 90 million and 150 million people could fall into extreme poverty, with a substantial increase in global poverty, between 15% and 24% from existing estimated level.<sup>1</sup> Such decline in incomes and increases in poverty could have large impacts on food security and malnutrition. The World Food Programme (WFP) estimates that [an additional 130 million people will experience acute hunger because of the pandemic](#), with concern for countries across sub-Saharan Africa and the Near East.

Food supply chain have seen rapid changes, from the way we perceive the role of farmers, to the collective need for stronger traceability and transparency to support consumer trust. It is no surprise that the pandemic has exposed weaknesses in our food systems, many of which existed before COVID-19.

*"COVID-19 has made visible many of the issues within our food system that were previously invisible; highlighting its vulnerabilities and the inequities that exist. It is only through working together that we will achieve SDG 2 and its target of Good Food for All. We hope that partnerships with business can accelerate action on the many crises we face – from COVID-19 to desert locust swarms – and achieve the Global Goals."*

**Paul Newnham, Director, SDG2 Advocacy Hub Secretariat**



*“The current pandemic has highlighted our fragility, but also the interconnected nature of our world. It underscores the need to work together to address global challenges. It offers governments and all stakeholders a critical opportunity for inclusive dialogues and for mobilizing multi-stakeholder action, both around the short-term socio-economic response and medium-term priorities to “build to transform.”*

**António Guterres, UN Secretary General**

In the face of the impacts of COVID-19, we have also seen the perseverance and resilience of communities and companies around the world. Many companies reacted quickly with stringent crisis measures and communication to ensure the health of their employees and the communities they work in, and to safeguard the continued performance of the manufacturing facilities. Multi-stakeholder partnerships have been growing, and companies have

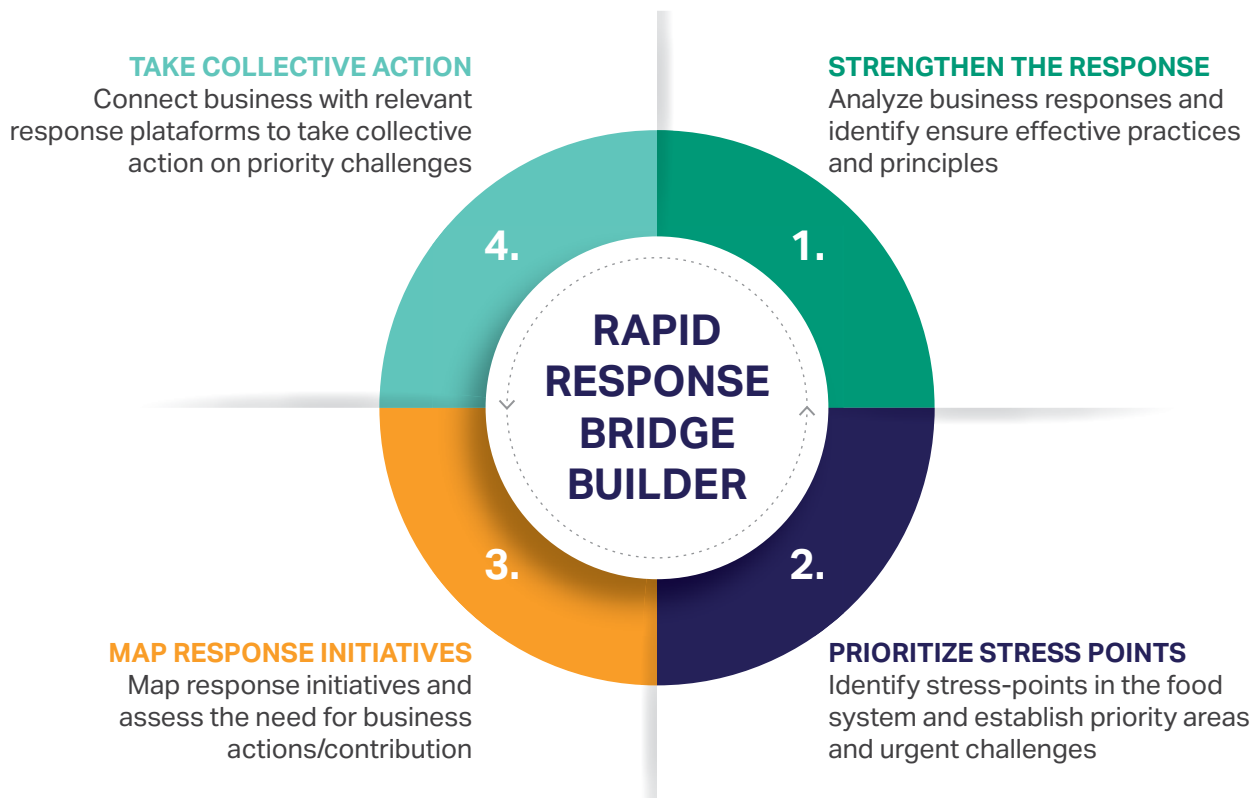
been working across sectors and with governments and NGOs to mitigate the severe consequences. The pandemic has also provided an opportunity to recognize essential food and agriculture workers who have kept us nourished throughout these challenging times.

