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Food Affordability

How can the food industry provide affordable, nutritious foods to support healthy and sustainable diets?

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Executive summary

Today, 3.1 billion people globally cannot afford a healthy diet[1] – a diverse range of nutritious foods that meet energy requirements and provide all the essential micronutrients in the right amounts.

WBCSD's vision is for nutritious food to be available and affordable for all. To achieve this, it is crucial to examine why healthy diets are unaffordable for many and how businesses can improve food affordability. In low-income countries, key internal drivers of the cost of healthy diets include inefficient food production, high production risks and insufficient diversification of crops, livestock and other nutritious produce.

This paper presents case studies from food value chain businesses, highlighting how stakeholders from agriculture, nutrition, food manufacturing, distribution and retail, investors, as well as governmental and non-governmental stakeholders are coming **together to forge partnerships to improve the affordability and accessibility of food**.

These case studies help to identify **four key areas** where businesses can act to increase the affordability of foods. The first two of these interventions address overall food affordability issues and the latter two specifically aim to address the affordability of healthy diets.

Firstly, at the input stage, businesses can strengthen climate resilience by developing new climate-resistant breeds and using a diversity of crops and breeds that are the most adaptable to a changing climate, thereby improving crop performance. Diversification away from a limited number of staple crops grown in 'breadbasket' regions ensures populations are less impacted by threats to supply that drive up the cost of foods.

Secondly, companies can leverage their innovation capabilities and know-how all along the food supply chain. They can empower farmers to adopt better farming and post-harvest techniques that will positively impact yields and reduce food loss and waste. Companies also contribute to deliver safe, affordable, nutritious foods to consumers in urban and rural areas by seeking efficiency in manufacturing and distribution channels in urban and rural areas.

Thirdly, businesses can collaborate and advocate for the consumption of nutritious foods to support a healthy diet within a sustainable food system. Partnerships that supply local knowledge can be vital in boosting demand and the ability of a business to scale sustainable and nutritious solutions.

Finally, investing in programs that go beyond price reductions and help to improve the livelihoods of populations vulnerable to economic instability, such as smallholder farmers and women, strengthens resilience to shocks such as pandemics, conflict and extreme climate events.

We call on all food system actors to collaborate on scaling the interventions included in this paper- strengthening resilience through diversity, increasing productivity and minimizing waste, changing consumption patterns, and improving the livelihoods of smallholders - working together to deliver healthy and sustainable diets to all, produced responsibly and within Planetary boundaries by 2030.

Introduction

Sustainable Development Goal (SDG) #2 calls for ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture globally by 2030. Yet, despite the urgency and necessity of these aims, the world is not on track to achieve them.[1] Food insecurity continues to escalate worldwide, with 216 million people facing crises levels* of acute food insecurity in 2021.[2] Experts expect the situation to worsen in the coming months with numbers of people facing starvation reaching 400 million by 2024. Disruptions in the food and energy systems are reducing the availability of food system inputs, driving up prices, and fueling the current food crisis in an unprecedented manner.[2,3]

In addition to those people that that cannot access an energy sufficient diet, billions of the most vulnerable people worldwide are unable to afford a healthy diet – one that contains not only foods that provide sufficient energy in the form of calories, but also foods that deliver adequate levels of essential nutrients, with diversity across and within food groups. The State of Food Security and Nutrition in the World (SOFI) 2022 report found that around 3.1 billion people cannot afford the least-cost form of a healthy diet, an increase of 112 million since 2019. Moreover, 1.5 billion people cannot afford diets that are nutrient adequate, the majority live in Southern Asia (1.3 billion), sub-Saharan Africa (894 million) and Southeast Asia (347 million).[1,2]

Figure 1. Three increasing levels of diet quality – from subsistence to health

Source: Herforth et al. 2020.[7]

While food insecurity predominantly affects low-income countries/regions, its prevalence is also increasing in middle- to high-income countries, where poverty is on the rise due to rising inflation and the developing recession in the European Union and US.

* Integrated Food Security Phase Classification [IPC]/Cadre Harmonisé [CH] Phase 3 or above – for definition https://www.wfp.org/publications/hunger-hotspots-fao-wfp-early-warnings-acute-food-insecurity-june-september-2022

A key determinant of food security and adequate nutrition is food affordability. Affordability is a determinant of access to food and healthy diets. It can be defined as the capacity to pay a market price for food compared to the proportion of a household's income and other expenses.[5] Availability, acceptability and nutritional quality are additional key parameters towards improving diets but- will have little impact if households are unable to afford these foods.[1]

In WBCSD's Vision 2050, everyone has access to nutritious and affordable food. Building on this vision and WBCSD's Food and Agriculture Roadmap, which sets out transformational targets and key action areas urgently required to achieve food systems transformation, this paper examines ways to improve food affordability from the perspective of businesses across the value chain. It discusses the factors, drivers, and constraints related to providing affordable and nutritious food to all to support the uptake of healthy and sustainable diets.

The paper presents case studies and a set of tactics appropriate for companies, identifying touchpoints along the value chain that can be targeted to strengthen food systems and the food environment to improve the affordability of healthy diets.

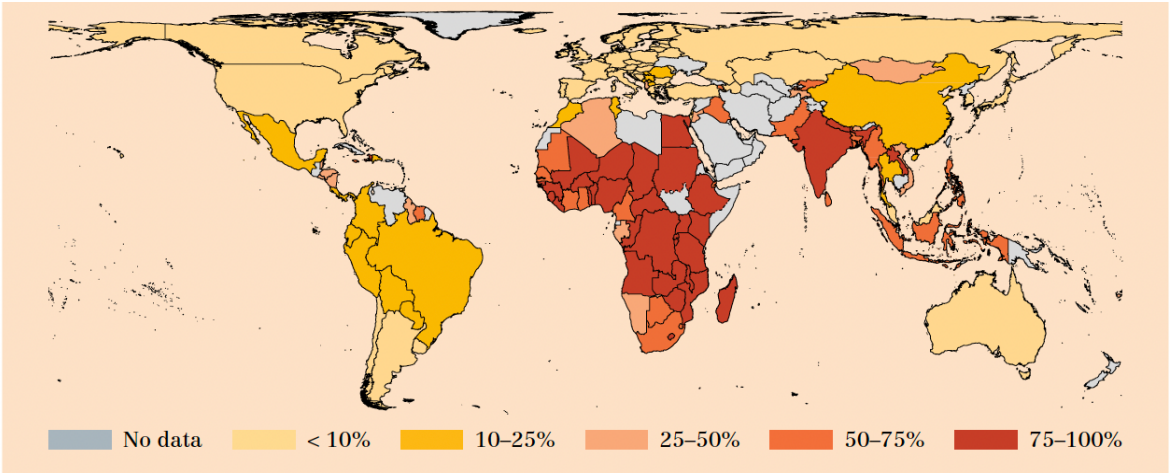
Background

The cost of food, in particular the price of staple grains, has risen globally and remains volatile. Additionally, overreliance on these few staples has increased the fragility of the entire food system.[4] Research examining food price data from 177 countries shows that cost per calorie is even higher for nutrient-dense foods (eggs, dairy, meat, fruit/vegetables, nuts, fish/seafood) than for these starchy staples consumed primarily to meet energy requirements.[5]

Recent research estimates that in different regions worldwide, a healthy diet is **five times more expensive** than a diet that meets only energy requirements.[6] Prices rise with each increase in the level of diet quality. The median cost of **a nutrient-sufficient diet is two to three times higher than an energy-sufficient diet**; the median cost of **a healthy diet is 1.5 to 2 times higher than a nutrient-adequate diet**.[7] The cost of a healthy diet increased globally by around 8% between 2017 and 2019, with the increase in Africa, at 13%, higher than the global average.[8]

In low-income countries, achieving a healthy diet requires a high share of household income. The 2021 SOFI report estimates that the poorest households in these countries would have to allocate at least 63% of per capita household income for food expenditures.[9] The transition to healthy and sustainable diets in these countries is difficult as healthy diets cost more than the international poverty line set by the World Bank of USD $1.90 per day, below which a large proportion of the population lives.

