FIXING
THE BUSINESS OF FOOD

THE FOOD INDUSTRY AND THE SDG CHALLENGE
THIS REPORT SUMMARIZES THE JOINT EFFORT OF FOUR ORGANIZATIONS to support the food industry in aligning with the Sustainable Development Goals: The Barilla Center for Food and Nutrition (BCFN), the UN Sustainable Development Solutions Network (SDSN), the Columbia Center on Sustainable Investment (CCSI), and the Santa Chiara Lab of the University of Siena (SCL). The first stage of our Project on Sustainability in the Food Sector preliminarily assesses the industry’s progress to date in aligning with the SDGs. In the next phase, we will work with industry leaders, in cooperation with other stakeholders, to recommend SDG-based operating principles and metrics for the future.

Sustainable Development is the globally agreed holistic framework for addressing the world’s economic, social, and environmental challenges. All 193 UN member states signed Agenda 2030 with the 17 Sustainable Development Goals (SDGs) and the Paris Climate Agreement that calls on all nations to pursue efforts to limit global warming to 1.5°C. The obligations are society-wide, including citizens, businesses, and civil-society organizations. They will shape markets and the behavior of businesses, government, and civil society in the years to come. A prerequisite is good corporate citizenship, including honesty in business practices, fair play with stakeholders, and business practices that do not impose harms on others or the environment.

The Food Industry is increasingly aligning its practices with the SDGs and the Paris Climate Agreement in order to promote its financial, social, environmental, and legal sustainability. (For purposes of brevity, we will use the phrase SDG alignment to include the Paris Climate Agreement, which is incorporated in SDG 13). Our basic conclusion in this first report is that many industry leaders have already taken important steps towards alignment with the SDGs but that much more work is needed in terms of business action towards sustainable development, as well as to make sustainability reporting more systematic, detailed, and useful for all parties: the companies, the investors, civil society organizations, and the public.
The SDGs are not merely constraints on behavior — do's and don'ts — but a call for deep transformations in society, with time-bound objectives for 2030 (and 2050 in the case of ending net greenhouse gas emissions). As described by the SDSN and partners,¹ six transformations are needed to achieve the SDGs: (1) Education, Gender, and Inequality; (2) Health, Wellbeing, and Demography; (3) Energy Decarbonisation and Sustainable Industry; (4) Sustainable Food, Land, Water, and Oceans; (5) Sustainable Cities and Communities; and (6) Digital Revolution for Sustainable Development.

The food industry is the key sector for the fourth transformation, to achieve sustainable food, land, water, and oceans. The success of this transformation is of vital importance for a world facing potentially calamitous environmental threats, including climate change, pollution, and loss of biodiversity; massive inequalities of income; and the lack of access of hundreds of millions of people to basic healthcare, healthy and nutritious food, education, clean water, sanitation, and electrification, despite the wealth of the world economy today.

As part of the Food and Land-Use Coalition (FOLU), the Food, Agriculture, Biodiversity, Land Use and Energy Pathways (FABLE) Consortium mobilizes top knowledge institutions from 18 countries and the European Union, to support the development of the data and modeling infrastructure to produce long-term pathways towards sustainable food and land-use systems. The question particularly asked by the FABLE Consortium is how countries can collectively meet associated SDGs and the objectives of the Paris Agreement.

Today, land-use and food systems lead to widespread hunger, malnutrition, and obesity. Food systems account for around one-quarter of greenhouse gas emissions, over 90 percent of scarcity-weighted water use, most losses of biodiversity, overexploitation of fisheries, eutrophication through nutrient overload, and considerable pollution of water and air, for example through the burning of crop residues. At the same time, food systems are highly vulnerable to climate change and land degradation. Integrated strategies are therefore needed to make food systems, land-use, and oceans sustainable and healthy for people.

In response to these challenges, the FABLE consortium has identified three pillars of the transformation to sustainable food, land, water and oceans: efficient and resilient agriculture systems; conservation and restoration of biodiversity; and food security and healthy diets. The necessary changes are complex and will require holistic, long-term strategies.

