

Workforce Nutrition Programs in Supply Chains

The benefits of addressing malnutrition among supply chain workers and how to make this a reality

December 2021





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Abbreviations

ATNI	Access to Nutrition Initiative	NGO	non-governmental organization
BMS	Breast-milk substitutes	SBN	SUN Business Network
CGF	The Consumer Goods Forum	SCGP	Sustainable Cashew Growers Program
CMS	Coffee Management Services	SDGs	Sustainable Development Goals
ESG	Environmental, Social, and Governance	SMEs	Small and Medium-sized Enterprises
GAIN	Global Alliance for Improved Nutrition	SUN	Scaling Up Nutrition
GDP	Gross Domestic Product	TCNA	Twinings Community Needs Assessment
GNR	Global Nutrition Report	UN	United Nations
IDH	The Sustainable Trade Initiative	UNICEF	United Nations Children's Fund
IFAD	International Fund for Agricultural Development	WASH	Water, Sanitation and Hygiene
IISD	International Institute for Sustainable Development	WBCSD	World Business Council for Sustainable Development
ILO	International Labour Organization	WFN	Workforce Nutrition Alliance
LMICs	Low- and Middle-Income Countries	WFP	World Food Program
NCD	non-communicable disease	WHO	World Health Organization



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Executive Summary

Malnutrition is prevalent throughout many supply chain workforces – and companies hold the key to making a meaningful difference

In a world where one in three people are malnourished and food insecurity is once again on the rise, it is imperative that every actor with the power and resources to do so plays a part in addressing this crisis. This includes the private sector: not only food-related companies, but *all* companies whose products (and, therefore, profits) rely on the labor of those who may be experiencing malnutrition and/or food insecurity. Workforce nutrition programs in supply chains therefore represent an important opportunity for companies to make a meaningful difference to tackling the malnutrition crisis.

Rates of malnutrition are disproportionately high in low- and middle-income countries (LMICs), where a considerable proportion of agro-commodity and low-tech manufacturing takes place. Within these countries, it has been found that 18 percent of agricultural workers and 12 percent of manufacturing workers are underweight, which results from chronic hunger and inadequate diets and causes physical and cognitive impairment. Women constitute nearly half of all supply chain workers, and their vulnerability to malnutrition not only further exacerbates gender inequalities, but also threatens the health of their children.

With its wide-ranging health impacts, malnutrition and food insecurity not only significantly impact one's quality of life, but also negatively affect productivity and earnings, thereby trapping both households and communities in vicious cycles of poverty. A recent study by Chatham House across 19 LMICs found that the prevalence of malnutrition among employees costs businesses an estimated \$130 billion to \$850 billion a year through associated productivity reductions.

The workplace represents a key food environment shaping worker nutrition access and behaviors. Low incomes, often long working hours, and other pressures also mean that workers often cannot afford, access, and prepare the nutritious diets necessary for good health. These conditions are compounded by inadequate knowledge about nutrition. Although supply chain workers are not direct employees of 'buyer' companies, they are nonetheless very much part of their sphere of influence and, therefore, their responsibility.



Interventions delivered through supply chain channels and into the workplace have the potential to be a key lever for improving the nutrition and health of these workers. Workplace settings offer many benefits as a platform for delivery of nutrition interventions at scale, in that a substantial number of the working population can be reached and multiple levels of influence on behavior can be targeted.

Currently, such supply chain workforce nutrition programs are relatively few in number, as ATNI found in its latest Global Index Report. This is despite increasing recognition among many companies of the benefits of addressing nutrition in their own (direct) workforces. Nevertheless, those who have already implemented such programs in their supply chains explain that, to them, it's a "no-brainer". Studies estimate the returns on investment for companies on workforce nutrition programs to be up to 6:1.¹

This report therefore aims to drive much-needed action from more companies to address malnutrition in their supply chains. Drawing upon findings from six case studies of such programs by multinationals



across a range of sectors and workplace settings, including factories, farm estates, and smallholders (as an 'informal' workforce), this paper seeks to not only demonstrate that there are major benefits to the company of doing so, but also show *how* it can be done, the many options that are available, and key considerations and recommendations for developing such programs.

Key findings of the report:

- **Business case:** The companies ATNI interviewed were enthusiastic about the immense value of these programs, emphasizing how their substantial intangible benefits go beyond financial returns. For example, by increasing their suppliers' productivity and lowering their costs and staff turnover, this ensured greater continuity and quality of supply and strengthened supplier relationships, which together increase supply chain resilience. Moreover, the danger of *not* addressing malnutrition was also identified as a potential reputational risk and threat to their commitments to corporate citizenship and responsible business, and, therefore, their brand.
- **Costs:** It was also found that these programs did not always require huge sums of investment beyond the start-up costs and initial capacity-building, with some interventions being largely self-perpetuating, while many suppliers (who see the benefits) are willing to shoulder the day-to-day costs themselves. Specific interventions range in cost, but many only require a tweaking of existing activities to incorporate nutrition elements or leveraging of existing programs and structures to extend nutrition to the workforce, rather than building systems from scratch. Meanwhile, given the potentially significant public health and social impact of such programs, (co-)funding opportunities can be sought with donors, host governments, and partnerships.
- **Wide range of approaches possible:** Across the six case studies, ATNI identified nearly 30 distinct interventions, across four key workforce nutrition pillars: healthy food at work (in this context, relating to addressing availability, access, and affordability), nutrition education and behavioral change, breastfeeding support, and nutrition-related health check-ups.

ATNI hopes that this paper provides inspiration to companies to invest in improving nutrition for workers in their supply chains who need it the most. It is a call to action for both companies and other organizations working with companies in their supply chains, including NGOs, policymakers and other accountability mechanism organizations, to engage companies to do more for the nutrition and health of their supply chain workers, and together contribute to ending hunger and poverty globally.

For additional information and or questions please visit our [webpage](#).

Box 1: Key statistics

- 1 in 5 jobs are in global supply chains.
- 58% people spend more than one third of their adult lives at work.
- 2.4 billion people were food insecure in 2020, 930 million severely food insecure.
- 18% of agricultural and 12% of manufacturing workers in LMICs are underweight.
- Female workers make up 44% of the global supply chain workforce, and are 1.4 to 2.6 times more likely to be anemic than male.
- Malnutrition among workers cost businesses in LMICs between \$130 billion and \$850 billion a year.
- Studies estimate workforce nutrition programs have a return on investment of 6:1.



1. Introduction

Improving nutrition through the workplace, where 58 percent of the global population spend at least one third of their adult lives,² has been identified by the World Health Organization (WHO) as one of a range of key solutions to tackling the malnutrition crisis worldwide.³ The benefits to businesses, meanwhile, have been proven time and time again, with studies estimating the returns on investment (RoI) for companies on workforce nutrition programs to be up to 6:1.⁴ Workforce nutrition programs are therefore gaining increasing traction in the private sector, especially those focusing on direct employees.⁵

However, to date, these programs have primarily been concentrated in high-income countries and predominantly for white-collar office workers,⁶ while relatively few companies have sought to address malnutrition among their 'indirect employees': global supply chain workers. This is despite rates of malnutrition being disproportionately high among low-earning and low-skilled workers in agriculture and low-tech manufacturing in low- and middle-income countries (LMICs). For example, ATNI's 2021 Global Access to Nutrition Index found that only eight of the 25 largest food and beverage companies worldwide showed evidence of addressing malnutrition in their supply chains, many of these being largely ad hoc projects with only a marginal focus on nutrition.⁷

The Workforce Nutrition Alliance, launched by the Global Alliance for Improved Nutrition (GAIN) and the Consumer Goods Forum (CGF) in 2019 to drive momentum on this topic, has identified four reasons for the lack of action on workforce nutrition in supply chains by companies so far.⁸ These include:

- Lack of awareness about malnutrition and its consequences;
- Insufficient understanding of the business case;
- The perceived high resource requirement;
- Lack of expertise for complex implementation.

This report aims to address these concerns with the aim of stimulating and inspiring action from more multinational companies from *all* sectors to develop programs to address malnutrition among their global supply chain workers.

Section 2 highlights how malnutrition is a critical issue prevalent throughout many global supply chains, especially those sourcing from the agro-commodity and low-tech manufacturing sectors in LMICs. It highlights how the private sector can therefore play a significant role in not only making a difference to the health and wellbeing of potentially millions of individuals, but also to breaking endemic cycles of poverty and rising inequality in sourcing communities, contributing to sustainable development in LMICs, and strengthening the resilience of global supply chains.

Through in-depth case studies of six multinational companies' workforce nutrition programs addressing supply chain workers, spanning a range of sectors and workplace settings (see **Table 1**), the rest of the paper covers the following:

- **Company motivations** for investing in workforce nutrition programs in their supply chains, demonstrating that not only is it their responsibility, but it is very much in their interests to see malnutrition eliminated from their supply chains (**Section 3**)
- **Mapping the large variety of company interventions** to address malnutrition in supply chain workplaces, as identified in the case studies. This not only shows what is possible, but provides inspiration for approaches future programs can possibly take (**Section 4**)
- **Discussion of important challenges faced and solutions identified** when designing and implementing programs, based on insights from the experiences of the case study programs (**Section 5**)



- **High-level recommendations and roadmap** for developing a successful workforce nutrition program for supply chain workers (Section 6)

Based on these findings, the report concludes with key recommendations for companies interested in addressing nutrition in their supply chain workforce. As such, it aims to be a one-stop-shop for those wanting to better understand both *why* they should and *how* they could develop workforce nutrition programs in their supply chains.

Table 1: Overview of the Case Studies of Workforce Nutrition Programs in Supply Chains (see individual case studies for more information)

Company Name	Sector	Program Name	Start Date	Maturity/Phase	Countries	Main Partners	Workplace setting
Unilever	Tea	Seeds of Prosperity	2015	Second-phase scale-up	India (Tamil Nadu & Assam)	GAIN, IDH Sustainable Trade Initiative	Farm estates
Twinings	Tea	Sourced with Care	2016	Continuous scaling-up	India, China, Kenya	UNICEF, Save the Children, BSR	Farm estates, smallholder farms
VF Corporation	Garments	Worker & Community Development (WCD) initiative	2019	Continuous scaling-up	Bangladesh, Cambodia	GAIN, CARE International	Factories
Olam*	Agriculture (including cocoa, coffee & horticulture)	Olam Healthy Living (OHL)	2015	Full scale-up in progress	Global	Workforce Nutrition Alliance, UNICEF, WHO, Red Cross Society	Smallholder farms, farm estates
Nestlé	Cocoa, Coffee	Farmer Family Nutrition programme	2017	First pilots completed	Kenya, Mexico, the Philippines, Côte d'Ivoire and Indonesia	Coffee Management Services (CMS), Simlaw Seeds, Solidaridad	Smallholder farms
Nature's Pride*	Horticulture	Nutrition at Work Programme	2018	First pilots completed, second pilots underway	South Africa, Peru, Côte d'Ivoire, Dominican Republic	GAIN	Farm estates

* Intermediary traders (i.e. not consumer-facing)

* Intermediary traders



Box 2: Key definitions: supply chain workforce nutrition programs

GAIN and NewForesight define supply chain workforce nutrition programs as using existing supply chain channels to reach workers or farmers and their households with different types of support for improving their nutrition.⁹

Throughout the paper, 'workers' refers to those working in:

- **'formal'** workplace settings, such as factories or farm estates, which have contained environments and employer-employee relationships;
- **'informal'** workplaces, without formal workplace structures or employers, such as the 500 million self-employed smallholder farmers around the world, who are nonetheless key parts of the global workforce. Companies to which these are relevant can choose identify target groups either as their key sourcing communities/regions, through aggregation points such as exporters/traders/processors, or farmer cooperatives.