Figure 2: Percentage of the population who cannot afford a healthy diet



Source: Herforth et al. (2020).[10]

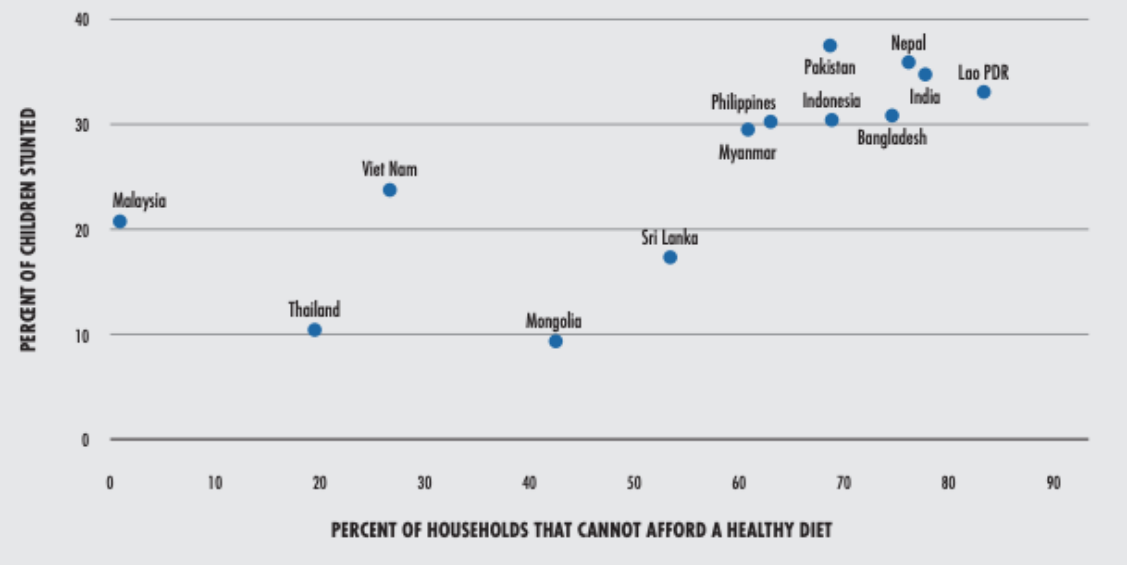
The ability to afford a healthy diet can vary greatly at different points in time in low-income countries due to high unpredictability and variability in income.[11] Incomes in these countries are more susceptible to shocks to individual health and the broader environment, such as natural disasters, pandemics and wars. Households in rural areas, primarily employed in the agricultural sector, will receive most of their annual income directly after harvest. Therefore, even for households with the same average income level, nutritious foods may not be equally affordable at different times. In addition, there can be significant seasonal variation in the affordability of

nutritious foods due to natural agricultural calendars and the cost of transport, preservation and storage required for the year-round availability of perishable foods.[12]

Moreover, the cost of a healthy diet may be higher for certain sub-population groups. For instance, life-cycle stages such as early childhood, adolescence and pregnancy have increased nutrient requirements, which has implications for cost and affordability. The World Food Programme's Fill the Nutrient Gap analysis conducted across several low-income countries found that a healthy diet for adolescent girls and pregnant and lactating women is relatively expensive compared to other household members.[13]

The low affordability of nutrient-adequate or healthy diets has significant consequences at the individual and societal levels. Increases in the unaffordability of a healthy diet are associated with higher levels of moderate to severe food insecurity and multiple burdens of malnutrition, including stunting (as illustrated in Figure 3), wasting, micronutrient deficiencies, overweight and obesity, and non-communicable diseases (NCDs).[14, 15] These short- and long-term health outcomes may result in lower educational attainment, reduced lifetime earning potential and on a societal level, increased burden on the healthcare system and reduced economic development and growth.[16, 17] These patterns can persist from one generation to the next, which is why interventions that improve the affordability of nutritious foods are essential for individuals, communities and societies to thrive.

Figure 3. Unaffordability of healthy diets and child stunting among countries in Asia and the Pacific



Source: Food and Agriculture Organization of the United Nations (FAO), UNICEF, World Food Programme (WFP) and World Health Organization (WHO) (2021).[18]

Key **internal drivers** of the cost of food in general and healthy diets in particular in low-income countries include low productivity in food production, high production risks and insufficient diversification in crops,* livestock and other nutritious produce. Inefficient food supply chains and

* Today's food systems heavily rely on wheat, rice, maize, potatoes and soy, with global calorie production concentrated on a limited set of commodity crops grown using intensive methods in a small number of breadbasket regions. The lack of diversity in staple crop production and consumption drives a number of negative health, social and environmental impacts around the world and jeopardizes our capacity, especially during the current climate crisis, COVID-19 pandemic, and risks associated with geopolitical tensions and conflict.

food loss caused by inadequate preservation and storage and weak transport and market infrastructure, particularly for perishable produce, drive up the cost of nutritious foods.[19,20]

Protectionary trade measures and subsidy programs promoting domestic production of staples such as rice and maize are designed to improve food security but often unintendedly discourage diversification into other nutritious crops. While non-tariff trade measures help improve food safety, quality standards and nutritional value, they can also drive-up trade costs and hence food prices, reducing the affordability of nutritious foods.[21]

Conflict, climate variability, global pandemics, economic downturns and slowdowns are significant **external drivers that affect food affordability**.[22] Conflict affects the entire supply chain, directly impacting natural resources, agriculture and livestock. Trade restrictions, slower movements of goods and services, funds, and labor disruptions during conflicts can also affect food availability, resulting in increased prices and decreased affordability of foods. Economic slowdowns and downturns disrupt the affordability of foods and diets by causing income changes with increased unemployment and lower wages, regardless of the origin of the economic situation. Similar effects on food prices can be observed from climate variability with a decrease in agricultural productivity and a need for increased in food imports in some regions.

The COVID-19 pandemic significantly impacted household capacity to afford nutritious foods, particularly among the growing urban poor in **sub-Saharan Africa** and **Asia**. Food supply chain disruption resulting from labor shortages, border closures (many countries are net importers of staples such as wheat) or movement and trade restrictions have reduced food availability and increased the cost of nutritious foods. Reduced household income and economic downturns that have yet to recover after the lifting of restrictions have exacerbated unaffordability.[23,24,25]

Market speculation based on the news for commodity crops and raw materials can cause tremendous price fluctuations that have significant effects on the affordability of nutritious foods, as seen with the current speculation on wheat due to the war in Ukraine[26] (discussed further below).