The industry should put increased focus and contribution on several urgent and unsolved challenges: the still-growing epidemics of micronutrient deficiency, obesity, diabetes, and cardiovascular disease; the food sector’s massive environmental impacts, including its greenhouse gas emissions, the harms to biodiversity, and the many forms of pollution and depletion (including PM 2.5 aerosols, nitrogen and phosphorus fluxes), groundwater depletion, soil degradation, and plastics wastes; and the continued extreme poverty and deprivation of many smallholder farm communities in global supply chains.

Certainly, no single company can solve such daunting problems on its own. Indeed, the food industry as a whole cannot address such challenges alone. The transformation to sustainable food and land use will require new partnerships of the food industry with governments, academia, and civil society. Some of these partnerships will operate locally; others will operate across an entire global supply chain, from “farm to fork.” Partnerships will require a wide range of technical expertise: agronomy, ecology, and public health, among others. And the partnerships must include the general public, who must be informed about the global environmental challenges as well as the keys to healthier diets and lifestyles.


4. Challenges of food systems are also described by the Barilla Center for Food and Nutrition, which has identified, since 2009, three Food Paradoxes, described at https://www.barillacfn.com/en/dissemination/paradox/
Many of the sustainable development challenges are still relatively new to the food industry. During the Green Revolution of the 1960s, for example, the overwhelming focus was on raising farm yields with improved seed varieties, irrigation and fertilizer use. Another focus of industry has been on achieving gains in logistics, shelf life, and the attractiveness and tastiness of products, but such efforts have led to excessive and massive use of sodium, sugar, fats and additives, reduced use of whole grains, and increased packaging and plastic wastes.

Only recently have the new sustainable development challenges come into the public’s and industry’s awareness, including the ongoing epidemics of obesity, diabetes, and cardiovascular disease (which now have also reached low-income countries\(^5\)); the widespread eutrophication of rivers and estuaries as the result of heavy fertilizer use and runoff; the massive plastics pollution of our land, waterways, and oceans; the over-abstraction of groundwater and river flow leading to water scarcity and stress; the deforestation (particularly in the tropics) and loss of biodiversity as the result of expanding areas of crop production and animal husbandry; the heavy emissions of greenhouse gases as the result of land clearing and agricultural practices; the heavy aerosol pollution as the result of the burning of crop residues; the socially explosive expansion of commercial agriculture into indigenous lands; the persistence of extreme poverty, child labor, and bonded labor in the supply chains of food products; the increasing vulnerability of agriculture to human-induced climate change; and the excessive diversion of agricultural raw materials for bioenergy and bioplastic instead of food.

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5. According to WHO, in 2016 78% of global Non Communicable Diseases deaths occurred in low- and middle-income countries.
TODAY BUSINESSES MUST ADDRESS GLOBAL FOOD CHALLENGES

Food companies are being called upon to address these wide-ranging challenges in an integrated and evidence-based manner, including the sustainability of upstream production in global value chains, and the health consequences of downstream use of their products. An ethos of co-responsibility along the entire supply chain, farm to fork, is emerging in governments, among investors, and with consumers. The food industry is increasingly responsible for the sustainable production of its products and the health and wellbeing of the consumers downstream. Agricultural producers, breeders – both small and large – and distributors are also fundamental actors to be taken into consideration.

This expansion of business responsibilities is in line with “multi-stakeholder” corporate management, as recently endorsed by U.S. CEOs in the Business Roundtable. Businesses are of course responsible to their owners, but they are also responsible to their customers, employees, suppliers, and the communities and nations where they operate. And together with their upstream suppliers and downstream customers, businesses are co-responsible for the environmental and social sustainability of their global supply chains. Of course, many CEOs, notably in Europe, have long recognized and practiced multi-stakeholder management well before the recent Business Roundtable statement.

Numerous companies in the food industry are currently working towards sustainable development transformations, for example, within the Consumer Goods Forum. At the same time, others are not yet prepared to face these new responsibilities and demands for accountability. However, even companies that warmly accept the principle of co-responsibility of the supply chain often find great difficulty in applying the principle to their own practices. Few firms in the food industry are able to adequately monitor their upstream and downstream supply chains, including environmental impacts and the effects of their products on the health and wellbeing of the final users, or to work towards the timebound targets of the SDGs.