WBCSD and its member companies have established the Rapid Response Platform to bring forward collective action to protect food supply chains immediately.

We have focused on key stress points in priority regions, such as in South Asia and sub-Saharan Africa, where the crisis is hitting the hardest, as well as supply chains at the most risk, such as for perishable foods.

To be able to navigate the challenges, share knowledge and enable collective business action, the Platform has developed a four-step process to use as a diagnostic tool.

**Figure 2: The Rapid Response Platform’s rapid response bridge builder**



## 1. STRENGTHEN THE RESPONSE

The framework of [seven business principles](#) for a strong response to COVID-19 outline effective, responsible and sustainable business action in

the context of the pandemic by prioritizing responsible near- and long-term actions with decisions based on ethical, sustainable and resilient strategies. The seven

principles are the following, complemented with concrete examples of business action:

### PROTECT EMPLOYEES

[Givaudan](#) and [Syngenta](#) have provided hand sanitizer to protect employees and to support local communities and services with their increasing needs. Both companies made donations to Swiss infrastructure such as airports, public transportation companies, NGOs and small associations.

### BUILD COLLECTIVE LEADERSHIP AND PARTNERSHIPS

The [Farm to Market Alliance](#), a public-private partnership comprising Syngenta, Yara, Bayer, Rabobank, AGRA and the World Food Program, set up an emergency working capital financing response in Kenya to increase liquidity to farmers and value chains where banks stopped lending. [Unilever](#) partnered with the United Kingdom's Foreign, Commonwealth & Development Office (FCDO) to establish the Hygiene & Behaviour Change Coalition (HBCC), contributing more than €100m to help the fight against the pandemic. This included a product donation of soaps and sanitizers of €50m to the COVID Action Platform of the World Economic Forum, which is supporting global health organisations and agencies with their response to the emergency, as well as working with 21 partners across 37 countries in handwashing education programs to support local communities most at need. Unilever also adapted its manufacturing lines to produce sanitizer for use in hospitals, schools and other institutional settings.

### ENHANCE ADAPTABILITY AND FLEXIBILITY

[Firmenich](#) has transformed its production lines to provide hand sanitizer to limit the spread of COVID-19 and meet growing global demand. It has donated 20 tons of hand sanitizer to the Geneva University Hospital (HUG) and is increasing its production capacity to 100 tons for hospitals and medical and emergency services across the USA and Switzerland. The [IKEA](#) facility in Hyderabad, India, has stepped up to create a quarantine center in the city to aid and reduce the strain on public hospitals.

### ACCELERATE PRODUCER-FOCUSED RESPONSES

[Barry Callebaut](#) and [Olam](#) have supported farmers with pandemic sensitization training and mobile payments. Through its initiative [Better Farms, Better Lives initiative](#), Bayer has expanded its partnerships with governments, internationally recognized NGOs and local organizations to provide farming care packages for up to 2 million smallholders farmers farmers in key countries such as Africa, Asia and Latin America that are facing challenges resulting from COVID-19. It will tailor the Better Life Farming Care Packages to specific local needs and may include seeds for crops – such as tomatoes, peppers, rice and corn – to sustain livelihoods, crop protection products, personal protective equipment and safety and training materials. OCP has scaled up the [Agribooster program](#) to support African farmers to address the main challenges they are facing, including improving their agricultural productivity and income through access to good quality products and services.

## ENSURE CONTINUOUS CASH FLOW

Danone has provided €300 million in financial support to the 15,000 small businesses in its global system (farmers, suppliers, service providers), to the entrepreneurs in the Danone Manifesto Ventures portfolio, and to the communities in the Danone Ecosystem. OCP contributed to the national relief fund with a cash donation of €300 million to support local relief efforts in the community where they operate.

## SUPPORT RELIEF EFFORTS RESPONSIBLY

DSM and Evonik shared knowledge of additive manufacturing applications and materials with the 3D printing community to help supply hospitals and healthcare workers with medical supplies, equipment and replacement parts. Nestlé has joined efforts with the International Federation of the Red Cross and Red Crescent Societies to mobilize substantial local relief efforts in the communities where it operates. Corteva is collaborating with several food banks, food pantries, and meal rescue, meal packing, and other organizations to fight food insecurity across the United States. AB InBev has switched its production line from brewing to alcohol-based hand sanitizer gel. Olam and its employees have raised USD \$1.2 million for the Courage Fund in Singapore, which provides support to the local population and those affected by COVID-19. Olam has also supported over USD \$7 million to provide medical and healthcare equipment, handwashing and sanitation, and essential food supplies to support farming communities across 33 countries.