War, drought, civil unrest – Global impact on food affordability

At the time of writing this report, the war in Ukraine is underway. The war in Ukraine has had a catastrophic effect on access to food for civilians directly involved and there has also been a broader impact on global food production. Ukraine and Russia provide nearly one-third of all wheat exports globally, as well as almost two-thirds of sunflower oil, one-third of barley and one-fifth of maize worldwide. Russia is also a major exporter of agricultural inputs for food systems, such as fertilizers.[27] The FAO Food Price Index (FFPI) has reported record-high prices across a range of staple food commodities in recent months; higher fuel and fertilizer prices due to supply disruptions further compound this effect.[28,29]

Another crisis is occurring in sub-Saharan Africa and the Horn of Africa. Just as the economic situation in these regions was slowly starting to recover from the impact of the COVID-19 pandemic, millions are now facing a major drought. This has impacted water supplies and farmer livelihoods, resulting in severe food shortages and famine. Ongoing civil unrest and heavy reliance on food imports are

compounding this threat to food security.[30] The region imports around 85% of its wheat supplies, with several countries relying on Russia and Ukraine for more than half their wheat imports. In a region where food accounts for about 40% of consumer spending, rapidly rising food prices are disproportionately affecting the urban poor.[31]

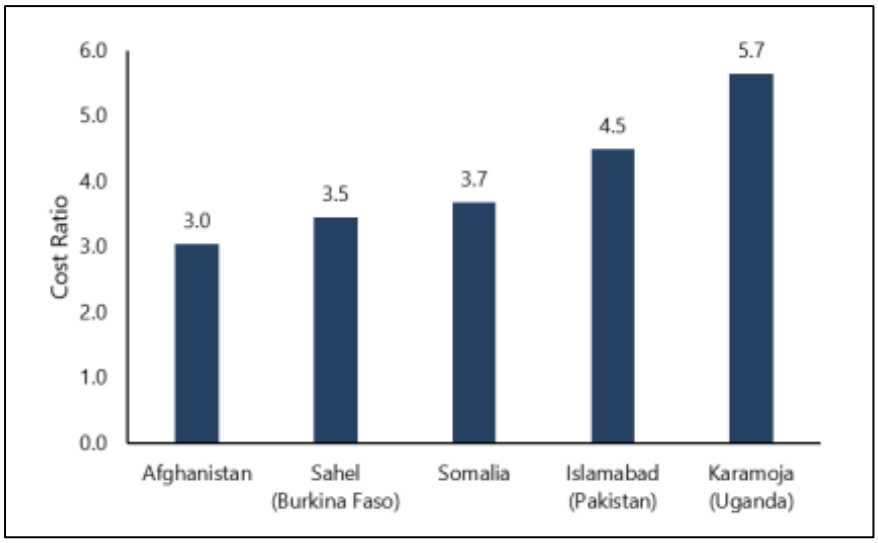
As these severe conflicts and extreme climate events unfold, certain governments have already taken unilateral decisions to reduce domestic surges in food prices. Indonesia has (as of 22 April 2022) banned the export of both edible and industrial palm oil, resulting in a significant increase in edible oil prices in sub-Saharan Africa and worldwide. This ban will also have a detrimental effect on global food production as palm oil is a key ingredient in many food products, as well as cleaning products and lubricants used in manufacturing, with Indonesia accounting for 56% of global palm oil supplies.[32] Even if these interventions are temporary, they send shock waves that will have residual effects for some time, likely leading to structural increases as the market builds greater resilience.

Therefore, the outlook for governments and industry in 2022 in terms of making foods affordable, available and accessible presents enormous challenges. This does not mean that the industry should be discouraged from taking action to improve the affordability of nutritious foods. Rather, it means that companies should anticipate challenges in rolling out the proposed tactics to the desired extent.

We are joining with the business community to call for a coordinated response to preserve the functioning of global markets and the ability of business to respond to such food system shocks and provide affordable nutrition to all. In addition to the individual best practices listed in this paper, we are providing private-sector representation in UN Global Crisis Response Group (GCRG) workstreams for food and energy as part of the broader multi-stakeholder response to current and future food systems shocks. Read more about WBCSD's business action in response to the war in Ukraine.

Fragile settings, those regions characterized by a combination of the external drivers mentioned above, are particularly vulnerable to high food costs due to weakened food systems.[33] Fractured infrastructure and an abrupt disruption to the supply of nutritious foods can lead to lower availability, significantly driving up the cost of diets that meet nutrient needs. While the cost of a healthy diet is, on average, five times more expensive than an energy-sufficient diet globally,[34] the cost of an adequately nutritious diet from local foods in fragile contexts can be **up to six times higher** than an energy-sufficient diet, as highlighted in Figure 4.[35]

Figure 4. Ratio of the cost of the nutritious diet to the cost of the energy-only diet in five diverse fragile contexts



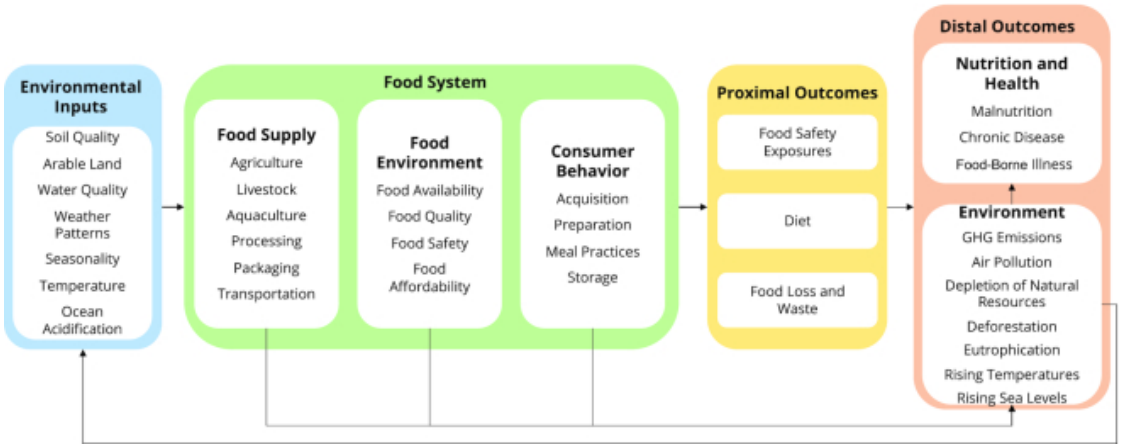
Source: World Food Programme (WFP) (2020).[36]

The populations of sub-Saharan Africa and Southern and Southeastern Asia face a disproportionately high level of unaffordability. The SOFI 2021 report highlights that between 2017 and 2019, at least one of the drivers of unaffordability identified above affected 93% of countries in Africa and 94% in Asia. In 2020, nearly all countries in sub-Saharan Africa and Southern and Southeastern Asia witnessed economic downturns, thus driving up the numbers of those who cannot afford nutritious foods. Many of these countries have high-income inequality that worsens the effects of these drivers.[37]

There is growing global recognition of the importance of affordable, nutritious foods for populations to achieve healthy and sustainable diets. Governments, United Nations (UN) agencies, civil society organizations and businesses are looking at how they can improve access to nutritious and sustainable foods for all. Affordability is a key element of this equation. Three major global events in 2021 highlighted this issue: the UN Food Systems Summit, the UN Climate Change Conference (COP26), and the Tokyo Nutrition for Growth (N4G) Summit. In addition, the Committee on World Food Security adopted the Voluntary Guidelines for Food Systems and Nutrition in February 2021, further highlighting the critical importance of addressing the affordability of healthy and sustainable diets. However, no single sector or entity can address this pervasive and complex issue alone – collaboration and innovation are critical to bringing lasting solutions to the table.