Companies are turning to sustainability reporting frameworks and standards and to sector-specific monitoring mechanisms in order to support them in this process, through initiatives such as UN Global Compact, World Business Council for Sustainable Development (WBCSD), Global Reporting Initiative (GRI), CDP (Carbon Disclosure Project), Fair Trade Certification, Rainforest Alliance Certification, the Forest Stewardship Council, and others.
Yet the reporting and certification arena is highly fragmented, and the practices, monitoring and reporting standards are still not adequately aligned with the SDGs and indeed are in flux. New initiatives such as the World Benchmarking Alliance (WBA) and the Science-Based Targets Network plan to introduce new recommended standards in the coming years.

We at the BCFN, SDSN, CCSI, and SCL wish to highlight the need for systematic practices, metrics, monitoring, and public education to support the transformation to sustainable land, food, water and oceans, as well as the shift towards sustainable food consumption and behavior.

For that reason, this first stage of the BCFN-SDSN-CCSI-SCL study offers a preliminary assessment of the current reporting and monitoring, and presents our initial recommendations on ways to improve these systems.
THE NECESSARY DIMENSIONS OF SDG ALIGNMENT, REPORTING, MONITORING, AND PUBLIC EDUCATION

We identify four overarching questions for companies in the food sector in order to assess each company's alignment with the SDGs:

1. DOES THE COMPANY CONTRIBUTE TO HEALTHY AND SUSTAINABLE DIETARY PATTERNS THROUGH ITS PRODUCTS AND STRATEGY?

In traditional thinking, a product is presumed to be beneficial simply because it is offered and purchased. Today there is increasing evidence, however, that purchasing and eating behavior, driven by marketing, availability and prices, is not necessarily healthful or beneficial for the consumer. Indeed, consumer food choices are influenced by a variety of factors that often result in very poor food choices, leading to obesity, metabolic diseases, micronutrient deficiencies, and other disorders, and to avoidable environmental impacts, such as those related to the excess consumption of animal source foods — red meat in particular. Perhaps most important, many foods offered to consumers contain excessive sodium, sugar and saturated fats and use processing techniques that contribute to obesity, metabolic diseases, and other disease burdens, while also undermining satiety control and healthful behaviors. Such foods are often heavily advertised and poorly labeled. Low household income is another risk factor for poor nutrition, because sugar-rich products typically provide more calories per unit cost, and tend to be more available and accessible, but then lead to unhealthy outcomes.

The global obesity epidemic has therefore been related to the massive offerings of obesogenic food products, the lack of proper labeling, the lack of awareness among many individuals about healthful food choices, the tendency for consumers to become habituated to foods that are high in sugars, fats, and highly processed products, and overall unhealthy lifestyles (including inadequate physical activity). In short, the food industry has a major responsibility to address and reverse the epidemics of obesity, metabolic diseases, and other related disorders, and to address the special needs and challenges facing low-income households, which must obtain nutritious diets on a tight budget.

2 ARE THE COMPANY’S PRODUCTION PROCESSES ECONOMICALLY, SOCIALLY, AND ENVIRONMENTALLY SUSTAINABLE?

Each company’s production processes raise a host of sustainability issues: the adequacy of worker compensation; the occupational safety of workers; the environmental sustainability of production processes regarding land, air, water, biodiversity, packaging and waste, and greenhouse gases (GHG) emissions; and the company’s relations with host communities. Many of these issues are core topics of company reporting and practices, but others are not, especially the multi-dimensional environmental impacts of production processes. Even in jurisdictions where environmental regulations are lax, companies should pursue best practices in social and environmental management, especially if they are already following higher standards elsewhere.

3 ARE THE COMPANY’S GLOBAL SUPPLY CHAINS SUSTAINABLE?

Supply-chain co-responsibility raises a host of new and difficult challenges. Many companies, especially large multinational companies, source their inputs from many countries, and the largest from dozens of countries. Monitoring of and co-responsibility for these global supply chains is therefore complex. Yet supply chain sustainability is vital. With the dramatic improvements in digital real-time data collection and processing (bar codes, blockchain, remote sensing and monitoring, and others), tracking international trade and environmental hotspots in real time, and thereby monitoring the supply chains regarding real-time economic, social, and environmental conditions, is becoming increasingly feasible.