## BUILD FORWARD BETTER

Cargill has prioritized the health and safety of its employees and worked to support farmers, ranchers, transporters, food service companies, retailers and others to keep the food chain moving and ensure people and animals are fed. Cargill has also engaged its non-profit and NGO partners and committed USD \$35 million to COVID-19 relief and recovery efforts focused on food security and nutrition, health and safety, and support to the food and agriculture industry impacted by the pandemic. Unilever Food Solutions (UFS) partnered with Yume Food Australia to launch a new online marketplace, Yume For Distributors, offering a unique solution to distributors to deal with surplus food stock and supporting other distributors who face a surge in demand. Utilising Yume's technology and UFS's extensive industry knowledge, Unilever have created a brand-new platform that enables food service distributors to both buy and sell stock.



## 2. PRIORITIZE STRESS POINTS

Our Platform has identified priorities for collective action using input from members and partners, and exhaustive research highlighting risks from trade, embargoes and other disruptions:

- **Systemic challenges:** nutritional security, income losses and food prices, smallholder farmer financing;
- **Food value chain stage:** production, transportation and logistics (especially cold chain), retail and consumption;
- **Geography:** sub-Saharan Africa, South Asia;
- **Commodities:** perishable goods (particularly fruits and vegetables), rice.

*"We need to promote more local and seasonal food as a solution to logistical disruptions. We need more information and traceability to understand where our food comes from and we need to support grassroots initiatives that are more visible and valuable to food system decision makers."*

**Gaelle Espinosa, FABLE consortium at SDSN Association**

## 3. MAP RESPONSE INITIATIVES

COVID-19 impacts are particularly acute in India and sub-Saharan Africa, due in part to disrupted supply chains for perishable foods. The Rapid Response Platform focused its research on initiatives and collective actions in those regions. We identified effective

initiatives and organizations that serve to connect companies into these platforms to support and expand their impact and to recognize that rapid responses can be most effectively achieved with existing collaboration platforms and structures.



## 4. TAKE COLLECTIVE ACTION:

The Platform has highlighted those member companies taking action on advocacy and partnerships, farmer connectivity and digital solutions, and the provision of operational

support. Examples include Yara's Action Africa: Thriving Farms, Thriving Future initiative, Bayer's collaboration with several partners in India to support farmers in connecting with bulk

buyers, and Unilever's partnership with Too Good to Go in the Netherlands to reduce food waste.

*"Coming out of this pandemic, we need to shift our understanding of the food system and re-examine the existing infrastructure, like agricultural subsidies, in their current form, that support it. We need to better understand the true cost of the food we consume."*

**Lisa Sweet, Head of Future of Protein, COVID Response, and Food-Health Food Systems Initiative, World Economic Forum**

*“Dedicated investments to address the disruptions in the food systems resulting from national policy responses to the COVID-19 crisis are needed. But even in the midst of crisis, opportunities exist to innovate and “build to transform.” This is essential in order to lay the foundation for an inclusive, green, and resilient post-crisis recovery.”*

**António Guterres, UN Secretary General**

While individual efforts are showing leadership and answering critical needs, the Rapid Response Platform has also highlighted platforms in which companies can engage to address the most vulnerable geographies. Collective actions between companies help to de-risk solutions. Most of the initiatives highlighted have holistic approaches and integrate elements such as digital solutions for smallholders and for finance as a way to recover from COVID-19 impacts. Below are a few examples highlighted on the [website](#):

- The **Food and Agriculture Organization of the United Nations (FAO)** has identified key priority areas of action and launched seven [standalone initiatives](#) aiming at mitigating the impacts of COVID-19 and covering major areas. FAO has accelerated the implementation of the [Hand-In-Hand Initiative](#), a model for coordinating integrated rapid response to COVID-19 impacts on food systems, particularly at the local or territorial level.
- **African Union Development Agency (AUDA-NEPAD)**, the **International Fund for Agricultural Development (IFAD)** and the **World Economic Forum** launched [COVID Action for Food Systems – Africa](#), a multi-stakeholder initiative working on financing, data and information platforms, and policy. Among other priorities, the initiative is working on digital finance and how it could enhance the distribution of inputs.
- **Invest India**, a national investment promotion and facilitation agency, has set up a [Business Immunity Platform \(BIP\)](#), a comprehensive resource to help businesses and investors get real-time updates on India’s active response to COVID-19.



# 5 Building forward better: Long-term solutions for food system transformation

**As the world moves towards recovery and governments deploy stimulus packages to mitigate the economic consequences of the pandemic, society is looking to the private sector to take aligned and concrete actions to serve social needs. To meet these expectations, business leaders must craft solutions sourced from those closest to the issues and use their collective power to support and scale these solutions at a regional and global level.**

The pandemic has highlighted the urgency to build more resilient systems to mitigate future shocks. We have seen throughout the

pandemic how fragile current systems are. But while the notion of resilience has become noticeably more prominent, to date it mainly concerns natural systems. It is still relatively new or even unfamiliar to business, which often blends understanding of resilience with business continuity and/or sustainability. So, what is meant by resilient business?