Food affordability is situated within broader food systems as one of the factors that comprise the food environment, as reflected in Figure 5. Food systems cannot contribute to ending hunger and malnutrition unless we transform them with strengthened resilience to the major drivers identified above.[38]

Figure 5. Conceptual framework for food systems and the environment



Source: Fanzo, J. et al. (2020).[39]

The relationship between cost, nutrition and sustainability in diets

Dietary patterns have a major impact on environmental sustainability, in particular climate and biodiversity.[40] It is therefore important to examine the relationship between dietary change toward nutrient-adequate diets and sustainability – as well as the impacts on cost for households and society.

Research shows that there are often trade-offs between the nutrient adequacy, cost and environmental impact of various diets. Analysis of the EAT-Lancet diet – optimized to be both healthy and environmentally sustainable – shows that this diet exceeds the income of around 1.6 billion people globally.[41]

Other research has found that a healthy diet **costs more** than an energy-sufficient diet but may have a lower environmental impact. A study in Brazil took food consumption and price data and designed diets optimized to be nutrient-adequate while respecting food preferences to examine the effect on diet-related greenhouse gas emissions (GHG). Meeting all nutrition requirements increased the cost of the diet by 14-24% but **reduced GHG** by 10-27%. Reductions in GHGe of up to 70% were possible according to the modeling; however, recommended calcium and potassium intakes would not be achieved.[42]

Conversely, research in Indonesia comparing different dietary scenarios for cost, nutrient content and environmental impact shows that nutrition- and cost-optimized diets meet nutrition adequacy but are also high in GHGe.[43]

However, taking into account broader costs other than food price data shows that **healthy AND sustainable** diets can **cost less.** Modeling across 150 countries finds that a healthy and sustainable diet pattern is 18-29% more expensive in low-income to lower-middle-income countries. But broader cost accounting of the True Value of Food – including the diet-related costs of climate change and healthcare – projects that a **healthy and sustainable diet** would be 25-29% **lower in all related social and environmental costs** than current diets for these countries by 2050.[44] We look to both policy-makers and investors to provide further incentives to sustainable businesses already investing in improving their true value creation for society.

The implication is that the dimensions of **nutrition**, **sustainability** and **affordability** are interlinked. Thus, it is important to focus on all three for future development while anticipating trade-offs.

How the food industry can increase food affordability

All food system actors play a crucial role in supporting food production and the food supply chain, and helping consumers to have healthier dietary patterns, which collectively impact food and diet quality, and, more generally, the health of people and the planet.[45]

The SOFI 2021 report identifies six possible pathways to food systems transformation, aimed at addressing the main drivers of food insecurity, malnutrition and the **unaffordability** of healthy diets:

1. Integrating humanitarian, development, and peacebuilding policies in conflict-affected areas;
2. Scaling up climate resilience across food systems;
3. Strengthening resilience of the most vulnerable to economic adversity;
4. Intervening along the food supply chains to lower the cost of nutritious foods;
5. Tackling poverty and structural inequalities, ensuring interventions are pro-poor and inclusive;
6. Strengthening food environments and changing consumer behavior to promote dietary patterns that positively impact human health and the environment.[46]

While myriad political, environmental, economic and socio-cultural factors influence people's diets worldwide, food companies can influence these through decisions about the sourcing, production and delivery of affordable, nutritious foods as essential components of healthy and sustainable diets. In a broader context with government, business also plays a role in engaging consumers – inspiring them to move towards healthier food choices and prepare nutritious and affordable meals for themselves and their families.

The pathways above are designed for adaptation to different populations or regions depending on which driver or combination of drivers exist, delivering targeted approaches based on unique needs. The SOFI 2021 report recommends ensuring coherence with other systems that are interconnected (e.g., agri-food, health, environmental and social protection) to build lasting solutions.[47] Points two, three, four and six of the key pathways highlight opportunities for business leadership in driving food affordability. Several leading companies are already taking action to address these areas, as highlighted in the case studies below.

Scaling up climate resilience across food systems

Climate variability and extremes that bring severe conditions such as drought and flooding and the longer term effects of higher temperatures impact crop yields and adversely affect the entire food system. Reduced crop yields and food supply chain disruptions due to climate-related shocks drive up the cost of nutritious foods.

Industry can support climate resilience by encouraging the growth and use of crop varieties better suited to local conditions, as well as the adoption of better farming practices that are adaptable to changing climate conditions. Organizations are already using crop selection and innovative technologies, such as gene editing, in agriculture to improve climate resilience.

Resilience – the capacity of business, economic and social structures to survive, adapt and grow in the face of change and uncertainty related to disturbances[48] – can also be built through geographical diversification. This concerns notably the diversification of crops away from reliance on a few staple crops coming from "breadbasket" regions and diversification towards more sustainable input sources, such as replacing wild-caught fish with plant-based alternatives for fish meal and fish oil used in agriculture and aquaculture, or replacing soybeans in feed for poultry and pig production.

Vulnerable populations include those whose incomes are the least resistant to economic downturns due to shocks and emergencies such as pandemics, conflicts and natural disasters. As previously discussed, reduced incomes severely impede the ability to purchase nutritious foods, regardless of their availability.

Industry can support the livelihoods of both rural and urban populations by investing directly or in partnership with social enterprises that support and build the capacity of vulnerable groups at multiple points along the supply chain. These notably include smallholder farmers at the input/production stages, and microentrepreneurs (women in particular) at the distribution/retail stages.

Strategies to protect food affordability for rural populations include: working with actors across the supply chain to catalyze agri-finance for small and medium-sized enterprises (SMEs) and drive more investment into a just rural transition; developing tools and training to help companies protect human rights; and exploring the role of inclusive and innovative business models in agricultural systems, such as empowering women suppliers through procurement. Forward-thinking businesses working on our Global Agribusiness in Action on Equitable Livelihoods project are already practicing these strategies, as are those active in the United Nations Food Systems Summit (UNFSS) Coalition of Action on Decent Work and Living Incomes and Living Wages.

Zero Hunger Private Sector Pledge

The Zero Hunger Private Sector Pledge encourages companies and investment funds to make a financial commitment to one of the ten high-impact intervention areas described by new evidence from the **Ceres2030 Sustainable Solutions to End Hunger**. One key recommendation area – **Empower the Excluded** – outlines investing in vocational programs for rural youths; enabling participation in farmers organizations; and scaling up social protection programs. Organized by the Food and Agriculture Organization (FAO) of the United Nations, the Global Alliance for Improved Nutrition (GAIN), Grow Africa, Grow Asia, the International Fund for Agricultural Development (IFAD), the International Institute for Sustainable Development (IISD), the World Benchmarking Alliance (WBA), WBCSD and the World Food Programme (WFP), the Zero Hunger Private Sector Pledge has achieved over USD $450 billion in investments from 43 companies in 47 countries at risk. **See the Zero Hunger Private Sector Pledge for more information and to join**.