Regarding supply chains, this paper primarily has in mind the stages of production where malnutrition rates are significant and the prospects of reaching a large number of 'workers' is high. This may be one or two steps away from the company, who might source from large-scale traders, processors and/or distributors. It can therefore be necessary to work with and/or through them to identify and/or access these workers. Companies should therefore ensure that they have mapped their supply chains to the key points of production, including commodities.¹⁰

The paper takes 'buyer' companies (often multinational brand companies) as its primary focus, since these possess the resources, power, and responsibility for taking action to address malnutrition among large numbers of workers in their supply chains (see **Section 2.3**).

1.1 Methodology

The cases were selected to reflect a diverse range of workplace settings, sectors, and company-types (see **Table 1**). The case studies (found on [ATNI's website](#)) were developed based on publicly available information online, primarily published by the companies themselves or their programme partners, as well as secondary literature. Further details were provided through semi-structured, in-depth interviews with key individuals at the 'buyer' companies who either currently are, or were at one time, responsible for the programmes, and would therefore be familiar with the motivations for and details of the programmes (see **Annex 1** for a list of interview respondents, and their relationships to the programmes). Once written, the case studies were reviewed by the company representatives for fact-checking. This report is primarily based on the findings of these case studies and the interviews with company representatives, as well as other secondary literature relevant to the topic and stakeholders with several experts (see **Annex 1**).



Box 3: The Access to Nutrition Initiative (ATNI)

The [Access to Nutrition Initiative \(ATNI\)](#) is an independent, not-for-profit organisation based in the Netherlands, which is dedicated to objectively assessing and monitoring the contribution of the private sector to addressing global nutrition challenges. Specifically, ATNI aims to encourage food and beverage companies to improve the nutritional quality of their products, to substantially increase sales of healthier products, and to change the ways in which they shape food environments (for example, through marketing, product labelling, and interaction with policymakers). Infant and young child nutrition is also a core focus.

Every two to three years, ATNI publishes the Global Index, which assesses the 25 largest food and beverage manufacturers globally on a range of topics relating to their contribution to addressing nutrition challenges.

Among these topics, there is a [category focusing on 'Supporting healthy diets and active lifestyles'](#). Within this category, the criteria 'Supporting Employee Health and Wellness' and 'Supporting Breastfeeding Mothers at Work', consisting of 8 and 6 indicators respectively, assess company commitments, performance, and disclosure in these areas, as well as the geographic scope of these. These indicators primarily focus on programs for direct employees (and their families), but recently one indicator on programs addressing the supply chain was introduced.

ATNI recognizes the increased interest by stakeholders, including investors, in addressing workforce nutrition in the wider supply chain, and the potential such interventions have for addressing global malnutrition. Food and beverage manufacturers in particular can play a significant role. Therefore, this action research paper serves to increase our understanding of this topic further, while also exploring how we can further address it in our accountability tools, such as Index indicators, in order to help drive action from big food and beverage manufacturers and increase accountability for addressing malnutrition in their supply chains.





2. Why malnutrition in supply chains matters

2.1 The urgency of addressing the malnutrition crisis

Malnutrition and food insecurity is widespread across the globe, negatively affecting hundreds of millions of people's quality of life, productivity and earnings, which exacerbates poverty and hindering sustainable development. Innovative and scalable solutions are urgently needed to tackle malnutrition.

Malnutrition is a critical global concern (see **Box 4**). Rising rates of food insecurity, worsened considerably by the impact of the COVID-19 pandemic as well as increasing inequality, is one of the key drivers of this. In 2020, 2.4 billion people were food insecure, meaning that they lack regular access to sufficient safe and nutritious food for normal growth and development and an active and healthy life.¹¹ 930 million of these were *severely* food insecure, meaning more than one in ten people in today's world lack certainty of where their next meal will come from, regularly skip meals, or experience more than a day without eating food, often needing to sacrifice other basic needs just to be able to eat.¹²

Box 4: Malnutrition and its underlying causes

Malnutrition consists of three often overlapping conditions: undernutrition, micronutrient deficiencies ('hidden hunger'), and overweight and obesity.¹³

- **Undernutrition:** arising from chronic hunger and insufficient intake of key food groups, including carbohydrates, fats, and protein, it manifests as wasting (too thin for height), stunting (too short for age), and underweight (low weight-for-age), which results in physical/cognitive impairment. 460 million adults are underweight.
- **Micronutrient deficiencies:** due to lack of important vitamins and minerals. Iodine, vitamin A, and iron are the most important in global public health terms, threatening children and pregnant women in LMICs in particular. For example, anemia is caused by insufficient iron, folate and vitamins B12 and A, which results in fatigue, weakness, shortage of breath and dizziness.
- **Obesity and overweight:** 1.9 billion people are overweight or obese, meaning that they are too heavy for their height. Excessive fat can impair health and increases the risk of diseases such as heart disease, stroke, diabetes and some cancers.

Insufficient intake of food due to food insecurity is not only one the key drivers of undernutrition, but also impacts obesity and micronutrient deficiencies, the most readily available food to eat is often calorie-dense and lacking in micronutrients.¹⁴

A recent *Lancet* series identified four key, highly inter-related factors causing malnutrition:¹⁵

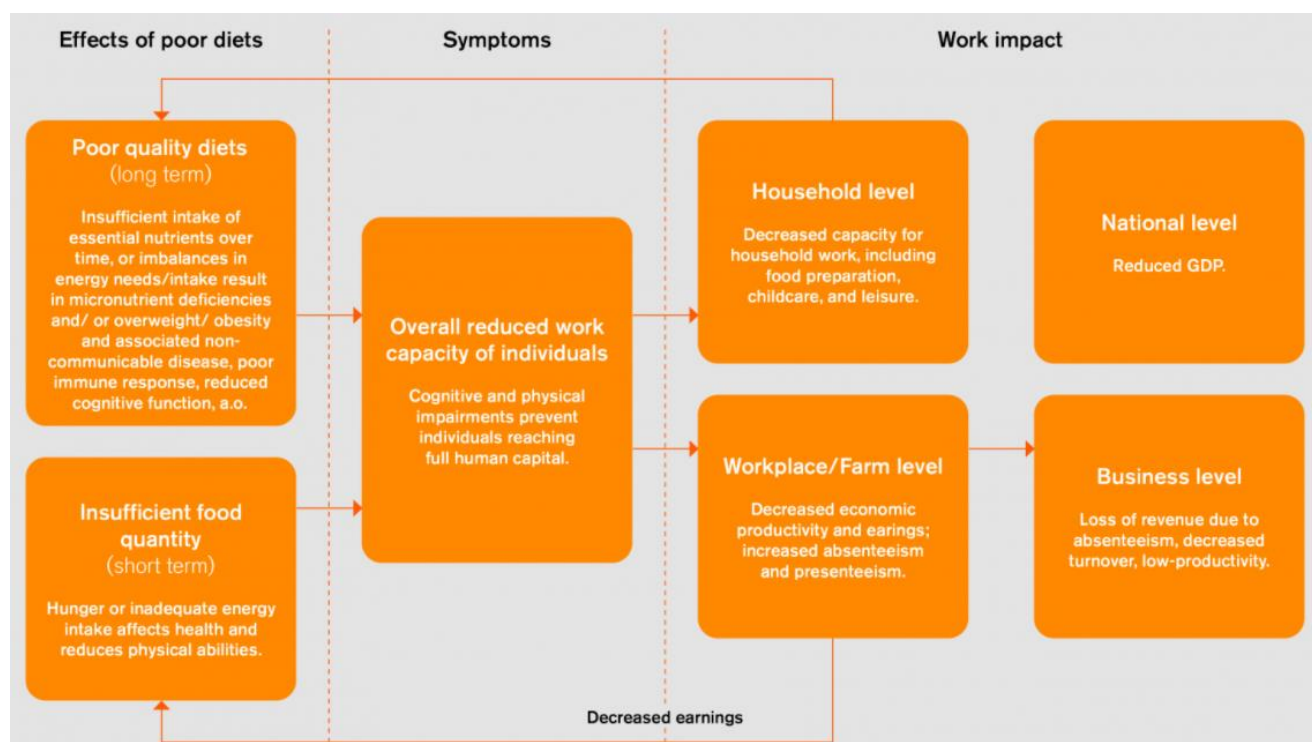
- **Poor diets:** Caused by insufficient intake of a diversity and abundance of fruits and vegetables, wholegrains, fiber, nuts, and seeds; modest amounts of animal source foods; and excessive intake of foods high in energy, sugar, saturated fat, trans fat, and salt.
- **Food environments:** The relative availability and convenience of healthy and diverse foods relative to less nutritious foods; the cost of these foods, and how they are marketed and promoted.



- **Socioeconomic factors:** Income and education are important drivers for the risk of malnutrition, particularly where income constraints and poverty prevent individuals from buying the foods they need for a healthy diet, leading to food and nutrition insecurity. Poverty is highly correlated with malnutrition.¹⁶
- **Early-life nutrition:** Inadequate nutrient intake in early life due to malnutrition in mothers during pregnancy and lactation, inadequate breastfeeding, and/or insufficient nutrient intake during their first five years not only leads to undernutrition among infants, but also predisposes them to all forms of malnutrition and their consequences in later in life. For example, adults that were undernourished as children have 15 percent less cognitive capacity.¹⁷

With its wide-ranging health impacts, poor diets and food insecurity not only significantly impacts one's quality of life and life expectancy, but also impairs work capacity and human capital development which negatively affects productivity and earnings. Malnutrition therefore traps both households and communities in vicious cycles of poverty,¹⁸ as **Figure 1** illustrates. At a national level, this negatively affects GDP, therefore holding back economic development. A recent study by Chatham House across 19 low- and middle-income countries (LMICs) found that malnutrition among workers cost businesses an estimated total of between \$130 billion and \$850 billion a year (equivalent to between 0.4 per cent and 2.9 per cent of those economies' combined GDP) through associated productivity reductions.¹⁹

Figure 1: The effects of poor diets on work output



Source: GAIN (2019) 'The Evidence for Workforce Nutrition Programmes' (reprinted with permission)

Success in addressing all forms of malnutrition consequently has a multiplier effect at both household and economy level, improving health, increasing incomes, and stimulating sustainable and inclusive development. Action on malnutrition is therefore considered to be "integral to achieving the Sustainable Development Goals (SDGs)".²⁰



However, with insufficient progress on Sustainable Development Goal 2 to 'end hunger and all forms of malnutrition by 2030', innovative and scalable solutions from all actors, including the private sector, are therefore urgently needed to drive progress on tackling malnutrition.²¹

2.2 Malnutrition is particularly prevalent among workers in global supply chains

Rates of undernutrition are disproportionately high further upstream in global supply chains, especially among agriculture and low-tech manufacturing workers in LMICs, and women in particular. This is often associated with the nature of the work they do and how they make their livings.

More than one in five jobs are estimated to contribute to the production of goods for global supply chains,¹ according to the International Labour Organization (ILO).²² The vast majority of these are based in LMICs, where rates of malnutrition and food insecurity are considerably high, especially those in Sub-Saharan Africa, Asia, and Latin America.²³

Within these countries, malnutrition is disproportionately common in sectors where a significant share of the workforce is engaged in low-skilled and low-earning labor such as agriculture and low-tech manufacturing. Chatham House found that these sectors had two of the highest rates (18.2 and 12.3 percent respectively) of underweight workers of the thirteen sectors they assessed across LMICs.²⁴

Meanwhile rates of underweight are disproportionately high among smallholder farmers, who are central to the production of many of the world's most important agricultural commodities,²⁵ and account for nearly three quarters of Sub-Saharan Africa's rural poor.²⁶ Consequently, it is clear that malnutrition is a serious issue upstream in global supply chains, especially where these involve low-skilled and low-earning workers in LMICs.

Box 5: Malnutrition among female workers

According to the ILO, women constitute 44 percent of global supply chain workers in LMICs.²⁷ This figure is even higher for sectors such as garments and agriculture: 60 percent of agricultural workers are women in many parts of Africa, where they often work 12 to 13 hours more than men per week.²⁸

Nevertheless, they experience unequal access to food in many parts of the world: within the household, weak bargaining positions mean they frequently eat the least, last, and least well, despite taking on the largest burden of cooking and care work within the home.²⁹

Women, especially those of childbearing age, are particularly at-risk of experiencing malnutrition.