WBCSD's Vision 2050 issue brief, [Building long term business resilience](#), defines resilience as *business's ability to anticipate and prepare for system crises, then adapt to circumstances in the manner that provides the greatest chance of persisting and thriving over the long term.*

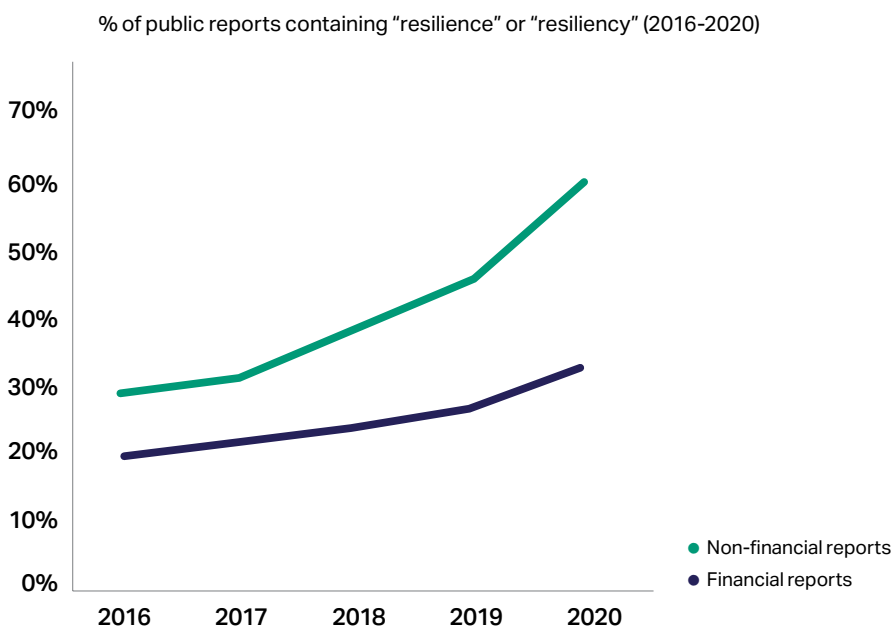
To better prepare for future shocks, companies must change and extend their view of long-term resilience to anticipate and prepare for all future scenarios, minimize the impact of the shocks that do hit, and recover more quickly from them. Business action must embed resilience more deeply.

Consultation with resilience experts highlights that resilience is the ability to react and transform as best suited to the interconnected and rapidly evolving environment in which business operates.

*"There are a lot of solutions that can increase the resilience of farmers, but they have not been adopted at scale. The solutions are not sufficiently remunerative. We need financial models and solutions that are inclusive not only of income, but also of health, education, nutrition and other parameters."*

**Simon Winter,**  
Executive Director,  
Syngenta Foundation for Sustainable Agriculture

**Figure 3: Mentions of "resilience" in financial and non-financial reporting**



Source: Datamaran. The charts represent data from global (mostly North American and European) publicly traded companies.



*“COVID-19 has underscored the need to build back better, more resilient food systems. In a world constrained by limited natural resources and challenged by climate change, we must ensure that feeding the world does not come at the cost of starving the planet. Achieving this requires innovation on a grand scale that can benefit farms of all sizes, combined with business models that reward sustainability and increase transparency for consumers.”*

**Liam Condon, Member of the Board of Management of Bayer AG and President of the Crop Science Division**

### KEY BUSINESS RESILIENCE ATTRIBUTES

According to [Dr Roland Kupers](#), Advisor on Complexity, Resilience and Energy Transition, resilience is the capacity of business, economic and social structures to survive, adapt and grow in the face of change and uncertainty related to disturbances, whether caused by resource stresses,

societal stresses or acute events. Dr Kupers developed a corporate perspective on collaborating for resilience, revolving around the nine lenses of resilience:

This overview of the concept of resilience provides food and beverage sector companies with a framework to assess transformational behaviors and actions they may adopt in order to

build truly resilient business and food systems. An example is the meat industry: the integration of a diverse protein product offering, including plant-based proteins, can increase the resilience of the protein industry. A strong network of players in the meat industry at different geographic scales (local, national, international) is crucial to building resilient protein transformation.