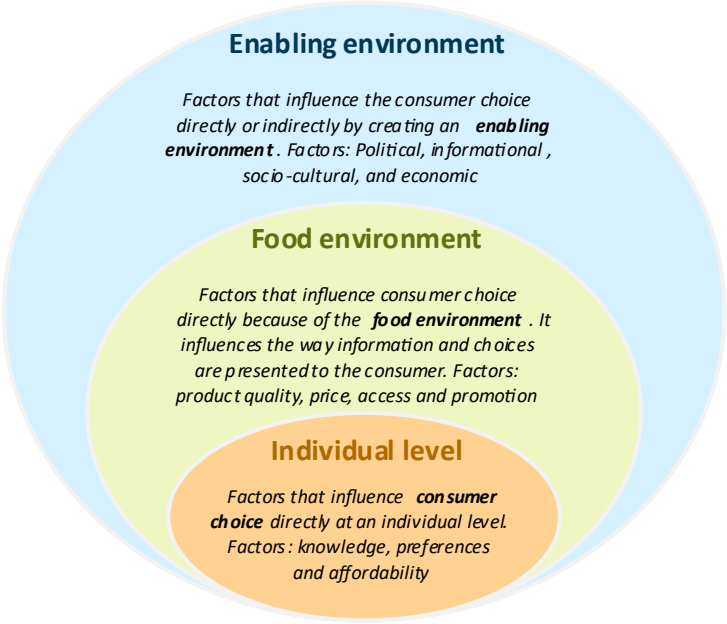
There are significant opportunities for the industry to lower the cost of nutritious foods to support the adoption of healthy, sustainable diets through interventions along the whole value chain (input providers, producers, manufacturers, distributors, food service providers and retailers). Actors at each stage of the value chain face different opportunities and constraints.

One way to lower the cost of nutritious foods is by reducing food loss and waste during agricultural, manufacturing, food service and consumer practices, as the supply chain is the source of 30% of food loss and waste today.[49] Renewed investment in innovation at all of these stages can reduce costs in the longer term by increasing efficiency and improving productivity. Local sourcing and the flexible use of raw materials wherever possible may reduce import, transport and storage costs. As a cost-effective way of providing essential micronutrient fortification can increase the affordability of healthy diets. At the distribution and retail stages, encouraging bulk buying through co-ops or through value packs may enable more stable or reduced pricing of nutritious foods for healthy and sustainable diets.

Providing affordable, nutritious foods on the market is not enough to drive changes in dietary patterns. People are drawn to various foods for many reasons, which differ across population segments.[50] These reasons include price, culture, convenience, taste, family considerations, and knowledge of storage and preparation.

Our work in consumer behavior change targets both the food environment and enabling environment, as illustrated in Figure 6 and outlined in further detail below.

Figure 6. Factors influencing consumer decision-making



Food environment: Businesses should not and cannot focus only on cost reductions. Rather, they should seek to encourage the adoption of nutritious, sustainable and affordable options through various behavior change levers, including marketing and education campaigns. Boosting demand for such products is essential in ensuring a financially viable solution, the production of which the business may scale up.

Enabling environment: The enabling environment is a broader concept that includes direct consumer engagement and components of culture and socio-political factors. All food system actors (governments, the private sector, academia, civil society and international organizations) share responsibility for the enabling environment. Thus, it requires a collaborative approach between private and public sectors at different scales and levels – local, national, regional and global.[51] Multisector partnerships or collaboration, particularly at the local level, may require significant investments in both time and resources but are critical to delivering these integrated education and behavior change programs to maximize reach to vulnerable populations.[52]

Tactics for businesses across the food value chain to support food affordability

The tactics proposed below present individual and collective actions for businesses to support the uptake of affordable, nutritious foods by the people that need them the most. We have structured tactics by supply chain stage and include several interventions along with their expected outcomes. Furthermore, we propose tactics relevant for other stakeholders whose actions and collaboration with businesses play a critical role in transforming food and agriculture systems – such as governments, investors and civil society. Some of these interventions are more geared toward general food production and others more specifically toward the provision of healthy diets. The tactics reflect the broad range of touchpoints where different areas of industry can contribute. Businesses can contribute to all three levels of diet – energy-sufficient, nutrient-adequate and, ultimately, healthy diets.

Businesses should prioritize those populations most in need – those with the highest proportion of people unable to afford nutritious foods for healthy and sustainable diets. Three particular global focus areas are sub-Saharan Africa, Southern and Southeastern Asia. As discussed previously, however, businesses should focus on those countries where they are present and can make the most impact, including vulnerable populations in both more and less economically developed countries. While applicable across regions, the proposed tactics may not work everywhere.

Inputs

Interventions	Outcomes
• Fostering the cultivation of breeds that are better adapted to local conditions and needs – both from environmental and nutritional perspectives • Developing technologies for breeding and variety selection, including biofortification • Protecting crop yields from agents and organisms that can damage them • Developing new crop protection products and practices • Developing eco-friendly fertilizers and feed for animals • Innovating new agricultural production methods, strategies and products	• Increasing intrinsic yield production and shelf life • Increasing the nutritional quality (nutrient content and bioavailability) and safety of raw materials to address micronutrient deficiencies • Reducing crop losses and waste to improve system productivity • Improving the efficiency of production and ensuing potential to improve farmer livelihoods • Increasing resilience through biodiversity

Production

Interventions	Outcomes
• Increasing support to farmers to develop sustainable agricultural and food production practices – helping farmers manufacture some basic products to get more economic value • Developing post-harvest processing – technical interventions such as drying grain to reduce post-harvest loss • Using and developing improved food processing and logistics techniques (e.g., irradiation, high pressure, extrusion and freeze-drying) to increase safety and conservation • Valorizing by-products (animal feed, methanization, compost, etc.) • Recovering valuable products through side-stream management from different waste streams such as wastewater and agri-food residue • Helping farmers produce a diversity of crops and achieving the right balance of crop and animal production	• Supporting more resilient food systems with actions that mitigate the emergence of disease and climate change • Using fewer resources and reducing inputs, maximizing yields and reducing losses, production costs and environmental impacts • Improving nutritional quality and increasing micronutrient bioavailability • Improving farmer livelihoods • Enhancing food safety and quality while maintaining accessibility and affordability • Ensuring the use of marginal land and its enrichment with animal agriculture, and making sure crops valuable for human consumption are not diverted for use in animal feed

Trade

Interventions	Outcomes
• Supporting rapid import/export of goods during times of scarcity or abundance • Expanding import/export options for raw material procurement	• Balancing production shortages and surpluses and increasing supply to thereby reduce raw material prices • Reducing disruption to food supply chain – particularly in times of global or regional crisis

Manufacturing and marketing

Interventions	Outcomes
• Sourcing local raw materials and/or flexible sourcing of raw materials, depending on context and circumstances • Adapting technologies to local settings • Reformulating and innovating products • Fortifying foods with shortfall nutrients • Marketing to help make purchasing affordable foods a more desirable behavior • Adapting packaging formats to available incomes such as single-serving packs or value packs • Balancing the overall costs of a product portfolio through strategic price positioning and the right package size • Inspiring people to cook meals using affordable, nutritious ingredients • Promoting reduced-waste cooking – using up leftover foods/ingredients to reduce landfill • Increasing production of low environmental impact, nutritious products that are processed to reduce cooking time	• Improving manufacturing process efficiency from an economic and environmental perspective • Manufacturing affordable and healthy food; increasing nutrient density and reducing nutrients of public health concern • Incorporating nutritious cooking into daily lives and habits • Reducing fuel use for cooking and reducing time spent on food preparation

Distribution

Interventions	Outcomes
• Developing more urban-rural linkages in distribution channels • Working with microentrepreneurs and ambassadors to distribute safe and nutritious food products • Developing social marketing with and through distributors/channels • Strengthening small-scale cold chain technologies that take products to communities and extend product shelf life; using solar or other sustainable technologies • Testing models that consolidate and streamline multi-company transport and distribution needs	• Improving physical accessibility to and aspiration for nutritious and affordable food in certain areas (including the last mile) • Reducing processor and fuel costs improves worker livelihoods and efficiency of operations