Female workers are 1.4 to 2.6 times more likely to be anemic than their male counterparts in LMICs.³⁰ In Bangladesh, eight in ten female garment workers were found to suffer from anemia (twice the national average).³¹

When pregnant and breastfeeding, women's health directly impacts their child's during their most vulnerable years. Maternal and child undernutrition is the cause of 3.5 million deaths annually.³²

¹ This estimates the number of jobs that contribute to the production of goods and services that are either consumed in other countries (i.e. final goods and services) or further processed in other countries.



For workers in global supply chains, many of the causes of malnutrition (see **Box 4**) are directly associated with the work that they do. For example, their workplaces represent the food environment in which workers spend a large share of their day. Meanwhile their incomes and working conditions, such as sufficient non-working hours to access and prepare nutritious food, represent key economic and environmental factors that employers could have direct control or influence over. Together, these can determine the quality of their diets. As such, many of the causes of malnutrition among supply chain workers are within both supplier and buyer companies' direct and indirect spheres of influence.³³

Supplier companies usually lack the means to address nutrition themselves. Those with formal workplace structures, such as factories and farm estates, for example, often operate with extremely tight profit margins and numerous competing pressures to meet buyers' demands, such as competitive pricing and short lead-times, while simultaneously being required to meet various quality requirements and ESG criteria.³⁴ This means they have limited resources and capacity to invest in addressing nutrition in their workforce. For those with 'informal' workplace structures such as smallholder farmers, even ensuring their basic needs are met is an endemic struggle.³⁵



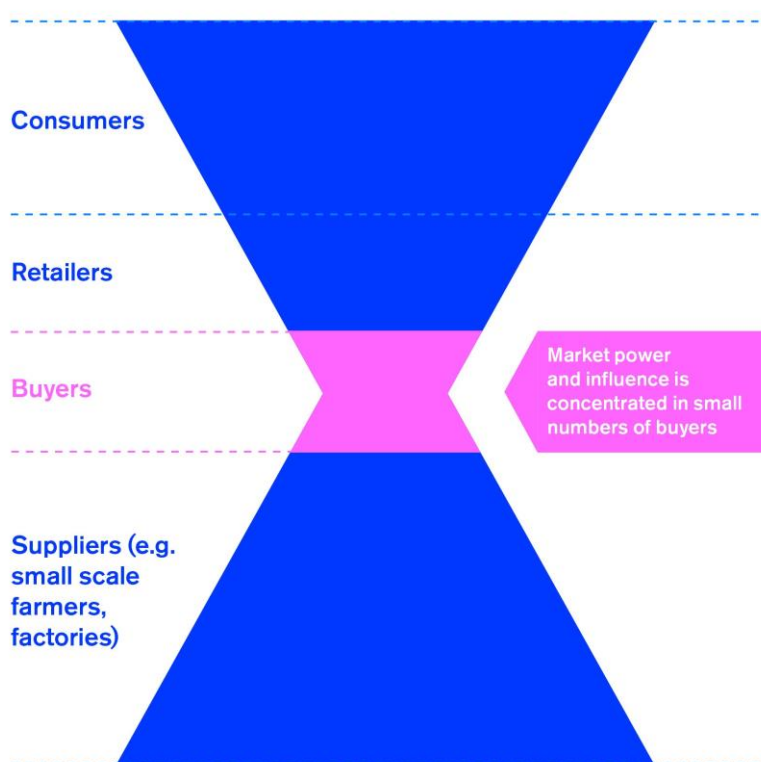


2.3 Buyer companies have an important role to play

Possessing the resources, power, and reach to have a significant positive impact on supply chain workers' health, buyer companies have the responsibility and opportunity to address malnutrition in their supply chains. In addition to working to change the structural causes of malnutrition in the long-run, it is vital that buyer companies also develop workforce nutrition programs for their supply chain workers.

It is widely recognized that buyer companies – be they brands, manufacturers, large traders, processors and wholesalers, or retailers – sourcing goods and agricultural commodities from LMICs have a responsibility for working conditions in their supply chains.³⁶ Large buyers, especially multinationals, have the power and leverage (see **Figure 2**) to influence some of the structural conditions (such as low wages, poor working conditions, and long work hours) that contribute to malnutrition in supply chains the first place.³⁷

Figure 2: the so-called 'hourglass shape' typical to many global supply chains, especially in agro-commodities



Source: adapted from Horstink, L. (2017) 'A global food polity: ecological-democratic quality of the twenty-first century political economy of food'.

However, such structural changes can rarely be achieved by one company alone. These initiatives require cross-sector collaboration, both across the industry and supply chain and involving other key stakeholders, which can take considerable time and complexity to achieve. Therefore, while changing these structural conditions is fundamental to addressing some of the key factors driving malnutrition among supply chain workers in the long run, there is a lot that buyers, and especially multinationals, can do to address these workers' current realities with more immediate effect.



A key way that individual buyers can improve supply chain conditions to prevent malnutrition is by working with their suppliers to develop and implement workforce nutrition programs (see **Box 6**). Multinational buyers' powerful position in the supply chain (see **Figure 2**) means they often have the power to influence the practices of their suppliers.³⁸ Meanwhile, given the considerable size and global reach of many multinationals, these interventions have the potential to be implemented at scale, reaching considerable numbers of these malnourished workers. As GAIN explains, companies' supply chains "provide an established and organised delivery channel through which to deliver nutrition interventions", which "provides a unique opportunity to improve health outcomes for workers, farmers, their households, and communities."³⁹

Box 6: Workforce Nutrition Programs

Defined by the Global Alliance for Improved Nutrition (GAIN) as "a set of interventions that work through the existing structures of the workplace to address fundamental aspects of nutrition amongst employees", workforce nutrition programs have been identified by the World Health Organization (WHO) as one of a range of key solutions to addressing malnutrition worldwide.

Workplace settings, being "contained environments that can be modified" and with "repeated interaction with a captive audience", present a promising opportunity for implementing nutrition interventions at scale.⁴⁰ The workplace therefore offers several benefits as a platform for delivery, in that a substantial number of the working population can be reached and multiple levels of influence on behavior can be targeted.

The Workforce Nutrition Alliance, launched by GAIN and the Consumer Goods Forum (CGF) in 2019, has identified four main types of workforce nutrition intervention for companies' employees:⁴¹

- **Healthy food at work:** programs which focus on increasing employees' access to healthy and safe foods at work, either through direct provision or subsidy, or by increasing the availability of healthy food options in the setting.
- **Nutrition education:** programs aiming to change the nutrition and/or lifestyle behaviours of employees through increasing employees' knowledge of beneficial health habits. This could be achieved through the following: (1) changing attitudes towards a specific behaviour; (2) addressing normative beliefs (i.e. the perceived norm); (3) modifying beliefs about self-control and the ability to change.
- **Breastfeeding support:** programs or company policies which enable working mothers to breastfeed exclusively for 6 months and continually up to 2 years.
- **Nutrition-focused health-checks:** periodic one-to-one meetings with a health or nutrition professional to assess, and usually discuss, the employee's nutritional health.

The business case for investing in workforce nutrition programs is clear: studies have estimated the financial returns on investment (RoI) for companies on workforce nutrition programs to be up to 6:1.⁴² Positive associations have between such programs and productivity, cognitive ability, reduced absenteeism and sick-days, reduced medical costs, and lower rates of accidents and mistakes.⁴³ In addition, companies with workforce nutrition programs have also reported benefiting from increased employee loyalty, satisfaction and motivation; improved employer-employee relationships; and greater talent attraction and lower staff turnover, saving training costs.⁴⁴



3. Why companies address malnutrition in their supply chains: the business case

“A no-brainer”

For each of the companies interviewed, the benefits of their supply chain nutrition programs to the company was beyond doubt. In addition to aligning with their purpose and values, the programs play a role increasing supply chain security and resilience, while lessening potential reputational risks from the presence of malnutrition.

Interestingly, three of the six program representatives interviewed all independently used the same term “no-brainer” when justifying their decision to invest in addressing nutrition in their supply chains. What was striking is that tangible economic benefits, such as reduced costs of supply and/or superior output, were not stated to be at the forefront of the company’s motivations. Further, none of the companies interviewed sought to evaluate the direct return on investment of their interventions in supply chain nutrition, nor had they any intentions of doing so in the near future, since the value to the company was already demonstrated.

The company’s mission and values created the scope for investment to improve the conditions of people working in their supply chains, while less tangible business considerations were also at play, especially in the terms of *risk management*. Supply chain security and resilience were at the forefront of these risks. By improving suppliers’ profitability and alleviating the costs caused by malnutrition, continuous production could be safeguarded and cushioned from shocks, especially for smallholders. Similarly, investing in programs that benefit their suppliers, the buyer companies could strengthen their relationships and garner their loyalty, which further secures supply. In addition, several companies also acknowledged the potential for reputational risks in not addressing malnutrition in their supply chain workforce, should it become known to the public and they be alleged to not be living up to their values.

Workforce nutrition programs in supply chains were also acknowledged as facilitating and/or strengthening, sometimes directly, other times indirectly, companies’ other supply chain sustainability priorities. For example, by generating extra resources or capacity for suppliers to invest in more sustainable or responsible practices, or by deepening their relationships to facilitate such investment from the buyer. In this way, investments in nutrition in supply chains go beyond addressing malnutrition only, but also contribute to other material issues such as poverty, livelihoods, and living incomes, as well as environmentally-friendly practices, gender equality, and even child labor, to name a few.



Table 2: Company motivations for addressing malnutrition in their supply chains

Company Name	Sector	Corporate Citizenship	Risk Management		
			Supply Chain Security & Resilience		Anticipating Reputational Risk
			More Productive & Profitable Suppliers	Strengthening Supplier Loyalty & Relationships	
Unilever	Tea	●	○	○	●
Twinings	Tea	○	○	○	●
VF Corporation	Garments	○	○	○	●
Olam*	Agriculture (including cocoa, coffee & horticulture)	○	○	●	●
Nestlé	Cocoa, Coffee	○	●	●	●
Nature's Pride*	Horticulture	○	●	●	

- significant motivating factor
 ● secondary/indirect motivating factor

*Intermediary traders (i.e. not consumer-facing)

Source: Interview findings and public documentation. See individual Case Studies for further details.

3.1 Corporate citizenship and alignment with company purpose

“It has been our longstanding ethos to do business responsibly”

- Sarah Rawson, Senior Strategist, Corporate Responsibility & Sustainability, Olam

Nearly all the companies emphasized that, as purpose- and value-driven companies, it was clear to them that malnutrition needed to be addressed.

When asked about their motivations for investing in workforce nutrition interventions in their supply chains, all but one of the company representatives interviewed began by emphasizing how it was their company's ethical *responsibility*, or moral obligation, to do so. Each identify themselves as 'purpose-driven' companies committed to doing business responsibly, which includes supporting the wellbeing of workers beyond their direct responsibility in their supply chains.

As such, they reported that once their companies became aware of the full impact of malnutrition in the countries they source from, affecting not just people's health but also poverty, income, and resilience, it became self-evident to the company that it needed to be addressed, in order to remain true to their core values. It is therefore clear that, for companies committed to ensuring worker wellbeing in their supply chains, that includes investing in tackling malnutrition. Susan Kevork, who currently leads Nestlé's Farmer Family Nutrition program, stated that “Farmers are core to our business, and so investing in their wellbeing is essential to our business long-term success.” Meanwhile Sarah Rawson of Olam emphasized that “For us, making the business case is not a barrier – that's been proven. It's obvious that by investing in nutrition, both people and business do better.”



3.2 Managing supply chain risk

3.2.1 Increasing supply chain resilience and continuity of supply

“Health and nutrition interventions help ensure that tea communities are thriving, which leads to the sustainable supply of good quality tea.”