**Figure 4: The nine lenses of resilience**

 REDUNDANCY	 MULTI-SCALAR	 DISTRIBUTED GOVERNANCE
<p>This refers to spare capacity or “fat” in the system. This is often the most straightforward but also most costly way of building resilience.</p> <p>Examples of redundancy include: the spare tire of a car, additional staff to deal with unexpected peaks, spare capacity in a power grid.</p>	<p>Multi-scalar interactions characterize the relationships of the system under consideration with other systems at different scales around it. Scales can be geographical or temporal.</p> <p>The ability to understand a system at multiple scales, both above and below the focal scale which one is operating in, is crucial for building resilience.</p>	<p>Polycentric or distributed governance is the core model for managing resilience. Centralized control is often perceived to be more efficient, but it represents a classic trade-off between resilience and efficiency. What some may perceive as slightly messy forms of governance can be invaluable for resilience.</p>
 MODULARITY	 THRESHOLD	 FORESIGHT CAPACITY
<p>This refers to loosely coupled components. When one part of the system is affected, the components can be separated and recombined to continue operations.</p> <p>Well-designed modularity means that the system can be re-combined in many ways to respond to changes in the environment.</p>	<p>Discussions and plans about the future almost always project smooth and gradual change. We rarely anticipate discontinuities that occur as a result of thresholds being crossed. Many threshold events are impossible to forecast, but that does not mean sudden change should not feature in planning.</p>	<p>Foresight capacity is the competence to go beyond a culture of forecasting, to include irreducible uncertainties and the plausibility of multiple futures into the planning culture of the city. I.e. having institutional capacity to engage decision makers and help them be comfortable with multiple possible future.</p>
 REQUISITE DIVERSITY	 SOCIAL COHESION	 INNOVATE & EXPERIMENT
<p>Diversity reduces risks. Workforce diversity also enables different responses. However, increasing diversity may reduce efficiency in the short term. Rather than diversity for its own sake, it is important to consider what types of diversity are relevant for particular circumstances, hence <i>requisite</i> diversity.</p>	<p>Self-organizing capabilities, social norms and trust levels within the existing system all have an impact on policy options. A key goal of resilience should be to increase the self-organizing capacity of societal groups.</p>	<p>There is an additional purpose to innovation, which is to build a culture that systematically explores the edges of the system. Having people who are comfortable with ideas of radical change and experiencing the friction of very diverse concepts increases the adaptive capacity of the system and builds resilience.</p>

Adapted from: Kupers & Song (2016). *A Resilience Framework for Smart Cities*. CSC.

## 6 Advocating for change

To build forward better, we must look at how to improve the policy and regulatory environment. We need policies that enable businesses to take the correct actions. At the start of the pandemic, several of our partner organizations noticed a food crisis was looming and would come to pass if no one took no extra measures. This resulted in an [open letter](#), signed by business, civil society and governments and directed at world leaders, calling for the following actions:

1. Keeping the supply of food flowing around the world – maintaining open trade.
2. Scaling support to the most vulnerable – ensuring access to nutritious, affordable food for all.
3. Investing in sustainable, resilient food systems – sowing seeds of recovery for people and planet.

In addition, we worked with members and experts to identify areas of priority and action for country governments:

**DEPLOY IMMEDIATE ECONOMIC ASSISTANCE** to bolster health and economic infrastructure for countries and regions that need it the most, ideally leveraging stimulus programs to create and support sustainable and environmentally beneficial food systems that also support biodiversity

**ENSURE ACCESS TO CRITICAL MEDICAL EQUIPMENT, FOOD SUPPLIES AND AGRICULTURAL INPUTS** by avoiding measures that limit the flow of critical goods and services. Traceability and safety of technology are important to safeguard transparency. We

need to ensure that governments maintain open, safe and predictable trade flows to keep prices from spiking, as we have seen in previous crises. Governments should help guarantee there are plans in place for the supply of critical goods in times of crisis.

**COORDINATE CROSS-BORDER EFFORTS TO FIGHT THE PANDEMIC** by supporting international organizations, such as the World Health Organization (WHO), and other multilateral institutions. The world needs to work together to contain this pandemic and address global challenges.

**PROVIDE URGENT, COORDINATED STIMULUS AND SAFEGUARD MEASURES** to support small businesses and affected workers, particularly those in precarious work and the self-employed, by creating incentives

for business to retain employees and, where needed, to give financial and tax relief. The pandemic has illustrated the importance of public infrastructure and safety nets and the need to provide support for the development of strong public responses to local shocks.

**INVEST IN LOCAL FOOD PRODUCTION, TREATING FARMERS, FARM INPUT PROVIDERS, FARM LABORERS, FOOD PROCESSORS AND FOOD DISTRIBUTORS AS PART OF AN ESSENTIAL SECTOR**, like public health workers. Prioritize support for their continued employment, as well as health and safety, on the front line of this global crisis.

**SUPPORT THE MOST VULNERABLE** (e.g., children, women) by providing food aid where necessary that is nutritious, safe, affordable, sustainable and healthy.



For long-term recovery, we have focused on the following key areas:

**COLLABORATE TO BUILD CAPACITY AND RESILIENCE AT THE LOCAL, NATIONAL AND INTERNATIONAL LEVELS**

to promote implementation and to enhance the capacity to better respond and adapt to future shocks, including but not limited to focusing on increased cooperation and comprehensive trade alliances.

**TAKE STEPS TO REDUCE THE LIKELIHOOD AND IMPACT OF FUTURE SHOCKS**

by supporting a just transition to net-zero emissions by 2050; investing in nature-based solutions; incentivizing the production of safe, nutritious and affordable food for all; protecting human rights; and understanding and respecting planetary boundaries.

**ENSURE STIMULUS PLANS AND LOANS ARE CONDITIONAL ON EFFORTS TO HAVE POSITIVE ENVIRONMENTAL AND SOCIAL OUTCOMES ACCOMPANIED BY PROPER OVERSIGHT, TRANSPARENCY, TRACEABILITY AND ACCOUNTABILITY,**

demonstrating links to positive social and environmental impact.