Retail and food service

Interventions	Outcomes
• Developing microcredit solutions allowing customers to buy ahead and pay later • Enabling micro-entrepreneurs to increase access to remote areas and generate income • Adapting packaging formats to available incomes such as single-serving packs when low and bulk-buy cost savings when high • Innovating payment methods where customers redeem credits (earned through "healthy choice" meal purchase, minimum daily step count, etc.) • Developing targeted marketing strategies (e.g., coupons, digital marketing campaigns) • Liaising with local benefit schemes (government or retail-owned programs) to broaden the scope of company-only targeted marketing strategies (e.g., through coupons) • Conducting point-of-sale consumer education programs, including product demonstration, recipe ideas and nutrition information resources • Developing partnerships between retailers and manufacturers to promote shift to healthier diets • Working with local formal and informal food service providers to improve nutritional value of food items they sell and encouraging them to serve as champions	• Driving consumer choice toward nutritious and affordable options – helping businesses to scale these solutions • Increasing affordability of nutritious foods for all • Improving perceived value, ease of use and desirability of affordable, nutritious products

Cross-sector (multi-stakeholder) tactics*

Interventions	Outcomes
• Identifying and engaging with relevant local partners – smallholder farmers, international non-governmental organizations (INGOs), NGOs, civil society organizations • Investing in farmer capacity building and best practice exchanges • Supporting the expansion of urban agriculture/farming • Increasing responsible investment in socioeconomic opportunities and innovations • Increasing nature-positive investments that grow both financial and natural capital • Shifting to more inclusive subsidies that reward the production of sustainable, nutritious and affordable products • Developing educational campaigns involving public-private partnerships to raise awareness of malnutrition and promote the adoption of healthy and sustainable diets • Forming a coalition across food sector to lower VAT/consumer tax on nutritious food products and particularly on fortificants in countries that may not clearly define nutritious product criteria • Collaborating on tracking metrics on cost of healthy diet and populations affected • Supporting workplace nutrition programs – starting with making nutritious foods more affordable for own staff in cafeteria or canteen	• Improving farmers' environmental practices – ensuring the long-term capacity to provide nutritious foods • Ensuring decent incomes and wages and social protection for farmers and workers • Improving the resilience of food systems to social, economic and environmental shocks • Encouraging food producers to produce nutritious and sustainable foods • Raising consumer awareness about the value and importance of nutritious food, building understanding and capacity to choose and prepare nutritious food • Lowering taxes reduces cost of nutritious foods – improving accessibility and scaling production systems • Growing the ability to inform policy-makers and target interventions where needed

*These solutions require collaboration between multiple stakeholder groups – including, for example, policy support, local coordination, capital market investments, and business innovation.

Case studies

The following case studies describe ongoing work by WBCSD members in the aforementioned areas.

Bayer: Improving tomatoes to perform better in a changing climate

A well-known Indian saying is "No tomato, no cooking." Tomatoes are one of the three most important crops on the Indian Government's TOP (tomato, onion and potato) horticultural priority list. As such, tomatoes are an important commercial crop for farmers – India is the second-largest tomato producer in the world.[53] However, climate change has challenged traditional vegetable growers in eastern India, reducing overall agricultural productivity. Higher temperatures tend to reduce crop yields and can increase weed growth and pests.[54] When temperatures rise, tomatoes may fail to "set" fruit and can be damaged in the field (sun blistering, reduced shelf life, etc.). Higher temperatures can also mean a need for more water and more than half of India's arable land is dependent on rainfall.

While open field hybrid tomato cultivation in India has grown substantially since the 2010-11 season (see table below), average yields were not maintaining a similar pace. The major areas representing tomato cultivation in smallholder geographies are West Bengal, Odisha, Jharkhand and parts of Eastern Uttar Pradesh. Farmers here were looking to maximize their harvest while decreasing inputs but they didn't have the tools to do this, especially with the added effects of climate change. Prior to the 2011-12 season there were few tomato hybrids on the market that provided a good fruit size along with productivity during the summer season (October-March), which is the main growing season.

Bayer introduced its hybrid "Saksham" tomato in 2011-12. In the regions identified above, cultivation of the Saksham variety increased 900% between 2012 and 2019. This variety is known for its excellent heat tolerance, giving it a key advantage for farmers, as it is better adapted to local environmental conditions. It also has an attractive fruit size (90-110 grams). The Saksham tomato variety benefits from a shelf life of 8 to 10 days, compared to a typical 3–4-day timeframe within which tomatoes would normally spoil. While just under one million hectares of land are used for growing tomatoes in India, as much as 40% of the tomatoes are lost before making it to small market stalls or supermarket shelves. Increasing shelf life is an important tool to increase production for farmers and reduce food waste. Breeding hybrid tomato varieties like Saksham provides farmers with varieties that are better adapted to local conditions, which could enable more abundant and affordable food supplies.

Saksham is part of Bayer's vegetable seeds business, which is strongly committed to providing solutions that mitigate the risks for smallholder farmers, placing their needs for access to seeds and resources at the center of Bayer's smallholder business operations. Bayer recently joined the Zero Hunger Private Sector Pledge, committing to invest around USD $101 million in research and development by 2030 to support smallholder farmers and enable access to quality vegetable seeds that are tailored for their specific needs, as well as agronomic knowledge and sustainable practices. Reducing post-harvest losses, as Skasham can, is also a key goal of Bayer's seeds research and development.

	Tomato cultivation area in eastern India (Odisha/Uttar Pradesh)							
Year	2010-11	2011-12	2013-14	2014-15	2015-16	2016-17	2017-18	2020-21
Total area (in thousands of hectares)	96.6	103.4	105.1	107.1	111.66	111.98	112.25	118.17

Source: Ministry of Agriculture and Farmers Welfare, Govt. of India.[55]

DSM: Fortification and specialized nutritious foods

Malnutrition in all its forms, including micronutrient deficiencies, affects 2 billion people globally.[56] Its negative consequences can be severe: impacting health, impairing cognitive development and hampering socio-economic development.[57] DSM is committed to improving nutrition through the following strategies.

Large-scale food fortification

The fortification of staple foods is one of the most affordable solutions to address micronutrient deficiencies on a large scale. Fortification provides a cost-effective way of adding or replacing essential vitamins and minerals that may have been lost during processing or are deficient in the population.[58] Improving micronutrient intakes through the fortification of foods that people consume daily helps reach vulnerable populations, with the potential to significantly reduce healthcare costs by millions each year.

It is possible to fortify a wide range of staple foods, influenced by what is readily available and most commonly consumed in countries. More than 3 billion people worldwide consume rice, contributing up to 75% of daily energy intake in many developing countries, with increased reliance on staples such as rice during recent economic downturns previously discussed.[59] Fortifying rice with vital micronutrients is an effective solution to address deficiencies and improve the micronutrient status of millions of people worldwide. Providing fortified rice through social safety nets and the open market, in the workplace and in schools is especially effective. As a pioneer in rice fortification, DSM provides fortified rice kernels, ready to use micronutrient blends and assistance in the development of the most appropriate micronutrient compositions.

DSM commits to helping fill the micronutrient gap by 2030, calling on governments and the nutrition community worldwide to partner to ensure the success of fortification initiatives in improving the nutritional status of the global population. The following examples of large-scale staple food fortification will significantly contribute to reaching this commitment:

- Supporting the School Meals Coalition – striving for every child to have the opportunity to receive a healthy, nutritious meal in school by 2030 to reach their full physical and mental potential;
- Fortified rice in workers' meals is linked to reductions in diseases, which improves earnings and enhances productivity for a limited added cost to the employer.