There are major downstream data collection challenges as well. Efforts by companies to improve the health and wellbeing of their customers, and to enable them to enjoy more healthful diets and lifestyles are still quite limited in scope, and should be prioritized. Similarly, producing companies should give more attention to the waste flows emanating from packaging and discarded products and implement innovative solutions to reduce the waste flows, in collaboration with retailers and researchers, and public awareness campaigns for consumers.
IS THE COMPANY A GOOD CORPORATE CITIZEN?

The SDG transformations depend on eliminating negative externalities, that is company processes (even legal ones) that impose harms on others and the planet. Market competition is appropriate; deliberately harming workers, competitors, taxpayers, or host communities is not.

Anti-social corporate behavior includes tax evasion, misleading counterparties, marketing unsafe products, engaging in misleading advertising or aggressively marketing to children, lobbying against proper food labeling and other health regulations, emitting pollutants, paying bribes, discriminating by gender, race, or ethnicity; and grabbing native lands. Such anti-social behavior is pervasive. Similarly, aggressive tax practices that seek to exploit loopholes in tax laws or weak enforcement processes should be avoided, as they deprive governments of the revenues needed to promote public services and thereby achieve the SDGs. Furthermore, governments should reach international agreements to reduce the disparity in national tax conditions that foster such aggressive tax practices.

Companies need to align their strategy with the SDGs, monitor their own behaviors, and report on them in order to bring such negative externalities under control, and to bring about positive externalities to contribute to tackling planetary and social challenges. Institutions play a key role in verifying and monitoring business behaviors.
In the global business scenario, sustainability reporting has become a practice adopted by a growing number of firms worldwide, with the aim to provide information about their social, environmental and economic performance. As the assessment and reporting of sustainability performance are substantially based on voluntary self-analysis processes, firms can make reference to a wide range of international reporting frameworks and standards, and to sector-specific monitoring mechanisms.

In this first stage of our study, we have reviewed the specific reporting practices of 10 leading companies in the food industry — Ajinomoto, Barilla, Carrefour, Danone, Kellogg’s, Honest Tea, Nestlé, Tesco, Unilever, and Walmart — as well as several of the major reporting standards used by the food industry. Our basic conclusions are the following:

1) The ten companies we examined are already reporting on all of the four main dimensions of corporate practice introduced above: health impacts of products and strategies; sustainability of production; sustainability of the supply chain; and corporate citizenship. These companies, even if with different emphasis, have broadly endorsed sustainable development as a core business concept, and accept the need for co-responsibility in their supply chains.

2) Among the existing sustainability international frameworks and standards, Global Reporting Initiative (GRI) standards are the most widely adopted (nine companies out of ten). GRI standards are usually used in combination with other frameworks proposed by, for example, the UN Global Compact and WBCSD. Further emerging initiatives such as Sustainability Accounting Standards Board (SASB) and the International Integrated Reporting Council (IIRC) are gaining prominence.

Furthermore, reference is made also to specific monitoring mechanisms. Some of them are issued by international financial or sector institutions, some are backed by business organizations, and some are developed and promoted by single private companies.

From our analysis, what emerged is that despite the efforts shown by organizations, reporting systems remain highly idiosyncratic and incomplete. Most problematically, too often the companies pick and choose the focus of their reporting to highlight strengths rather than weaknesses.
3) Companies generally do not report in detail on their supply chains by product line and source regions. Companies offer little disaggregation by source country or product line. It is therefore not possible to assess the company's environmental or social impacts according to the current sustainability reporting. Companies should be transparent on sourcing regions, in order to contribute to the global institutional efforts to tackle extreme poverty and deprivation within the farm communities from which they source and work to improve production practices to make them sustainable.

4) Information regarding the food content and the impacts of products on the health and wellbeing of consumers is not always specific in terms of extent. Companies should make additional efforts to assess and explain the impacts of their products on the health and wellbeing of their customers, working with epidemiologists and other experts in this process, and taking into account that impacts will depend on individual lifestyles, personal characteristics, and other social and institutional factors.