**ASSESS AND ADMINISTER RELIEF WITH CONSIDERATIONS FOR SYSTEMIC ISSUES**

related to economic inequality, gender inequality and accessibility to ensure a holistic and inclusive policy response.

**SCALE SUPPORT TO THE MOST VULNERABLE.**

For example, strengthen and expand targeted food programs and income safety nets for social protection. Support innovative approaches to build health and immunity of the poor, such as through fortification of staples and supplementation of vitamins and minerals.

**TAKE STEPS TO SUPPORT DIGITAL COLLABORATION THAT ENABLES GREATER TRUST AND RESPONSIBLE BUSINESS CONDUCT THROUGH SUPPORTING BUSINESS INVESTMENT IN DIGITALIZATION.**

Digitalization, with the right frameworks and policies, can enable supply chain resilience and transparency.

Notwithstanding the need for policy and regulatory reform to better mitigate the effects of the pandemic, our Vital Supply Chains project has focused on the necessary business response, including considerations about inclusivity, resilience and sustainability:

**INCLUSIVITY IN THE ECONOMIC RESPONSE**

**RESILIENCY THROUGH RECOVERY**

**SUSTAINABILITY FOR REAL TRANSFORMATION**

*“What we knew and COVID has emphasized is that digital technologies that offer transparency across the food system are an enabler. They build trust and enable producers to better understand consumer behavior. What is deeply important to remember though, is that we need to take a geographical approach to data collection and consolidation. Consumers and producers in different geographies have different needs and a one-size-fits-all approach will not suffice.”*

**Anemette Hansen, Global Food Business Development Manager DNV-GL**

## 7 Conclusions

**COVID-19 has been a great revealer of the inequities of our societies and the weak points in many of our vital supply chains. The pandemic has particularly exacerbated the fragilities of our food systems. Business support for building equity and resilience in all food and livelihood systems is urgent. This crisis can serve as a turning point to rebalance and transform our food systems, making them more inclusive, sustainable and resilient. This issue brief is an assessment of barriers and opportunities that have arisen from COVID-19 and impacted food systems. It brings together lessons learned and best practices on how to build a more resilient, sustainable and fair food system for all.**

Throughout the past months, we have seen examples of companies doubling-down on their efforts to protect employees, farmers and producers, enhancing flexibility to keep essential supply chains working and partnering to address dangerous disruptions of vital supply chains faster – and at scale. We have worked together with member companies, experts, and key partners to map the priority areas where we need to advocate for a collective business voice for change.

Collectively we developed the seven [Principles for a Strong Response](#) to COVID-19 to guide business to prioritize specific areas where collective action is needed to protect food supply chains and enable a resilient food system recovery. While our work will continue to incorporate the lessons of COVID-19, these principles should guide our actions, including protecting employees, accelerating producer-focused responses, ensuring continuous cash flow, enhancing adaptability and flexibility across supply chains, responsibly supporting relief efforts and building collective leadership through partnership.

In the coming months, WBCSD's [Food and Nature Program](#) and its members will integrate the outcomes of this issue brief to accelerate the building forward of a more resilient and sustainable food system. In addition, this paper will serve as a foundational element for our leadership and engagement at strategic global events, such as the [United Nations Food Systems Summit 2021 and the Nutrition for Growth \(N4G\) Summit](#). We also hope that it will help focus and inspire the broader private sector community, in all its diversity, ranging from large companies to SMEs, to take action where it counts the most and to leverage key messages to drive a resilient and sustainable recovery of food systems.



# 8 Annex: Results of the full analysis

## TIPPING POINT FRAMEWORK

We developed a “tipping point” analysis building on the *CEO Guide’s* pathways. The *CEO Guide* defines five barriers to food system transformation, three of which COVID-19 has weakened.

**Table 1: Tipping point framework barrier analysis**

BARRIER	DIAGNOSIS	INSIGHTS
Consumer disconnect	Weakened	Improved consumer awareness of food system
Short-term economic pressure on business	Weakened	Business asked to pursue positive societal, environmental & nutritional impact over profit
Regulatory incentives	Mixed	Early signals that government will tie recovery funds to incentivize food system improvement to achieve stronger integration/consolidation
Alignment between stakeholders	Unclear	Unifying effort for “doing good” but uncertainty around future creates confusion for recovery efforts & action prioritization
Scientific consensus	Strengthened	Unsettled public view on COVID-19 & climate science; ongoing battle against misinformation & politicized information

Yet COVID-19 has the potential to be a catalyst for positive change in the food system supply chain.