- Céline Gilart, Head of Social Impact and Sustainability, Twinings

By increasing productivity and lowering costs, workforce nutrition programs can improve suppliers' profitability, which in turn increases their resilience, minimizing disruption of supply, and enabling them to address other ESG concerns.

The relationship between malnutrition and productivity is well-established, and this is especially the case for highly labour-intensive production that requires sufficient physical and mental capacity to operate effectively.⁴⁵ In extreme cases, malnutrition can significantly disrupt production: for example, throughout 2017, there were more than 1,600 cases of factory workers in Cambodia fainting in various incidents, and one incident in 2018 saw 200 workers at a shoe factory fainting almost simultaneously; these incidences of fainting have been linked to high rates of anaemia and underweight in these factories.⁴⁶

While such instances may not be common to all supply chains, the presence of malnutrition (especially in the form of undernutrition) often results in a phenomenon called 'presenteeism', reflecting lack of stamina, strength, concentration, which significantly holds back productivity.⁴⁷ Together, this undermines their profitability, and makes them more vulnerable to external shocks. Cumulatively, lost productivity due to malnutrition can therefore threaten reliability of supply for companies.

Addressing malnutrition where it exists among workers through workforce nutrition programs is therefore key to ensuring reliable and quality supply, as was acknowledged by several company interviewees. By increasing productivity and lowering costs, nutrition interventions help to improve suppliers' profitability. This, in turn, renders these suppliers more resilient to external shocks, both physically, through improved health of their workers (in the case of epidemics), and economically, through increased profit margins.⁴⁸

In addition to increased productivity, company representatives also highlighted the following benefits to supplier profitability and resilience of addressing malnutrition through their programs:

- **Reduced absenteeism**, not only due to reduced occurrence of infectious and lifestyle-related diseases among workers, which are caused or exacerbated by malnutrition and unbalanced diets, but also due to time taken off for caring for sick children and family members (where interventions also address families and wider communities). This is especially the case for workforces made up predominantly of women, since they are usually expected to care for sick family members.
- **Improved worker morale**: workers were reported to appreciate feeling that the company looks out for their needs and health. Nature's Pride explained that, in many countries, sharing quality food together is a sign of care, and so they found that workers were more loyal to the company as a result. VF Corporation also emphasized this, stating that “when workers feel safe, healthy and protected – including through good nutrition – productivity is enhanced”.
- **Lower staff turnover**, due to improved job satisfaction and reduced health-related absenteeism. This results in a more skilled and productive workforce due to staff having more experience on the job, while requiring fewer resources to be devoted to attracting and training new employees. For example, Unilever's evaluation of Seeds of Prosperity found that 98 percent of those taking part reported that the program made them more likely to continue to work for the tea estate, alongside benefits including reduced tiredness and increased self-esteem.⁴⁹



The increased profitability also potentially enables them to address other issues of material concern to the buyers, such as payment of living wages to their workers, improving working conditions, or adopting more environmentally friendly practices, for example. In this way, investments in addressing malnutrition in supply chains not only complements but *contributes* to other ESG-related supply chain priorities.

3.2.2 Profitability and resilience for smallholder farmers

Nutrition and food security interventions with smallholder farmers can play an important role in reinforcing their profitability and thereby resilience, reducing the likelihood of premature selling and opening opportunities for income diversification. This increases the long-term viability of their livelihoods, which can break the cycle of poverty while reinforcing continuity of supply for buyers.

Similarly, interventions addressing malnutrition in smallholder farms contribute to greater resilience and sustainability of supply in several ways. Not only does it improve farmers' wellbeing directly by improving their physical health, which might otherwise be impaired by illness, fatigue and other health-related problems, but, in the long run, greater productivity from better health and nutrition, as well as reduced healthcare costs, can increase their profitability.⁵⁰ Farmers' nutritional health is directly linked to their productivity and earning potential in terms of their own household, farms and businesses.⁵¹ Meanwhile malnutrition has been identified as a key driver of low productivity among smallholders in cocoa growing communities, for example.⁵²

Nutrition-related health improvements can result in reducing time spent ill or tending to sick family members. Improving access to food can also alleviate the immense psychological and physical pressures of food insecurity. As Sarah Rawson of Olam explained: "For example, it is difficult to convince farmers to apply specific agricultural practices at certain times if their kids have fallen ill, or if they don't know where their next meal is coming from... people cannot focus or invest in work if they are worried about just getting by."



Meanwhile, efforts to increase access and availability of nutritious foods on-site can reduce the time spent travelling to far away markets to purchase food and costs involved in doing so. As discussed in **Section 4.2.1**, interventions that involve diversifying crop production, through intercropping or the planting of kitchen gardens of nutritious crops, for example, can also open up new opportunities for additional income generation if surplus crops are harvested. Together, this means farmers have greater capacity to invest in income-generating and/or resilience-building activities, such as diversifying income sources, improving their farms, or engaging in more environmentally-friendly practices.

Similarly, several informants highlighted how the problem of food insecurity during farmers' lean months (i.e. the months prior to harvesting their crop in which they do not have a source of income) often drives them to harvest and sell their crop prematurely in order to feed themselves, resulting in lower prices being paid to them due to inferior quality of their product. Nutrition interventions that address food and nutrition security during these lean months, by planting crops that can be harvested at these times, for example, can therefore help avert these situations, ensuring farmers can receive the full value of their crops, while ensuring better quality supply for the buyers.

Investments in addressing malnutrition can therefore contribute to a virtuous cycle for farmers, by improving their incomes, alleviating their poverty, and building their capacity and resilience, which in turn helps them to achieve nutrition security for their households in the long run. For sectors like cocoa and coffee this has particular significance, as it helps to reinforce the viability of farmer livelihoods for future generations, which is currently a significant risk to companies' security of supply.⁵³

3.2.3 Strengthening relationships with suppliers

Due to the benefits that they bring and the trust that ensues from developing a project together, workforce nutrition programs for suppliers can increase their loyalty to the buyer, therefore further securing supply and enabling other ESG-related interventions.

As explained above, workforce nutrition programs can bring numerous advantages to them in terms of productivity, absenteeism, morale, and staff turnover, for example, as well as greater productivity. When multinationals assist their suppliers in developing such programs and help invest in them, this is likely to strengthen their relationship.

Building strong relationships with suppliers can be essential for ensuring continuous and reliable supply: even in sectors with relatively strong market consolidation among buyers relative to suppliers, suppliers still have the choice of who to sell to. The tea sector, for example, remains particularly competitive among buyers in securing quality supply. Cultivating supplier loyalty was therefore a key motivation for Unilever, for example.

Similarly, VF Corporation also highlighted the importance of the program in fostering a good reputation and strong relationships with its garment suppliers: by investing in them, they establish a virtuous cycle of shared value between business, workers and the community. Nature's Pride emphasized how their programs deepen their relationships with its suppliers.

Olam also mentioned importance of "farmer loyalty", stating that "partnering with communities to address the issues they care about benefits the company too, in that farmers appreciate that Olam cares about the welfare of their families". As the World Business Council for Sustainable Development (WBCSD) report emphasizes, "When business supports issues that communities have identified as important, such as good nutrition, those communities are more likely to support the business."⁵⁴

In situations where buyer companies have invested significantly in a supplier, either for productive capacity or sustainability-related improvements, securing their loyalty is particularly key. As Nature's Pride emphasized, fostering long-term relationships ensures that they can have "multi-year impacts" with their sustainability initiatives. Therefore, again, investments in workforce nutrition programs can facilitate



the fulfilment of other supply chain goals for a multinational by deepening their relationships with their suppliers.

3.3 Anticipating potential reputational risk

“Consumers have high expectations from brands to behave in the right way, but brands also have a role to play in achieving the SDGs”

- Céline Gilart, Head of Social Impact and Sustainability, Twinings

While malnutrition in supply chains is yet to be at the forefront of the public eye relative to other issues, it is increasing in importance for investors and failure to act can undermine brand reputations and commitments to sustainability.

Stories like the mass-fainting incidents in Cambodian garment factories supplying Nike and Puma caught media attention in 2017.⁵⁵ However, this is an extreme and somewhat unusual manifestation of malnutrition. As several supply chain experts ATNI spoke to emphasized, the issue of malnutrition in supply chains does not yet feature strongly in the public eye relative to more salient supply chain-related issues, such as environmental concerns, labor rights, child rights, and poverty. On these topics, multinational companies are subject to ever-increasing scrutiny and external pressure from NGOs, the media, and consumer expectations, as well as an increasingly ESG-minded investment community.

Inadequate due diligence in their supply chains and failure to address these issues can therefore translate into considerable reputational risks for these companies, which, in turn, can adversely affect their bottom-lines the face of consumer backlash (if consumer-facing) or difficulty in accessing capital from investors. This is especially the case for sectors that are under greater public scrutiny and pressure to be sustainable than others, such as cocoa, coffee and tea, according to Anjali Ravikumar, Global Sustainability Director at Unilever.

Nevertheless, since the topic of malnutrition and healthy diets has risen significantly on the global sustainability agenda over the last decade,⁵⁶ the presence of malnourished workers in their supply chains could soon pose a real reputation risk to these companies.

For companies who highlight their ‘responsibility’ credentials and commitments to sustainability, it is therefore advantageous that they anticipate these potential risks in advance. Chatham House, meanwhile, emphasized how failure to address malnutrition in the communities they source from “risks undermining the credibility of their commitments to the sustainability agenda and threatening their social licence to operate.”⁵⁷

For food and beverage companies, these expectations are particularly significant, since they are in the business of food and, therefore, nutrition. For example, with nutrition and wellbeing featuring strongly in the company’s ‘Purpose’.⁵⁸ For Olam, which is primarily not a consumer-facing company but nonetheless a key player in the food system, in light of the growing global dialogue on nutrition, it was important for it to “play our part to improve nutrition in the countries and communities where we operate”.

Moreover, as previously mentioned, several company representatives also recognized how dealing with malnutrition in their supply chains also helps them to address other supply chain priorities, priorities that *do* carry a significant degree of public pressure and reputational risk attached, such as poverty and unsustainable practices.



3.4 Nutrition interventions can be relatively inexpensive, relative to the benefits

While interventions require at least some start-up costs to the company, many day-to-day costs can be borne by the supplier if they are convinced of the benefits, or can be covered by leveraging partnerships with donors. Intelligent designs of interventions can make them relatively inexpensive overall.

While this section has so far outlined the various benefits that workforce nutrition programs in supply chains can bring to companies, most of which being intangible in nature (so difficult to assign value to), it is important to discuss the costs and funding considerations for such programs. While precise cost estimates for these programs are unavailable for these programs, it is possible to discuss various approaches to funding them and keeping their costs low.

3.4.1 Funding Approaches

Funded by the company

Each of the programs assessed involved some degree of direct investment from the buyer company: however, the extent and duration of this investment varied. For example, Unilever's 'Seeds of Prosperity' program required continuous investment from the company, so as not to impose costs on the tea estates, who lack the ability to fund the program themselves and do not perceive an immediate return on their investment. While this is a relatively high-cost approach, for Unilever, the benefits are sufficiently worthwhile. Others, such as Nature's Pride, funded aspects of their program through their foundation.

Costs mostly borne by suppliers themselves

However, this contrasts with other companies' approaches, which sees the cost of sustaining the programs being primarily borne by the suppliers themselves, with the buyer committing to initial investments to cover start-up costs of the program, including required capacity-building and supplying technical advice. This was the case for VF Corporation, for example. The suppliers would then maintain the implementation of the program at their own-cost: these costs, where they exist, would then be internalized as another cost of production, which then gets recuperated by charging VF Corporation slightly higher prices in the short-run, but potentially lower prices in long-run due to productivity gains. In this way, the program would be built into and sustained through the normal supply chain processes, with the supplier taking day-to-day responsibility and ownership of the program. Olam and Nature's Pride take a similar approach.