Specialized nutritious foods (SNFs)

In response to increased interest in affordable solutions to reduce the global prevalence of malnutrition, the United Nations World Food Programme (WFP) and DSM co-developed Super Cereal Plus (SC+) – an SNF tailored to the nutritional needs of children 6- to 59 months old to treat moderate acute malnutrition (MAM; associated with insufficient intake of calories and micronutrients). Additionally, the use of SC+ reduces the risk of poor birth outcomes in pregnant and lactating women, using malnutrition as an indicator to target those at highest risk. SC+ is a highly nutritious mix of maize flour, sugar, soy meal, refined soy oil and skimmed milk powder enriched with essential vitamins and minerals.

In the field, SC+ quickly demonstrated positive results, proven to be equally effective in the treatment of MAM as supplements already in use.[60] By leveraging WFP's global outreach and logistical capabilities in reaching last mile beneficiaries, combined with DSM's technical capability in developing SNFs enabled a rapid scale-up by providing an additional 5 million WFP beneficiaries with nutritious food.[61] The scaling up of SC+ focused on product improvement and strengthening a growing market. Therefore, the WFP-DSM partnership focused primarily on ensuring adequate supply for growing demand for high-quality nutritious products by targeting specific beneficiary groups with "the right food, at the right time, at the right place."[62]

DSM is continuing to invest in ways to make nutritious foods more available and affordable for all. An example is Africa Improved Foods (AIF), a social enterprise in Rwanda and a public-private partnership between the Rwandan Government, DSM and others. AIF is a key producer of SNFs, currently sourcing from 130,000 smallholder farmers and reaching 1.6 million consumers daily through both private and public channels across East Africa. AIF is a scalable, sustainable, profitable and affordable solution to reducing malnutrition by reaching vulnerable communities with affordable SNFs in East Africa. By 2030, AIF aims to make a significant contribution to the DSM food system commitment to improve livelihoods, sourcing from 500,000 smallholder farmers across the value chain. An independent study commissioned by the International Finance Corporation (IFC) and conducted by the University of Chicago estimates that from 2016 to 2031, AIF will generate an added net incremental value of approximately USD $1 billion to East Africa – attributable both to a reduction in malnutrition rates and increased local economic activity.[63]

Griffith Foods: Nutriamor

Griffith Foods partnered with the Fundación Saciar, a member of the Global Food Banking Network serving the undernourished in Colombia, to develop a powdered beverage product with essential nutrition for children, pregnant women and families. A food loss commercialization opportunity was identified, and Griffith Foods' expertise was leveraged to convert bananas rejected due to minor blemishes into green banana flour. A powdered beverage premix, branded Nutriamor, was formulated by combining the flour with powdered milk and soy protein, and fortifying with vitamins and minerals to meet nutritional requirements as defined by the Fundación Saciar nutritionist.

Griffith Foods adopted the project in 2015 with the goal to make a more self-sustainable, easy-to-prepare, nutrient-dense product at a reasonable cost. During development, close interaction with vitamin and mineral suppliers was necessary to ensure appropriate usage levels, functionality and maintenance of desired nutrient levels throughout processing and shelf life. Cost parameters were also defined to ensure that the final formulation met affordability objectives.

During scale up, challenges included ensuring the homogenous distribution of nutrients, along with proper handling and storage of vitamins and minerals. Training of customers, including non-government organizations and food bank staff was also necessary to ensure proper handling, storage and preparation of the product.

To support use and awareness, an interdisciplinary team developed and implemented a marketing strategy. This team worked to understand the segment and consumers to ensure the appropriate communication of the benefits. In addition, new channels for distribution were identified such as healthy eateries, healthcare outlets and neighborhood stores. This required identifying specialized distributors, creating a broader ecosystem to reach these segments, and formulating more differentiated products to expand the existing portfolio. The importance of partnerships was key to ensuring cost-effective raw material procurement and product distribution. Additionally, a dedicated team focused on collecting insights, effectively communicating benefits, and supporting targeted distribution, all of which proved extremely valuable to promoting use and acceptance.

Nestlé: Bear Brand in the Philippines

Nestlé has been contributing to the Sustainable Development Goal of Zero Hunger (SDG 2) through its Popularly Positioned Products (PPP) Affordable Nutrition strategy, which aims to provide accessible and affordable nutrition to lower-income consumers. By leveraging its global footprint and global expertise along the value chain, including in R&D, the company can offer a wide range of products and services that cater to local consumer nutritional needs and tastes at price points and in formats those living with a limited budget (USD $2-4 a day) can afford. The offer includes widely and regularly consumed items such as dairy products and porridges. Many of Nestlé's affordable nutrition products also contribute to addressing common deficiencies through micronutrient fortification.

Philippines is a market where Nestlé has deployed this strategy, to address the needs of the less affluent population. Food insecurity in the Philippines is increasing, affecting 64% of households in 2019 – an increase of almost 10% from the previous year.[64] Food fortification is a cost-effective way to address micronutrient deficiencies at scale, helping to mitigate the impact of nutrition-insecure households in the Philippines. In order to reach a large population, fortified food products need to be part of widely and regularly consumed food. As an example, Nestlé has been fortifying dairy products because these products are an effective vehicle for iron fortification, as their consumption is widespread and allows for a wide reach. Building on its brand legacy, Nestlé's Bear Brand, for example, operating in the Philippines since 1976, sold 5.2 billion servings of fortified products in 2021. The company can only achieve this outcome by applying a holistic approach considering the whole value chain and addressing the relevant local context in terms of affordability and nutrition. These are the steps Nestlé has taken to deliver successful fortification:

- **Understanding local nutrient deficiencies,** which allows for identifying the right fortificants;
- **Choosing credible food vectors** as part of a healthy diet, regularly and widely consumed, and with the right market penetration to contribute at scale;
- **Optimizing costs throughout the whole value chain** allows Nestlé to make the products affordable, which is reflected in the consumer price; one factor is the use of locally available raw materials whenever possible to lower production costs without compromising quality standards;
- **Maximizing reach** through an extensive network of micro-distributors striving to reach emerging and less affluent consumers, through a variety of outlets using different models to make the products more easily accessible and widely available. For instance, this involves small entrepreneurs selling directly to Sari-Sari outlets (convenience stores in the Filipino traditional trade). These micro-entrepreneurs can often be competitive on price due to their low fixed-cost base. This also a model of revenue generation for women in local communities hence contributing to their empowerment;
- **Communicating and educating** as it is crucial to make the products desirable and to raise awareness of the issue of malnutrition and solutions to address it; relying on innovative marketing techniques, multichannel campaigns have been developed featuring celebrities who can carry powerful messages while adhering to the Nestlé Marketing to Children Policy;
- **Innovating to improve consumer knowledge**, such as through interactive online tools like the launch of the Tibay calculator by Bear Brand in 2020 and involving Nestlé Research experts in partnership with the Food and Nutrition Research Institute (FNRI); the tool offers parents valuable feedback on the nutritional value and diversity of their children's diet and will reach over 500,000 children; the launch of this tool is embedded in the broader Laki sa Tibay (Growing Up with Strength) program, launched in 2006.

Nestlé continuously seeks new product development opportunities that meet local nutritional needs and reduce its environmental footprint. Side stream use in the agricultural supply chain and in the manufacturing process fully valorizes raw materials and avoids nutrient losses. A pilot conducted in Africa created a nutritious porridge out of Milo malt side streams, reducing the cost of raw materials to an affordable price for lower income families.