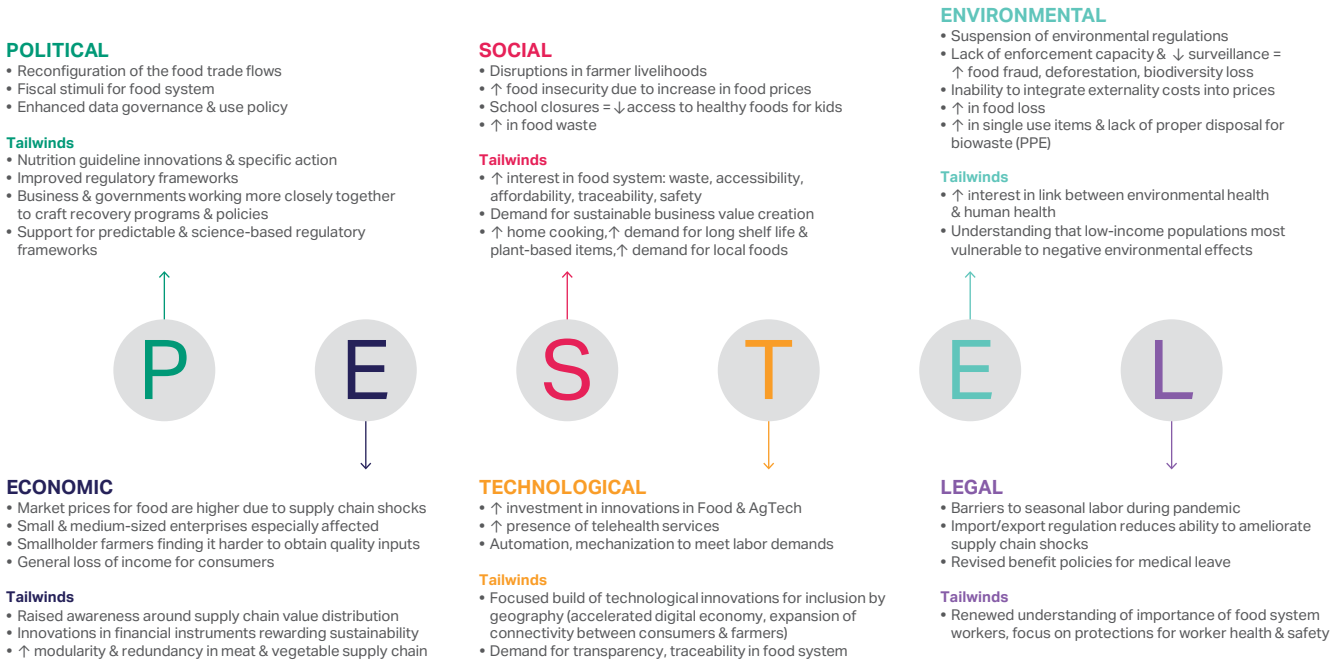
**Table 2: Tipping point framework transformation pathway analysis**

TRANSFORMATION PATHWAY	DIAGNOSIS	INSIGHTS
Agriculture transformation	Tailwind	Governments & companies aligned on opening up the toolbox for farmers, especially in funding & knowledge
Equitable value distribution	Tailwind	Farmers could set up e-commerce to improve market & quality input access; they could also diversify farm products for more resilient income streams
Dietary shifts	Headwind	Food insecurity & loss of income could exacerbate nutrition-based health issues, elevated focus on immune health through nutrition is an opportunity vector
Food loss & waste	Mixed/public will	Possibility to heighten public awareness to address food waste issues; system structure unable to shift quickly from shock, resulting in food loss & waste
Transparency	Public will	Companies & governments see a need for increased real-time data to address food system issues; emerging technologies at stage for rapid scaling; need for data policy to ensure farmer & consumer data rights & business economic opportunity
Policy & finance	Mixed	Companies have space to focus on positive societal, environmental & nutrition action versus near-term profit; demand growing for methods to incorporate environmental, social & governance (ESG) criteria into reporting & internal financial models
New business models	Tailwind	Possibility to heighten awareness of need to better price natural capital but unclear timelines for enabling capabilities & forum to solve tradeoffs between price discovery of natural capital, food affordability & changes to food value chain.

## PESTEL ANALYSIS

Our PESTEL framework gives an overview of the political, economic, social, technological, environment and legal factors influencing how food supply chains can build forward better to deliver healthy and sustainable diets for all.

Figure 5: PESTEL analysis outcomes



## BAKER MCKENZIE ANALYSIS

Baker McKenzie expert analysis of global supply chains shows that many multinationals seeking efficiency have structured operations in such a way that they became wholly dependent on one or just a few suppliers in a single region for mission-critical materials or components.

Figure 6: Baker McKenzie analysis



## BAIN & COMPANY'S SIX CRITICAL AXES FOR CHANGE

COVID-19 can be a catalyst for food system transformation and its extended duration opens a window for incremental system shocks (political, trade, conflict, financial, environmental), which greatly influence the shape of change. Multi-stakeholder engagement will be critical to advancing strong actions, following six critical axes of change.

**Table 3: Bain & Company's six critical axes for change**

### 1. Investor demand

The pandemic has shed light on the need to create strong alignment between activists, consumers, and investors. Investors have an important role to play in enforcing better preparation for systemic disruptions and insisting on buffers and redundancy that would make it easier to absorb shocks.