5) Companies do not currently provide sufficient evidence on the major aspects of their corporate citizenship. Within the sustainability reports, these aspects are reported mainly in a narrative form that is affected by a lack of specific information and quantitative data. Perhaps most importantly, companies do not report in detail on their tax payments by country, or their lobbying activities, and limit their information to few specific economic KPIs.

6) Companies in their documents often set targets for the future and show their progress towards such targets. However, they use different targets, criteria, and time-frames, causing difficulties in comparing the results achieved over the years or comparing different companies. Common frameworks could help assess and compare.
We strongly recommend that food industry leaders undertake a series of actions to better align corporate practices in the food sector with the SDGs. Most importantly, we urge the industry to address all four dimensions of SDG alignment emphasized in our Four Dimension Framework.

- Products that contribute to healthy and sustainable dietary patterns;
- Sustainable production practices;
- Sustainable global supply chains;
- Good corporate citizenship.
In order to align corporate practices in the food sector with the SDGs and to deal with such challenges, we emphasize the importance of adopting meaningful and targeted reporting and monitoring standards. Most importantly, we call on the industry to support the harmonization of reporting and monitoring to entail a systematic assessment of the existing and planned international reporting standards for their consistency, gaps, and overlaps, with the intention of the food industry agreeing upon a systematized SDG reporting and monitoring process.

Such harmonized reporting and monitoring standards should be built on the existing platforms (among others, the UN Global Compact, GRI, WBCSD, World Benchmarking Alliance, the Science-Based Targets Network, International Chamber of Commerce, SASB, Integrated Reporting, etc.) and should be structured to address all four pillars of alignment emphasized in the Four Dimension Framework. Since most companies will rely upon third-party monitors and compliance processes, the industry should also agree (pre-competitively) on the financing and standards of these reporting and monitoring processes in a manner that ensures the independence, credibility, and accuracy of the resulting data.

Harmonization should induce reliable and comparable measurements. Such comparability will support the efforts by companies to set ambitious targets in terms of the four dimensions of our framework.

Through the previous commitments, the harmonization of reporting and monitoring should also entail industry efforts to expand the public’s awareness of sustainable and healthy diets and lifestyles through the use of social media, public events, online free educational programs and materials, and of course useful product labelling and marketing. Companies should promote sustainable and healthy diets, improving their products and cooperating with research and other institutions to conduct scientifically-grounded evaluations and assessments on public health issues related to dietary habits. They should also inform consumers about the nutritional content of their products and the role that each product plays within healthy and sustainable dietary patterns.

Such awareness efforts and the proactive implementation of targeted actions, in partnership and in accordance with their respective roles, with institutions at the international and local level, academia, NGOs, and retailers, should address the needs of distinct groups in society — notably children and the elderly, and specific attention should be given to the role of cities.
The harmonized reporting system should cover each major product line along the entire global supply chain. The goal should be to track the supply chain of each product line from the upstream sources to the final users, to monitor and ultimately to ensure economic, social, and environmental sustainability along the entire supply chain. In particular, supply chain leaders should promote the profitability of local producers and foster rural development, thereby also reducing the pressures for out-migration. The sustainable management of supply chains should also promote gender equality, end child labor, and promote the education, wellbeing, and empowerment of youth.

The industry’s growing reliance on intermediaries for supply-chain monitoring puts increased scrutiny and responsibility on the monitors, including Fair Trade, the Rainforest Alliance, the CDP, and others. These organizations need to ensure their own alignment with the transformation to sustainable land, food, water, and oceans. Moreover, the industry needs increased monitoring of the downstream supply chain, and to seek to positively contribute to healthier and more sustainable diets and less waste from processing and packaging.