This approach relies on sufficient buy-in from suppliers to bear these costs and sustain the program, meaning they need to be convinced of the benefits of doing so.

Co-investing with partners and donors

Interview respondents also highlighted the possibility of seeking co-funding opportunities through partnerships with donor governments, philanthropic foundations, relevant NGOs, and relevant sustainability platforms, such as the Ethical Tea Partnership. VF Corporation and Olam reported that a number of programs had successfully covered some investment costs in this way. Olam's Sustainable Cashew Growers Program (SCGP) in Cote d'Ivoire, for example, has joined with the Ivorian Ministry of Health and Public Hygiene National Nutrition Program, alongside its partners UNICEF, WHO, Hellen Keller International and the Government of Canada to help increase coverage of essential nutrition services, like Vitamin A supplementation and screening for acute malnutrition. Olam provides funding and in-kind contributions to support community mobilization and logistics, while the expertise, supplements and materials are provided by the government and other partners.



3.4.2 Minimizing costs

Choosing cost-effective interventions

Some interventions, such as the supply of fortified products (see **Section 4.2.1**), for example, can be extremely cost-effective in addressing malnutrition.⁵⁹ Capacity-building interventions, meanwhile, have the potential to be self-perpetuating in the long-run, such as the development of kitchen gardens and/or crop diversification, where by harvested seeds and profits can be reinvested in the next crop, or ‘train-the-trainer’ approaches to nutrition education (see **Box 10** on Unilever, for example).

Buying in bulk

Several interview respondents were also keen to emphasize that the programs can be relatively inexpensive relative to the benefits gained, especially once it is up-and-running. Coen van Iwaarden of Nature’s Pride, for example, explained how upgrading canteen menus by its supplier in South Africa led to only slight increase in overall costs, defying initial expectations that healthy food was expensive. To this end, he explained that the local teams did particularly well in keeping costs low due to buying large volumes, planning ahead, and avoiding waste. Unilever also added that a key advantage of implementing projects at scale is the exploitation of economies of scale, while VF Corporation and GAIN keep prices ‘fair’ in their ‘fair price shops’ by buying in bulk through buying cooperatives.

Tweaking existing activities and leveraging existing programs and structures

Moreover, certain nutrition interventions only require modifying existing activities to add a nutrition element. For example, Coen van Iwaarden of Nature’s Pride explained that, in many cases, “tweaking existing activities” goes a long way in improving nutrition for workers, citing how its suppliers upgraded existing canteen menus and integrated nutritious foods into employee incentive schemes. VF Corporation and Twinings, meanwhile, pointed out how several of their interventions are delivered through existing on-site health clinics.

Olam also highlighted this, explaining how it has built nutrition interventions into its existing extension services for smallholder farmers in remote regions as part of the SCGP, since it had transport going to those areas in any case; it was just adding an extra person in the car. In this way, the company facilitated the Cote d'Ivoire government's efforts to reach farmers to provide them with Vitamin A supplementation, de-worming tablets, and health screening through year-round extension services: “For us, we’re already there, working with the farmers. We know the communities and they know us”. In this way, nutrition can easily be integrated into existing programs and infrastructure, even for smallholder farmers, which exist beyond formal workplace in often difficult-to-reach settings.



4. Approaches to addressing malnutrition in supply chains

4.1 Needs assessments and deep-dive studies

“It is essential to hear from the communities themselves and not assume the challenges they may be facing to achieve healthy diets.”

- Céline Gilart, Head of Social Impact and Sustainability, Twinings

It is important to first assess where rates of malnutrition are highest across the supply chain. Once priority groups have been determined, the next step is to carry out deep-dive studies to determine the drivers of malnutrition and the realities these workers face.

As a first step, it is essential that companies conduct needs assessments across their supply chains to reveal the presence, severity and type(s) of malnutrition present among various groups of workers and their communities.

Where high rates are detected, it is then important to understand *why* this is the case, so the root cause may be appropriately addressed. It is therefore recommended to go beyond general, high-level indicators and conduct deep-dive studies into the specific *drivers* of malnutrition, the risks and challenges unique to each community are identified, as these are highly context-dependent. In doing so, programs can be designed to have the maximal impact.

Box 7: Twinings Community Needs Assessments (TCNAs)

Each Sourced with Care initiative begins with a Twinings Community Needs Assessment (TCNA), to understand needs in its tea-growing communities. The TCNA framework was created in consultation with expert organizations, and assessments are carried out every two to three years by Twinings' Social Impact team. It looks at housing, water and sanitation, labor standards, gender, children's rights, livelihoods, and (for smallholder farmers) land rights / farming practices – and health and nutrition. The nutrition assessment includes looking at the year-round adequacy of food provision and the dietary diversity available (to women in particular). Based on the TCNA, Sourced with Care takes a different approach in each country in which Twinings operates, addressing the principal need in each community.

These participatory assessments are carried out on a rolling basis every two to three years by The Regional Twinings Social Impact teams. Listening to the voices of people in the community is vital: outsiders cannot assume that they know the on-the-ground realities.

When conducting the TCNAs, the topic of nutrition works as a useful starting point of discussion with community members, bringing community members on board with the project, which helps to build trust, facilitating further discussion to address other issues.



Box 8: Nestlé's Rural Development Framework (RDF)

Nestlé, meanwhile, having identified significant shortfalls in nutrition among the smallholder farmers in its coffee supply chain in many countries through its Rural Development Framework (RDF) assessment, decided to conduct deeper assessments in order to understand the underlying causes, choosing Mexico, Kenya, and the Philippines as pilots.

This in-depth assessment focused on months of food security and dietary diversity, finding significant seasonal variations in access to good nutrition, with up to 70% of farmers spending up to three months of the year without sufficient food, prior to harvest time, and that their diets also often lack diversity, supplying insufficient protein, dairy, fruit and vegetables. This helped to inform the development of their Farmer Family Nutrition program.

4.2 Diverse and multi-faceted approaches

Since there is rarely a single factor causing malnutrition, it is important to develop multifaceted approaches in order to maximize impact. For example, nutrition education will not be effective without ensuring access to healthy food. There is a huge diversity of approaches companies can take.

Nutrition interventions in supply chains can take countless different forms, as evidenced by **Table 3**. This is because each approach needs to be specific to each context, and each context is unique, depending on the types and drivers of malnutrition present, as well as the local conditions (see **Section 5.1** below). In addition, approaches also depend on the resources and capacity available for a program, and who is implementing it. Generally, most of the projects within the programs ATNI researched involved multiple interventions being implemented simultaneously for the same group of workers, as there is rarely a single, stand-alone cause of malnutrition.

For example, many of the program representatives spoken to for this report emphasized the importance of combining nutrition education with access and affordability: one may not always be successful in improving nutrition outcomes without the other. This is because nutrition education seeks to build *demand* for nutritious food and balanced diets, access and affordability interventions ensure this demand can be met by adequate *supply*. For example, Unilever stated that, while they started with nutrition education interventions, they soon realized through their evaluations that this was not enough without addressing access and availability of food, leading them to develop kitchen gardens on their tea estates. VF Corporation also emphasized this point.

Table 3 maps each of the wide variety of different interventions that ATNI identified among the six company programs researched as case studies, indicating which companies have implemented them, and in what countries they did so. The interventions are divided firstly according to workplace type, and secondly according to the type of 'workforce nutrition pillar' (see **Box 6**) it corresponds to. This is not an exhaustive catalogue of possible interventions, but only lists those encountered during the research for the six case studies. This goes to show the immense diversity of possible approaches that could be taken, many of them highly innovative, while also highlighting the need to take local context into account. For more approaches, consult the forthcoming Workforce Nutrition Alliance self-assessment scorecard for supply chains.



Table 3: Approaches to addressing malnutrition in supply chains identified across the six case studies:

Factories (garments, agro-commodity processing)	Farm Estates (tea, horticulture)	Smallholder Farmers (horticulture, cocoa, coffee)
'Health Food at Work': Availability, Access, and Affordability		
Establish factory canteens serving nutritious foods or improving existing menus, training canteen staff: Olam (DRC) , VF Corp (Bangladesh)	Improving the food offer (increasing the supply of fruit and vegetables) in estate or neighborhood shops: Unilever (India) , Twinings (India)	Helping to establish vegetable gardens on spare land and cultivating food crops alongside commercial crops by providing training and inputs; crop diversification: Nestlé (Kenya, Philippines) , Olam (Nigeria, Cote d'Ivoire, Vietnam)
Providing free or subsidized nutritious food at canteens: Olam (Indonesia, Cote d'Ivoire, Nigeria, Turkey, India, Brazil)	Improving menus for on-site canteens: increasing fruit and veg offer, and reducing staple portions: Nature's Pride (Peru, South Africa, Cote d'Ivoire, Dominican Republic) , Olam (Tanzania)	Distribution of food packets, fortified staples and/or vitamin supplements to communities: Olam (Cote D'Ivoire, DRC, India)
Establishing 'fair price shops' on site, which provide nutritious groceries and other essentials at low cost: VF Corp (Bangladesh, Cambodia)	Providing free or subsidized nutritious food at canteens: Nature's Pride (Peru, South Africa, Cote d'Ivoire) Helping to establish kitchen gardens and fruit orchards in plantations and/or communities: Unilever (India) , Twinings (India)	Supporting development of food bank networks in rural areas, serving primarily nutritious food and contributing to balanced diets: Nestlé (Mexico)
Improving the food choices supplied by local food vendors, and working with them to improve food hygiene: VF Corp (Cambodia)	Developing female entrepreneurs from the community to source and distribute nutritious products (e.g. fortified oil, double fortified salts) in rural areas, including plantations: Unilever (India)	School feeding programs and kitchen gardens/greenhouses, for children: Nestlé (Philippines, Cote D'Ivoire)
Running competitions among local food vendors to reward those with the cleanest stalls and best nutrition: VF Corp (Cambodia)	School feeding programs and kitchen gardens/greenhouses, for children: Nature's Pride (Peru)	
Nutrition education and behavioral change		
Working with both management and employees to improve health and nutrition literacy: Olam (Mozambique) , VF Corp (Bangladesh, Cambodia)	Nutrition education programs conducted with workers and communities: Unilever (India) , Twinings (India, China, Kenya) , Nature's Pride (Peru, South Africa, Cote d'Ivoire, Dominican Republic) , Olam (Tanzania)	Nutrition education programs and training conducted with workers and communities: Nestlé (Kenya) , Olam (Cote D'Ivoire, Ghana, Nigeria, India)
Sponsored radio dramas with a focus on nutrition: VF Corp (Bangladesh)	'Master trainers' selected among workers and trained to spread nutrition awareness among their counterparts and wider community: Unilever (India) , Twinings (Kenya)	Cooking demonstrations and training for diverse and nutritious meals: Nestlé (Kenya) , Olam (Nigeria)
	Cooking demonstrations and training for diverse and nutritious meals: Unilever (India) , Twinings (India) , Nature's Pride (Dominican Republic, Côte d'Ivoire, Peru, South Africa) , Olam (Nigeria)	Working with market vendors as conduits for nutrition information, including provision of posters containing guidance on nutrition: Nestlé (Kenya)
	Entertaining ways to raise awareness and educate workers and communities about nutrition, e.g. cooking competitions, street plays, nutrition games in school, wall painting and poster campaigns, and videos on nutrition: Unilever (India) , Nature's Pride (Peru, Dominican Republic)	Education on the benefits of self-consumption of nutritious crops grown for market sale/export: Olam (Peru)
	Counselling on iron and folic acid supplementation: Twinings (India)	Training 'master trainers' to spread nutrition awareness in farming communities: Olam (Cote d'Ivoire)
Maternity and Breast-feeding Support		
Upgrading health services provided through onsite factory clinics/infirmarys (for example, improving understanding of maternal nutrition to reduce maternal/infant mortality): VF Corp (Cambodia)	Training village healthcare providers and improving facilities, and improving community understanding of the importance of breastfeeding, hygiene and nutrition: Twinings (China) , Olam (Tanzania, Republic of Congo)	
Training workforce on breastfeeding: Olam (Egypt, Turkey, Vietnam)		
Nutrition-focused health checks		
	Provision of health check-ups to farmers, providing specific recommendations on how to manage or treat any diagnosed risks: Nature's Pride (Peru)	Provision of health check-ups to farmers, providing specific recommendations on how to manage or treat any diagnosed risks: Olam (Egypt)



4.2.1 Availability, access and affordability

Ensuring the availability, access, and affordability of nutritious food all year-round is a prerequisite for the consumption of healthy diets. A wide variety of approaches are available to address this.