### 2. Alternative solutions

Creating new business models is one of the most urgent actions the private sector should take to increase resilience and adaptability to withstand future systemic shocks. COVID-19 is an opportunity to learn from past challenges, to change approaches going forward and to accelerate transformational innovations across the whole food value chain in order to achieve more sustainable business behaviors.

### 3. Consumer preference shift

Consumers are increasingly looking for transparency from food and beverage companies and confirmation that they are investing in issues such as food waste, providing accessible and affordable healthy and sustainable food for all, and prioritizing public health and nutrition.

### 4. Government and regulatory actions

As COVID-19 has spread through societies and economies, many businesses have found their communication with governments too limited. Humanitarian efforts face hurdles of inadequate funding and restrictions on access to vulnerable communities. In emerging and developing countries, the double impact of COVID-19 and low commodity prices creates the potential for a chain reaction of income loss leading to hunger and to increased conflict. Schools closures and lack of labor have also brought a spike in child labor within supply chains. There is an opportunity for business to align with governments, local and international institutions to enable the regulatory environment.

### 5. Scientific consensus

COVID-19 has brought scientific experts to center stage, increasing trust and driving consensus. Building back better and more resilient supply chains requires forming strong alliances and partnerships across different stakeholders in the whole food system value chain, especially the scientific community.

### 6. NGOs and activists

Smallholder farmers are large contributors to global food supplies. Many smallholder producers, especially women, perform the role of primary contributors to food systems, [producing 28–31% of total crop production and 30–34% of food supply on 24% of gross agricultural area](#). COVID-19 impacted most smallholders, mainly via decreased sales (82%), difficulty accessing inputs (49%), and difficulty paying staff (44%). To ensure SMEs remain in a position to provide nutritious, safe foods in the future, a multi stakeholder network of NGOs and activists must sponsor initiatives that address smallholders' limited access to land, water, agricultural inputs, markets and price information, credit, improved technologies, agronomic knowledge, risk management tools (including risk sharing pricing models), and representation in economic and political decisions.

## ACKNOWLEDGMENTS

We would like to thank the following organizations and individuals for their inputs into the development of the Vital Supply Chains issue brief.

**Member companies:** Bayer, McKinsey & Company, Unilever, Yara, ABInBev, The Boston Consulting Group (BCG), Cargill, Danone, DBS, DNV-GL, DSM, Edelman, Evonik, Givaudan, IFF, KDD, Olam, Natems, Nestlé, OCP, Protix, Rabobank, Sigma, Syngenta

### Coordination:

WBCSD: Diane Holdorf, Sylvain Maibach, Sophie Hall, Elisabeth Petraki, Clea Kaske-Kuck, Susanne Kat, Camilla De Nardi, Emeline Fellus, Tony Siantonas, Juliet Cachat, Maria Ana Campos

Secondee: Daniel Kurdys, Bayer & Anu Paasiaro, Yara

### Contributing stakeholders:

4SD, World Economic Forum (WEF), UNDP, Food and Agriculture Organization (FAO), Food Systems Dialogues, Global Alliance for Improved Nutrition (GAIN), Global Alliance for the Future of Food, SDG2 Advocacy Hub, Scaling up Nutrition (SUN) Movement, The Food and Land Use Coalition (FOLU), The Rockefeller Foundation, AGRA, CEBSD, Department for Internal Development, The World Food Programme (WFP), World Wide Fund for Nature (WWF).

## DISCLAIMER

This publication has been developed in the name of WBCSD. Like other WBCSD publications, it is the result of a collaborative effort by members of the secretariat and senior executives from member companies. A wide range of members reviewed drafts, thereby ensuring that the document broadly represents the perspective of the WBCSD membership. Input and feedback from members and interviewees were incorporated in a balanced way. This does not mean, however, that every member company or interviewee agrees with every word.

## ABOUT WBCSD

WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. We help make our member companies more successful and sustainable by focusing on the maximum positive impact for shareholders, the environment and societies.

Our member companies come from all business sectors and all major economies, representing a combined revenue of more than USD \$8.5 trillion and 19 million employees. Our global network of almost 70 national business councils gives our members unparalleled reach across the globe. Since 1995, WBCSD has been uniquely positioned to work with member companies along and across value chains to deliver impactful business solutions to the most challenging sustainability issues.

Together, we are the leading voice of business for sustainability: united by our vision of a world where more than 9 billion people are all living well and within the boundaries of our planet, by 2050.

Follow us on [Twitter](#) and [LinkedIn](#)

[www.wbcسد.org](http://www.wbcسد.org)

## COPYRIGHT

Copyright © WBCSD,  
January 2021.



**World Business Council  
for Sustainable Development**

Maison de la Paix  
Chemin Eugène-Rigot 2B  
CP 2075, 1211 Geneva 1  
Switzerland

[www.wbcsd.org](http://www.wbcsd.org)