Finally, companies should foster innovations in order to address the environmental, health, and social challenges consistent with sound financial performance. Innovations will include new products and processes, new digital solutions, social innovations, and adoption of the principles of the circular economy. To promote such innovations, the food industry should partner with the scientific community, including agronomists, nutritionists, ecologists, engineers, climatologists, social scientists and business experts, to address the unprecedently complex challenges facing the industry and society, especially the complexity of combining environmental sustainability and healthy diets for all of the world. Regarding corporate citizenship, emphasis should be put on ensuring fairer and more transparent tax payments by companies in the food sector.
The BCFN – SDSN – CCSI – SCL process will aim in the second year of this project to engage with industry leaders to support this goal to systematize and upgrade the practice, reporting, monitoring, and public education efforts of the companies on SDG alignment. In the coming year, we will convene a series of consultation meetings with the key reporting standards (e.g. ICC, UN Global Compact, GRI, Science-Based Targets Network, WBA, etc.), the key monitoring agencies, and the academic disciplines (ecology, climate, land use, agronomy, nutrition, public health, business and public finance) to help form a consensus on best practices, reporting standards and supply-chain monitoring to address the areas of concern noted in this report. We will also use the resources of our own and our partner institutions to help prepare and recommend new materials for public awareness and education, including an online course on the transformation to sustainable land, food, water, and oceans.

We aim to make our second-year recommendations available to the public and industry at the occasion of the UN General Assembly session in 2020.
The UN Sustainable Development Solutions Network (SDSN) has been operating since 2012 under the auspices of the UN Secretary-General. SDSN mobilizes global scientific and technological expertise to promote practical solutions for sustainable development, including the implementation of the Sustainable Development Goals (SDGs) and the Paris Climate Agreement.

SDSN aims to accelerate joint learning and promote integrated approaches that address the interconnected economic, social and environmental challenges confronting the world. SDSN works closely with United Nations agencies, multilateral financing institutions, the private sector and civil society.

The organization and governance of SDSN enables a large number of leaders from all regions and diverse backgrounds to participate in the development of the network. The SDSN Leadership Council brings together global sustainable development leaders from all regions and sectors. National or Regional SDSNs mobilize knowledge institutions around the SDGs. Several Thematic Networks mobilize experts from around the world on the technical challenges of implementing the SDGs and the Paris Climate Agreement. SDSN has a small secretariat with offices in New York, New Delhi and Paris.

The Barilla Center for Food & Nutrition Foundation (BCFN) is a multidisciplinary centre for the analysis of the major global issues related to food, nutrition, agriculture and environment.

Created in 2009, the BCFN bridges science and society, bringing experience and expertise to the debate in an effort to end the paradoxes of our planet, where obesity and food waste happen despite widespread hunger and malnutrition.

Awareness raising and continuous dialogue within economic, social, environmental and scientific spheres represent critical first steps towards achieving long-term change. The BCFN delivers concrete recommendations and proposes solutions to respond to these urgent challenges and improve food system along the food supply chain - from farm to people. BCFN is convinced that these issues must become priorities in the agendas of decision makers and opinion leaders around the world. BCFN is eager to play an important role and to propose sustainable solutions for the future of our planet.
The Columbia Center on Sustainable Investment (CCSI), a joint center of Columbia Law School and the Earth Institute at Columbia University, is a leading university-based applied research center and forum dedicated to the study, practice and discussion of sustainable international investment. Its mission is to develop and disseminate practical approaches for governments, investors, communities, and other stakeholders to maximize the benefits of international investment for sustainable development, by integrating legal, economic, and policy expertise. CCSI approaches sustainable investment holistically, bridging investment law, natural resource management, human rights, economics, political economy, and environmental management. Through research, advisory projects, multi-stakeholder dialogue and educational programs, the Center focuses on constructing and implementing a comprehensive investment framework that promotes sustainable development and the mutual trust needed for long-term investments that can be practically adopted by governments, companies and civil society. http://ccsi.columbia.edu

The Santa Chiara Lab is a multidisciplinary centre of the University of Siena aiming at promoting and facilitating research and cooperation projects on Agenda 2030 and the Sustainable Development, fostering the acquisition of soft and digital skills, boosting open innovation through the contamination of ideas, knowledge and contributing to the dissemination and promotion of concrete solutions for the relevant challenges for the development of our societies.

The main focus areas of Santa Chiara Lab are Sustainable Development, Agro-Food, Digital Innovation, Education, Life Sciences.
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