Ensuring the availability of diverse and nutritious food all year round, as well as access to it and its affordability, are key to ensuring healthy diets. On the one hand, many workers and farmers live in circumstances where they have very little choice as to what they eat: calorie-dense, starchy foods are often the most easily accessible and affordable options available, whereas more diverse and nutritious foods are either less convenient to access and consume, or more expensive (often both). At worst (in situations of severe food insecurity), nutritious foods are simply not available to them, in which case they have no choice but to consume unhealthy diets. Constraints on access and affordability come in many different forms, such as the nature of the work and workplace itself, community-level factors, cultural factors, and/or geographic factors, for example.

Box 9: Distinct approaches to addressing access and affordability in VF Corporation's supply chain

VF Corporation found that, while workers in its suppliers' factories both in Bangladesh and Cambodia are suffering from malnutrition, the situations that lead to this outcome are very different. On the one hand, in the Bangladeshi factories, workers eat one meal at factory canteens, but their access to affordable nutritious foods outside the workplace is severely constrained by the exigencies of living in slums. Here, they are forced to buy from expensive grocery stores by their landlords, where nutritious foods are prohibitively expensive. Consequently, they eat the cheapest foods available to them, which lack key nutrients.



To remedy this, not only does the company improve the menus at the canteens, but also helps to establish 'fair price shops' at the factories in partnership with GAIN. These will be stocked with a wide range of groceries, including nutritious foods, at affordable prices (due to buying in bulk). Workers (primarily women) could indicate what groceries they need from a list of stocked items, which are then picked up for them during working hours; at the end of the day the workers collect the grocery bag and the bill is taken out of their salary. In this way, both the affordability of and convenient access to nutritious foods is greatly enhanced.

Meanwhile in Cambodia, workers almost exclusively eat from local food vendors stationed around the factory premises. While cheap, their offerings are energy-dense and lacking in nutrients, as well as being quite unhygienic. As such, these workers primarily have access to unhealthy food, with little or no healthier options available. VF Corporation and CARE International therefore work with these vendors to improve the food choices on offer, as well as their hygiene practices. They also promote competition among the vendors, whereby workers vote on the vendor with the best nutrition and best hygiene, with leading vendors receiving a certification to put on their stall to attract more customers.



4.2.1.1 Encouraging crop diversification on farms

Promoting crop diversification is a key intervention for supporting smallholder farmers in terms of access, affordability and availability. By encouraging farmers to grow their own nutritious foods for consumption, they and their families not only consume more of these foods, but also saves them money in purchasing food, as well as time and money spent travelling to markets, which can be located significant distances away. Such models also help to diversify local food markets, ensuring that more people in their communities have access to diverse foods.

For instance, Olam trains coffee farmers on intercropping on their farms with food crops like banana, avocado, durian and other high-value crops like black pepper so that they can increase food production and incomes without requiring additional land.⁶⁰



In addition, strategic choices of crops to plant can ensure farmers have access to nutritious foods year-round and improve their resilience to environmental shocks. For example, specific crops can be selected that can be harvested during the 'lean months' prior to the harvest of the farmers' main crop, when their incomes are lowest. Similarly, the planting of 'hardier' crops with greater resistance to droughts, for example, can ensure nutrition security for them and their families, and perhaps wider communities, especially as these are exacerbated by climate change. For Nestlé, for example, this was a key consideration in their Kenyan pilot, where they encouraged farmers to grow indigenous crops such as amaranth and managu nightshade.

Companies can support crop diversification by providing the inputs, such as distributing seeds, providing training in cultivation, as well as the harvesting and cooking of these vegetables, fruits and/or animal products, which may be relatively unfamiliar to their diets. These activities can easily be integrated into existing extension services the company funds or carries out.

4.2.1.2 Increasing access to or distributing fortified products

Fortification, and supply of fortified foods, is another key intervention programs can consider including, especially to address specific micronutrient deficiencies in workers, especially anemia. One of its main advantages is that it does not require the beneficiaries to change their dietary habits, and multiple micronutrients to be addressed simultaneously.⁶¹ Examples include increasing relevant micronutrients in staples such as wheat, maize, beans, sweet potatoes, cassava, pearl millet, lentils, cowpeas, rice, and sorghum that can be effective means of addressing micronutrient deficiencies, for example.⁶² Food fortification is one of the strategies with the highest value for money when it comes to improving lives.⁶³

While fortification approaches did not feature strongly in the six case studies, with the exception perhaps of Unilever, there have been several initiatives that have successfully addressed micronutrient deficiencies among garment workers through rice fortification in Bangladesh, such as that implemented by GAIN (2014 to 2017),⁶⁴ which successfully reduced rates of anemia, and the World Food Program (2013 to 2017).⁶⁵



4.2.2 Nutrition education and behavioral change

“Never forget the importance of integrating education – farming communities want to understand the value of why you’re asking them to do something”

- Susan Kevork, Group Nutrition Manager, Nestlé

Without knowledge and understanding of the importance of nutrition, efforts to increase access and affordability may be insufficient. However, efforts to change longstanding cultural habits can be challenging, so using innovative and culturally embedded approaches is key.

While important, it is not always sufficient to improve access and affordability of diverse and nutritious foods due to a lack of understanding of their value. People are not always aware of the nutritional benefits of a diverse diet or of locally available nutritious foods. For example, Nature's Pride found that in Peru and Dominican Republic, fruits, vegetables and 'superfoods' are often readily available, but obesity among women is a serious concern. Further exploration found that many women in these cases perceived healthy food as a “luxury”, meaning they over-consumed starchy foods, while also cooking with a lot of oil and grease. Nestlé also observed that some communities they worked with in their Kenyan supply chain often consider food primarily in terms of ‘fuel’ or energy, so nutrition education aided recipients in linking their dietary choices to their health.

In some cases, longstanding food customs and habits may also limit the consumption of nutrient-rich foods. For example, in parts of West Africa, it is not usual to consume eggs,⁶⁶ while Nestlé described how some farming communities they worked with in Kenya were reluctant to consume fish, since it was unfamiliar to their diets and they were deterred by its appearance.

Programs can deliver nutrition education and behavior change communication through multiple venues and activities, including information campaigns, teach-in lessons and training with managers, families, worker groups, community groups (such as women's groups), and schools. Innovative delivery approaches can also make awareness-raising entertaining, through cooking competitions, radio dramas, street plays, nutrition games and videos, for example.





When delivering these nutrition education messages, it is important to consider who is delivering them: some groups may be more suspicious of messages delivered by culturally unfamiliar outsiders. As such, approaches that involve training local community members, workers, or health workers may have greater impact, due to better trust and rapport with the beneficiaries.

Meanwhile identifying appropriate and innovative channels of information is key and may differ from place to place. For example, Nestlé found that market vendors in Kenya were often sources of information for local communities, so decided to collaborate with them to deliver nutrition messages and hang information posters at their stalls.

Box 10: Nutrition education and awareness raising in Unilever's 'Seeds of Prosperity'

Unilever's approach to nutrition education and behavioral change as part of its 'Seeds of Prosperity' program in India is particularly noteworthy. Estate workers are selected to be 'master trainers', who are provided with training on why it is important to eat a diverse diet, what such a diet entails, and how estate workers and farmers can improve their diets – and they are then encouraged to pass on this learning to groups in their community.

A variety of entertaining ways to raise awareness and educate the population about good nutrition have also been designed, with participation encouraged across the community. These include cooking demonstrations and competitions, street plays, nutrition games in schools, wall painting and poster campaigns, and videos on nutrition.

Unilever also worked with a local social enterprise called Dharma Life, who trains local women to become entrepreneurs, selling products such as fortified oil and salt in tea-growing communities, while also delivering nutrition messages. These women are able to make strong connections with the predominantly female workforce on the estates, and are considered to be influential 'social change-makers'.

Moreover, while women's knowledge of nutrition is particularly important given their common role in food preparation and care, it is important that all family members benefit from nutrition education, especially those who make purchasing decisions and given customs that dictate who has access to greater food portions and more nutritious food. Nestlé, for example, therefore invited both male and female partners to their nutrition education and cooking sessions in Kenya, in order to ensure they received the same information. Many young men, in particular, welcomed the opportunity, and couples competed against each other to develop a nutritionally balanced plate.

4.2.3 Breastfeeding Support

Since breastfeeding mothers are present in many supply chain workforces, raising awareness of the immense importance of breastfeeding and supporting them to do so is vital to protecting their health and their child's.

For predominantly female workforces, such as those of the garment and tea supply chains, interventions that support breastfeeding mothers are crucial. Breastfeeding substantially improves the health of both mothers and children. The benefits of breastfeeding for mothers include faster recovery from childbirth and on the long-term reduced risk of chronic diseases such as breast and ovarian cancers, heart disease and diabetes. Meanwhile the health benefits to children, both short-term and long-term, are profound. This means that mothers at work take less time off to care for sick children, who would



otherwise be more susceptible to infectious diseases such as diarrhea and respiratory infections.⁶⁷ Ensuring adequate maternal nutrition is also essential for breastfeeding.

Box 11: Twinings raising community awareness on the importance of breastfeeding in Yunnan, China

In Yunnan, a rural and remote province in western China, access to basic services is often limited and, consequently, there has been a high child mortality rate – double that of urban areas. Since 2011 Twinings and Save the Children have been working to enhance children's health and reduce mortality rates of children under the age of five by training village healthcare providers, improving facilities and raising community awareness on important health issues, including breastfeeding and nutrition.

Within six years of the program, the mortality rate of children under five in Cangyuan county reduced from 43.1 to 10.8 per 1,000 live births, with exclusive breastfeeding among babies under six months increasing nearly tenfold from 8.7 percent to 83.3 percent. More than 16,000 children have been reached directly by the program to date, and 5,000 more will be targeted by the next phase of the program, which will focus on feeding practices of babies and young children.⁶⁹





4.3 Living income interventions and malnutrition

Low incomes are a crucial constraint on being able to consume a healthy diet. Efforts to increase incomes are therefore vital to structurally enable better nutrition, so long as these are accompanied by nutrition education and/or women's empowerment, for example.

Low incomes are one of the key drivers of malnutrition, so a critical way of addressing it is by ensuring workers have the *means* to purchase nutritious food through payment of a living wage, or efforts to ensure a living income for workers and farmers. Food represents one of the main expenditures for smallholder households.⁷⁰ Meanwhile nutritious foods and diverse diets are often more expensive than eating cheap, readily-available, calorie-dense foods. This is exacerbated by the fact that food prices can be particularly volatile in many LMICs, especially in times of drought, natural disasters and/or political instability. Low incomes are therefore a key constraint in addressing malnutrition.

Limited incomes put great pressure on workers and farmer households who are coping with many different priorities, forcing them to make trade-offs between nutrition and other needs. For example, garment factory workers often need to send money back to their families in the countryside; while smallholder farmers may need to pay hired laborers, pay for agricultural inputs, repairs, healthcare, education etc.⁷¹ Accordingly, even if nutritious food is readily available at a reasonable price, insufficient incomes mean that individuals may still choose to minimize food-related expenditures, at the sake of their health, in order to ensure other essential needs are met. This consideration is especially important for interventions involving kitchen gardens and crop diversification: without adequate income, farmers may choose to sell their produce for cash to spend on non-food items, rather than consume it themselves.⁷² As such, efforts to pay living wages and ensure living incomes for smallholder farmers are key to addressing malnutrition in supply chains.