Unilever: Healthy eating programs

Unilever is addressing affordability and accessibility worldwide through product offerings, sales channels and pricing, and through healthy eating programs. Unilever's Healthy Eating and education programs center on a locally identified and acknowledged nutritional need, such as stunting, micronutrient deficiencies or lack of dietary diversity, and very often in areas where affordability and accessibility are also issues. A collaborative approach with local governments, NGOs and academia is essential to addressing those issues through integrated programs targeting specific needs and populations. Unilever's long-standing efforts in nutrition are widely recognized, making the company a credible and trusted partner for governments and NGOs. Unilever's brands play an important role in helping consumers adhere to the programs since customers recognize and trust them for their quality and food safety, which are not always a given in some parts of the world. The following examples highlight Unilever's collaborative approach to healthy eating programs.

Knorr: Follow in my Green Food Steps

A lack of dietary iron causes around 50% of the incidence of anemia in Nigeria. A dietary diversity assessment carried out across six states revealed that the majority of the population was not consuming adequate amounts of iron-rich foods such as meat or leafy green vegetables.[65] In 2015, **Unilever** partnered with the **Global Alliance for Improved Nutrition (GAIN)**, the **Growing Business Foundation** and **Society for Family Health (SFH),** the **Nigerian Nutrition Society** and the **International Fund for Agricultural Development (IFAD)** to develop and deliver a six-week home and school-based community program for mothers and teenage daughters, with the aim of changing cooking behavior to help increase iron intake. The program was based on robust consumer and technical insights and scoped the nutrition gap on iron intake, current and desired cooking behaviors and understanding of the shopping, dish preparation and eating habits of the target group. It entailed fortifying a top selling Knorr bouillon with iron and remixing a commonly consumed stew recipe, where the Knorr bouillon is used, by incorporating an additional iron-rich ingredient (leafy green vegetable). Both the bouillon cubes and the leafy green vegetable were accessible, affordable and acceptable ingredients to the families in the target population and the recipe met the Unilever Healthy Recipe criteria.

The program championed nutritious cooking and helped improve women's livelihoods by training them to sell nutritious products and reinforce the dietary changes that can help reduce the prevalence of iron deficiency in families across the country. This was achieved through Unilever's inclusive "Gbemiga" business model, a social distribution initiative that creates income opportunities for women microentrepreneurs while improving access to goods and services for rural consumers.

Additionally, the program helped smallholder farmers, who grow the local leafy green vegetables, become part of a sustainable supply chain through training to equip them with skills in sustainable agriculture. At the end of 2018, the program had reached 320,000 mothers and daughters through behavior change activations and an additional 20 million indirectly via digital and social channels. At the end of the program, 41% of participants had started adding leafy vegetables to their dishes.[66]

Knorr Nutri Sarap Nutrition Program in the Philippines

The Food and Nutrition Research Institute (DOST-FRNI) reports that at least 7 million children in the Philippines are malnourished. A recent rapid assessment survey revealed that 6 out of 10 households reported "moderate to severe" food insecurity.

The Nutri Sarap program started over 15 years ago as a supplementary feeding program under the title of Knorr Lutong Nanay. It has since developed into a multifaceted nutrition education program that reaches about 2 million people per year.

Partnering with the Department of Social Welfare and Development, DOST-FNRI, the National Nutrition Council and the Department of Education, Knorr Philippines worked with local chefs and nutritionists to develop a cookbook featuring 63 recipes in line with "Pinggang Pinoy" (healthy food plate for Filipino adults) that are also budget-friendly – costing less than the equivalent of €0.50 per meal. Communities receive a 120-day supplementary feeding program ensuring the provision of additional support for undernourished children. The program also teaches caregivers about the food pyramid and how to budget for nutritious meals, choose healthy ingredients and maintain healthy eating habits. Knorr products play an equally important role in the program. Knorr has reformulated some of its best-selling products to provide essential nutrients and the company promotes portions of added vegetables in the recipes provided.

The Nutri Sarap program now includes nutrition education on TV and in schools in partnership with the Department of Education. The habit-changing program has shown a 6-fold increase in caregivers cooking healthy food within these communities and a 50% improvement in key health indicators among children as measured by DOST-FNRI. The program serves individuals across Metro Manila and the Calabarzon region and is poised to scale even further.

Royco Nutrimenu in Indonesia

To help tackle stunting, Unilever collaborated with the Indonesian Government, seven NGOs – including Nutrition International, GAIN and Thyroid Federation International – as well as numerous community stakeholders to deliver workshops and a 21-day program of nutritious and affordable recipes following "Isi Piringku" (Indonesian healthy eating plate). The Nutrimenu cookbook recipes, prepared by chefs and nutritionists taking into account taste, price and nutritional content, promote the use of sustainable Future 50 Food ingredients like the drought-resistant Moringa plant. In addition, Royco has reformulated its bestselling broths and meal makers to include iodine and makes them available in affordable pack sizes.

By 2021, the program had directly reached more than 1 million people and changed around 80 million plates to meet Isi Piringku guidelines. Research conducted in collaboration with IPB University showed that about 75% of program participants were able to prepare meals in accordance with the Indonesian healthy eating plate. Royco is the government's appointed partner to lead Indonesia's stunting rate reduction efforts and aims to change 100 million plates in 2022.

Conclusion

Food affordability is an important determinant of food choice and access, driving dietary patterns, nutrition status and overall health and environmental outcomes. Affordability remains a key barrier to accessing nutritious foods that make up healthy diets among the poorest segments of the population worldwide, particularly in low-income countries in sub-Saharan Africa and South and Southeastern Asia. Climate shocks, conflict and pandemics risk further impacting fragile food systems in these regions, resulting in further economic downturns and supply chain disruptions, driving the cost of nutritious foods and, ultimately, healthy diets beyond the reach of most households.

Businesses have an important role to play in supporting affordability, a role that is dynamic, multi-faceted and far more complex than solely reducing prices. Improving the affordability of the nutritious foods that comprise a healthy diet requires actions tailored to the unique needs and caracteritistics of various countries and population segments.

There are distinct opportunities for businesses in the food value chain help build food system resilience and increase the affordability of the nutritious foods- boosting the number of people that can access energy-sufficient, nutrient-adequate and, ultimately, healthy diets. Leading companies are already taking action along their value chains. Nevertheless, collaboration with actors across sectors is critical to scaling impact for vulnerable populations and encouraging consumers to seek out and adopt these foods as part of a healthy and sustainable diet. It is necessary to harness interventions that leverage companies' unique offerings and positions throughout the food system to support improvements in the affordability of nutritious foods.

We call on all food system actors to collaborate on scaling the interventions included in this paper – strengthening resilience through diversity, increasing productivity and minimizing waste, changing consumption patterns, and improving the livelihoods of smallholders – working together to deliver healthy and sustainable diets to all, produced responsibly and within planetary boundaries, by 2030.

Find out more about WBCSD's Food Reform for Sustianbililty and Health (FReSH) project here, or get in-touch at Watkins@wbcsd.org for further information.

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This report is released in the name of WBCSD. Like other reports, it is the result of collaborative efforts by WBCSD staff, experts and executives from member companies. Drafts were reviewed by a wide range of members, ensuring that the document broadly represents the majority view of WBCSD members. It does not mean, however, that every member company of WBCSD agrees with every word. Please note that the data published in the report are as of April 2022.

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