However, payment of living wages and income-related interventions alone should not be considered a 'silver-bullet' for addressing malnutrition. The World Bank and numerous other studies have shown that even if incomes rise, nutrition outcomes often do not improve accordingly.⁷³ This is because the pathway from income to nutrition is conditioned by several different factors, including nutrition knowledge and behaviors, as well as women's status, household control over income, and hygiene practices.⁷⁴ An income-specific intervention that does not seek to address at least several of these factors, especially nutrition knowledge and behaviors, will therefore unlikely yield positive nutrition outcomes and health improvements.⁷⁵

Moreover, as one company representative pointed out in an interview, progress on achieving living wages/incomes has been incredibly slow in most sectors. A major reason for this is that it requires so many different stakeholders, including other companies and other supply chain actors, to collaborate to make it happen – a point acknowledged by the Global Living Wage Coalition.⁷⁶ As such, while payment of living wages is still one of their goals, this company considers the investments in their nutrition program to be a crucial means of supporting workers and improving their wellbeing with more immediate impact. They also emphasized that these efforts and their living wage work are not mutually exclusive for the company, but are happening in parallel.

Nutrition-focused interventions, meanwhile, have the potential to increase workers' and farmers' disposable incomes. While some, such as crop diversification, can lead to increased incomes directly through the sale of surplus crop (see **Box 12**), other interventions more broadly have the potential to reduce costs. For example, they could make nutritious food cheaper, reduce transport costs (by making food available on-site), and/or reduce healthcare bills (due to better nutrition), which all save workers and farmers valuable money. Together, these extra earnings and additional savings enable workers to invest in improving their wellbeing.

Nevertheless, there is significant value in addressing income constraints *together* with nutrition-sensitive interventions: even if the costs of healthy diets are significantly reduced, if a worker's/farmer's incomes decrease for whatever reason, or other essential costs increase, they will remain in the position whereby



they are forced to make trade-offs. Therefore, a holistic approach to addressing the material conditions of workers, especially smallholder farmers, is encouraged.

Box 12: Improving incomes and nutrition security for smallholder farmers

The WBCSD paper 'Taking Action on Nutrition' features several case studies that focus on increasing farmer incomes, but with an explicit focus on improving their nutritional focus in the process.⁷⁷ For example:

- **Income diversification:** while crop diversification (e.g. through kitchen gardens or intercropping) can greatly increase farmers' access to nutritious foods, especially during lean months, farmers who are particularly successful at this can sell their surplus crops for additional income. This is especially effective if combined with **entrepreneurship training** and efforts to **increase access to markets**, as Nestlé seeks to do as the third stage of their Farmer Family Nutrition program in Kenya.
- **Capacity-building and agricultural extension services:** investments to increase efficiency and productivity, for example through Good Agricultural Practices (GAP) trainings, is a way to increase income. Combining this training with nutrition education can lead to positive nutritional outcomes.

Additional interventions to promote living incomes for smallholder farmers include access to finance, establishing farmer cooperatives, securing land tenure, among many others.⁷⁸

Nutrition interventions can also lead to savings food expenditure, time, transport and healthcare costs. As Nestlé observed, many of the farmers they addressed in Kenya already consumed vegetables, but they did so by purchasing them from markets: by encouraging them to produce their own, and a wider variety, they not only increased consumption of vegetables and other food groups, such as animal protein, but also saved on food expenditure.

Smallholder farmers with better nutritional status experience greater productivity, which in turn means greater profitability in the long run. As such, this could enable them to accumulate savings to invest in more sustainable agricultural practices, pay off debts, and help them to break out of the poverty trap.



Source: Nestlé



5. Key challenges and solutions

5.1 Tailoring interventions to local preferences, cultural habits, and environmental factors

Ensuring that interventions are sensitive to local preferences, cultural habits, and environmental factors is key and will likely increase the chances of positive reception by the beneficiaries, greatly increase its chances of impact and success, and reduce costs associated with redesigning the program.

One of the core insights highlighted by each of the interview informants is of the necessity of conducting clear problem analyses and adapting interventions to the specific local context: cut-and-paste or blanket approaches will not be anywhere near as effective as tailor-made programs. Certainly, lessons from programs in one location can be relevant for another, but each intervention needs to take into account local circumstances, conditions and preferences, and be tailored accordingly.

For example, interview respondents consistently reported the necessity of ensuring that interventions are sensitive to local cultural preferences and habits. Food is culturally significant, so a program that ignores how certain foods are perceived and how it is consumed will struggle. As explained above in **Section 4.3**, people are often resistant to new foods being introduced into their diets due to visual or taste preferences. For example, a representative of BOP Inc, who had worked on a fortified rice distribution program among garment workers in Myanmar, described the challenge of persuading workers to consume the rice given that it tasted different, given their strong cultural preferences for certain types of rice. While some behaviors can eventually be changed through effective nutrition education and behavioral change programs, it is important that they are anticipated in advance.





Similarly, for certain interventions, especially those involving kitchen gardens or the supply of specific foods, it is important to understand specific environmental factors to determine what can be grown in that area. For kitchen gardens, for example, it is important that appropriate crops are selected that are not only nutritious and suited to consumer preferences, but are also easy to grow in that area, given the climate, altitude, water availability and soil type, as well as resistance to shocks such as drought. Nestlé, for example, encountered challenges with kitchen gardens in the Philippines, particularly regarding what animals can be raised at different altitudes.

When designing programs that seek to make certain nutrients more accessible to workers, it is important to determine that the key sources of these nutrients are available in a certain market. For example, Unilever explained how, in India, Tamil Nadu had access to very different protein sources compared to Assam, meaning that the approach had to be customized to each region.

Early identification of these kinds of challenges and ensuring that they are factored into the initial design of the program will greatly increase its chances of success, reducing costs associated with redesigning the program, and increasing the chances of positive reception by the beneficiaries.

As such, it is important that programs are co-designed with and implemented by teams close to the ground with knowledge of diets, consumption patterns and culture in the market. Olam, for example, delegates responsibility for the specific design and implementation of activities of its Olam Healthy Living program to in-country supply chain managers and/or factory managers. As such, its program encompasses a huge diversity of approaches, since “they are based on what makes sense for the local context.” Nestlé adopted a similar approach in three of its five pilot countries. In both cases, the company headquarters provide the impetus and framework for intervening, while helping to coordinate and facilitate the sharing of lessons learned and best practices.

The identification of specific nutrition challenges and the co-creation of solutions with communities in the market are essential for interventions to be effective and sustainable. One way of doing this is through participatory focus groups, such as those conducted by Olam in Cote d'Ivoire whereby cashew-growing communities undertook problem-tree analyses to identify the local causes and consequences of food insecurity, as well as proposed their own solutions to address them. Twinings also takes a similar approach through its TCNA (See **Box 7**). Interventions must be desired by communities to be effective and sustainable; therefore, such interventions need to reflect community needs, values, and nuances.⁷⁹

5.2 Securing short- and long-term supplier buy-in

Securing supplier buy-in is key as they are often responsible for day-to-day implementation (which includes in kind contributions of space, time and management) and may also bear the cost of the project. A pilot with a strong supplier that creates a clear business case and compelling moral reasoning can help scale the program across more suppliers.

An important challenge reported by interviewees was of ensuring sufficient buy-in from their supply chain partners. Regardless of the program, its success relies substantially on the willingness and enthusiasm of the supplier, be it a factory, farm estate or smallholder farm, since the program takes place on their property and targets their workers, meaning that they are likely to be responsible for the day-to-day implementation of the project. In many cases, they will also bear most of the costs the project, while also providing significant in-kind contributions of space/land, as well as substantial time commitments and management resources. All of this, in the context of increasing pressure to deliver on a range of other competing priorities, both commercial (e.g. keeping costs low), and sustainability-related, including environmental considerations and other labor rights issues, for example, often being required to complete numerous assessments on these different topics.



As such, securing their buy-in and genuine enthusiasm to see it succeed is crucial, not just in the initial implementation of the program, but also in ensuring its permanence in the long-run. This is especially the case if the buyer wishes to make it self-sustaining without its support, allowing it to focus on scaling up elsewhere. For example, Nature's Pride has observed the immense pride and enthusiasm with which its suppliers have designed and implemented the pilot programs in South Africa and Peru: from managers and HR staff to canteen workers, everyone is "very celebratory of the work they've done; everybody becomes excited and aligned around the topic of nutrition", according to Coen van Iwaarden, Senior Advisor.

On the one hand, some respondents, including Twinings and Nature's Pride, stated that they had very limited difficulty convincing their suppliers to get on board with addressing malnutrition among their workers; the benefits (both business and moral) were clear to their main suppliers. However, this cannot always be guaranteed, and many suppliers could be more difficult to convince.

To start, therefore, it is essential that a strong business and moral case is made to the management of the factories or farm estates; in the case of smallholder farms, it could be the farmers themselves, or the leadership of farmer cooperatives, or community leaders, depending on context. One multinational interviewed explained how different managers will respond differently to different pitches: some respond better to the business case, with case studies and testimonials, while others, especially those who are less literate in business lingo, are moved by the moral case.

If the sizeable body of existing evidence is not sufficient to persuade all supply-chain partners of the benefits,⁸⁰ then it is worth generating further evidence through pilot projects with suppliers who are more amenable, perhaps due to a closer and/or long-term relationship with the buyer, or those who have a stronger, more genuine commitment to sustainability and/or worker well-being. This was the approach taken by VF Corporation, Nature's Pride and Nestlé, for example. Once a robust 'proof of concept' from a directly relevant context has been shown, other suppliers may be less sceptical, or actively willing to reap the same benefits. This enables the pilot to be scaled up, as was the case with VF Corporation's Worker & Community Development initiative. The company also emphasized the need for robust monitoring and evaluation of the impact of its program, in terms of productivity and absenteeism, for example, to further convince suppliers of its effectiveness.

Even if the benefits are clear, some suppliers could still be difficult to persuade due to the costs and inconvenience involved: they simply do not have the capacity to cover these, given their other priorities. In these scenarios, interventions that are relatively inexpensive and build on existing structures are advised. For example, if a specific micronutrient deficiency needs to be addressed, the bulk-purchasing and distribution of fortified rice or supplements is significantly cheaper than setting up a canteen where one did not exist before. Similarly, a program could be delivered through existing systems and structures, for example, through existing health clinics/infirmarys. See **Section 3.4.2** for more information.

Alternatively, the buyer may need to offer more financial support to the supplier. Unilever, for example, explained how they continue to pay for most of their interventions as part of the Seeds of Prosperity program, and that most are designed not to interfere with working hours of the estates.

5.3 Overcoming expertise and capacity constraints through partnerships

While companies may lack the in-house nutrition expertise and capacity to develop and implement workforce nutrition programs in supply chains, this can be overcome by seeking partnerships with relevant organizations and government bodies.

Another challenge identified by several of the companies ATNI interviewed was the initial lack of in-house knowledge and expertise on the topics of health and nutrition, especially for companies not in the business of food. Even for those with such expertise, there can still be additional complexities involved



when intervening in supply chain contexts, so partnerships still add significant value and enhance their credibility to external stakeholders. In addition, companies may not have the capacity and personnel to implement certain program activities directly.

It is therefore important to seek out partnerships with relevant organizations with specific expertise when designing and implementing these programs. Not only do they provide invaluable technical knowledge on the subject of nutrition and workforce programs, but many can also provide the capacity for implementing program activities. Each of the case studies ATNI researched featured such partnerships. For example, Twinings works with partners in each of its projects in different countries such as UNICEF, Save the Children, and CARE International; VF Corporation partnered with GAIN and CARE International in Bangladesh and Cambodia respectively; while Unilever designed Seeds of Prosperity through partnerships with GAIN and IDH Sustainable Trade Initiative.

In addition, the Workforce Nutrition Alliance has developed a range of [guidebooks and technical support programs](#) covering various aspects of workforce nutrition and how to develop such programs, including in supply chains.⁸¹ It can also help to facilitate partnerships with nutritionists and other technical partners.⁸²

Moreover, working with partner organizations with an established local presence in the specific market can facilitate a stronger connection with beneficiary groups and communities through shared language, customs, and experiences. This in turn fosters trust, which is especially key for nutrition education and behavioral change-related interventions, as well as for ensuring the sustainability of the program in the long-run by embedding it in the community.

In India, Unilever co-designed their interventions with the tea-growing communities themselves alongside the suppliers, while also working with an Indian social enterprise called Dharma Life, which in turn trains women in the communities to become entrepreneurs and sell products such as fortified oil and salt in tea-growing communities. In Kenya, Nestlé worked with local partners Coffee Management Services (CMS) and Simlaw Seeds, a local seed supplier, who helped them select the most appropriate seeds for kitchen gardens, including indigenous vegetables such as amaranth. Another benefit of working with these partners is that it builds their capacity as well, who can then apply their learnings for similar projects with other partners in the future.

Government bodies can also be key sources of capacity and expertise. In many cases, they already have programs in place to address malnutrition among priority populations. Companies can therefore use their knowledge, reach, and resources to facilitate access to these for their supply chain workers, as Olam's SCGP has done for cashew farmers in Cote d'Ivoire (see pages 24 and 25). Alternatively, companies can seek to align with governments' public health aims and develop programs that complement these. By demonstrating alignment, companies may be able to access to government support and expertise.



6. Roadmap and recommendations for developing a successful program

This final section lays out ATNI's recommendations and suggestions that would enable companies to successfully develop impactful and sustainable workforce nutrition programs for their supply chains. These are based on the findings of the case studies research, conversations with representatives from the Workforce Nutrition Alliance, and ATNI's own experience in driving private sector action and accountability on nutrition.

Figure 3: Roadmap for developing successful workforce nutrition programs in supply chains





Table 4: Roadmap and Recommendations

Recommendations	Rationale	Further Suggestions
1. Conduct needs assessments of nutrition/ health status of workers and smallholders in supply chains	<p>Develops understanding of the types and prevalence of malnutrition among supply chain workers that need to be addressed with programs.</p> <p>Identifies the most at-risk groups to be prioritized first.</p> <p>Provides baseline data for setting targets and monitoring/evaluation.</p>	<p>Integrate nutrition indicators into existing due diligence, materiality and/or needs assessments the company conducts.</p> <p>Consult with expert NGOs such as GAIN on developing indicators/ assessments.</p>
2. Set SMART targets and commitments for programs	<p>Defining expected SMART (Specific, Measurable, Achievable, Relevant, and Time-Bound) targets ensures agreed-upon definitions of success helps to unite everyone involved around a common goal.</p> <p>Drives greater accountability (internally and externally) for the program.</p> <p>This also signals to external stakeholders (e.g. consumers, investors, governments etc.) that the company takes their responsibility to supply chain workers seriously.</p>	<p>Targets could include outputs, such as beneficiaries reached, but should also involve outcomes, e.g. reducing rates of (a type of) malnutrition.</p> <p>Set SMART targets for individual projects, as well as aggregated targets for the whole company program.</p> <p>Become a signatory of the Workforce Nutrition Alliance to demonstrate to stakeholders a genuine commitment, as well as to access valuable resources of the Alliance and network with other signatories.⁸³</p>
3. Conduct deep-dive assessments to understand the specific drivers of malnutrition among workers in each individual context.	<p>Through interviews and focus groups with the beneficiaries and local nutrition and health experts, develop better understanding of their circumstances. This enables effective problem analysis and subsequent project design.</p> <p>Also enables early understanding of cultural/environmental drivers of malnutrition.</p>	<p>Work with local researchers/NGOs to ensure culturally sensitivity, create trust and build effective community relations.</p> <p>Ensure that both supply-side (access/affordability/availability) and demand-side (nutrition knowledge and behaviors) are addressed.</p> <p>Look beyond the workplace, to also consider conditions in their households (especially children) and communities.</p>
4. Secure supplier buy-in	<p>Securing sufficient supplier buy-in and enthusiasm is key to the sustainability and success of a program, both in the short- and long-run.</p> <p>Doing so can also reduce costs to the company in the long-run if suppliers are expected to take ownership and shoulder the implementation costs themselves.</p>	<p>Make a strong business and moral case for the intervention. Demonstrate proof of concept through pilot projects and robust M&E results.</p> <p>In addition to prioritizing those experiencing the high rates of malnutrition, also consider selecting suppliers with stronger relationships with the company for pilot-projects, to increase the chances of initial success.</p> <p>Involve suppliers in the design of the program, not only to factor in their resource/ funding/ space constraints, but to give them greater ownership.</p> <p>Work with the company's supply chain/in-country teams to identify synergies with existing programs/activities that nutrition interventions could be integrated with.</p>



5. Partner with expert NGOs and/or international organizations	<p>Involving NGOs with significant expertise in addressing malnutrition and experience in developing these kinds of projects will enhance their effectiveness and impact.</p> <p>They could also point to existing initiatives/programs that could be either joined or learned from directly, to avoid duplication.</p> <p>NGOs with an established local presence helps to anticipate locally specific challenges, increases trust and legitimacy</p>	<p>The Workforce Nutrition Alliance has developed a Technical Support Programme (beginning April 2022), providing five months of hands-on guided support to help develop workforce nutrition programs.</p>
6. Consult, co-operate and seek partnerships with relevant in-country government bodies	<p>By identifying possible alignments with public health priorities and existing (local) government programs, companies can design their own programs to either complement these, facilitate access to them, or work through them.</p> <p>This avoids potential inefficient duplication, which potentially lowers costs.</p> <p>Government-endorsement can also increase the legitimacy of a project in the eyes of local and international stakeholders.</p>	<p>Efforts to do so could result in greater support from these governments, be it in-kind support or possibly funding.</p> <p>Funding can also be sought from donor governments with health programs in relevant countries.</p>
7. Ensure participative design, involving, amongst others: <ul style="list-style-type: none"> • Beneficiaries (workers, communities) • NGOs with local presence. • Suppliers/intermediaries 	<p>Helps to ensure the program is tailored to the needs and preferences of the beneficiaries, increasing its effectiveness.</p> <p>Helps to anticipate locally specific challenges (e.g. cultural habits, environmental factors), thereby lowering costs.</p> <p>Increases the program's legitimacy, enhancing the trust between beneficiaries/ suppliers and the company, increasing their receptiveness to the intervention.</p>	<p>Ensure the interventions are sensitive to local preferences/customs, gender relations, and the realities beneficiaries face.</p> <p>Identify areas to minimize the interventions' inconvenience to workers and suppliers e.g. planning education/training sessions at convenient times.</p>
8. Develop a tailored, multifaceted approach	<p>Malnutrition is rarely caused by a single factor alone, so programs should consist of multiple overlapping interventions addressing different factors (as identified in the deep-dive assessment), including both demand- and supply-side, to be the most effective.</p>	<p>Consider taking a holistic approach and address other key aspects that impact nutrition, such as Water, Sanitation and Hygiene (WASH), support for breastfeeding mothers, nutrition-related health checkups, and access to cooking facilities, for example.</p> <p>In addition to nutrition-specific interventions, implement these as part of a wider set of interventions to address structural conditions that influence malnutrition, such as working towards living incomes, reducing work hours, gender equity and empowering women, increasing resilience, etc.</p> <p>The exact approaches that need to be taken will depend on the industry, but will often require industry and multistakeholder collaboration to address.</p>



9. Ensure cultural embeddedness (e.g. working with/through local NGOs and/or changemakers)	<p>Having program staff that can connect with the workers due to shared language, cultural background and mutual understanding, will likely increase the receptiveness of the beneficiaries to the intervention, especially for nutrition education and behavioral change interventions, and other trainings.</p>	<p>In addition to working through local NGOs, consider 'train-the-trainer' approaches, in which workers or community members are trained to share knowledge/awareness among their peers.</p>
10. Conduct thorough Monitoring and Evaluation (M&E) assessments	<p>Helps to determine whether the program is on track to achieve its targets and goals, and what is needed to meet them.</p> <p>Helps to identify what has been successful/effective, any unforeseen challenges and lessons learned. This is especially important for scaling up.</p> <p>Important for reporting purposes, including for both current and future donors and partners.</p>	<p>Repeating needs assessments with the same indicators periodically helps to measure change over time.</p> <p>Collecting not only quantitative but also qualitative data is also important for understanding the realities and issues being faced on-the-ground.</p> <p>Using the soon-to-be launched self-assessment scorecard for supply chains developed by Workforce Nutrition Alliance helps to track progress, especially if used as a KPI in the evaluation.</p> <p>Monitoring indicators relating to the 'business case' (e.g. productivity gains, reduced absenteeism/healthcare costs, etc.) can increase the sustainability of the program in the long run, for this information can be key to convincing certain key company personnel and suppliers of its importance. This information can also help inspire other companies to develop their own programs, meaning greater impact overall.</p>
11. Publicly report information relating to the previous recommendations and future plans	<p>Comprehensive disclosure increases transparency, trust, and accountability with key stakeholders, such as investors, governments, and key NGOs.</p> <p>Public reporting also helps to communicate the company's efforts to increasingly conscious consumers, which can improve a company's brand equity/reputation.</p> <p>Sharing experiences, including what went well and what went wrong, can inspire and inform other companies considering developing their own programs and helping a greater number of workers.</p>	<p>Share information, particularly lessons learned and best practices, with bodies such as the Workforce Nutrition Alliance to help promote cross-learning and inspire other initiatives.</p>

ATNI hopes that this paper provides inspiration to companies to invest in improving nutrition for workers in their supply chains who need it the most. It is a call to action for both companies and other organizations working with companies in their supply chains, including NGOs, policymakers and other accountability mechanism organizations, to engage companies to do more for the nutrition and health of their supply chain workers, and together contribute to ending hunger and poverty globally.

For additional information and or questions please feel welcome to contact ATNI by visiting our [website](#).



Annex 1

Table of individuals and organization interviewed:

Company Name	Name	Role (at time of interview)	Relationship to the project
Unilever	Anjalli Ravikumar	Global Sustainability Director	Responsible for Seeds of Prosperity program
Nestlé	Karen Cooper	R&D Program Manager for Climate Change	Developed/lead the Farmer Family Nutrition program
	Susan Kevork	Group nutrition manager	Currently responsible for the program
Twinnings	Céline Gilart	Head of Social Impact and Sustainability	Developed/leads the Sourced with Care program
Olam	Sarah Rawson	Senior Strategist, Corporate Responsibility & Sustainability	Leads Olam Healthy Living program
VF Corporation	Jazz Smith Khaira	Global Senior Manager Worker and Community Development	Developed/leads the Worker & Community Development initiative
Nature's Pride	Coen van Iwaarden	Senior Advisor Sustainable Business	Responsible for the company's Nutrition at Work Programmes with suppliers
Organization	Name	Role (at time of interview)	Relevant Expertise
Bopinc	Tessa Fij	Project Manager	Worked on WFN Project for Garment Factories in Myanmar
IDH Sustainable Trade Initiative	Gäel Lescornec	Program Manager Cocoa & Living Income	Leads IDH's Cocoa Nutrition Initiative
GAIN	Bärbel Weiligmann	Senior Advisor for WFN	Leads GAIN's Workforce Nutrition Program
	Christina Nyhus Dillon	Senior Technical Specialist	
NewForesight	Yoshita Arora	Senior Consultant	Consultants for the Workforce Nutrition Alliance
	Laure Heilbron	Principal	
The Sustainable Food Lab	Christina Archer	Strategic Advisor for Private Sector and Stakeholder Engagement	Sustainable Supply Chains
Rogers MacJohn	Richard Rogers	Managing Director	Sustainable Supply Chains



Endnotes

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