A diverse diet – one incorporating many food types and colours of fruits and vegetables - can be the difference between poor and good health, but an estimated two billion people suffer from vitamin and mineral deficiencies globally. The Seeds of Prosperity programme is a partnership between the Global Alliance for Improved Nutrition, the Sustainable Trade Initiative (IDH) and Unilever1 which tackles this challenge in commodity supply chains. The first phase of the programme reached 300,000 people in tea farming communities in India, Tanzania and Kenya, and provided helpful lessons for the next generation of workplace programmes2.

Programme successes
✓ The programme reached 300,000 people in tea farming communities.
✓ Diets became more diverse in both locations in India.
✓ The percentage of women in the programme who reported eating at least 5 food groups (a diet linked to lower risk of deficiency) increased between 15% and 24% in Tamil Nadu.
✓ Handwashing frequency improved in Assam.
✓ Programme participants viewed the programme positively and reported feeling increased loyalty to employers.
✓ The programme provides valuable insights to inform the next generation of workplace programmes.

The challenge
Some 500 million people are small-scale farmers globally, meaning they rely on small family plots of land for their food production or income. Although small-scale farmers manage 80% of farmland in Asia and Africa, they often sell their most nutritious foods, and eat starchy foods such as rice, bread and wheat – inexpensive and filling, but lacking in key vitamins and minerals such as iron and zinc, which are essential for good health.

A monotonous diet is more likely to bring deficiencies of vitamins and minerals which carry several health risks, including decreased resistance to infections and impeded brain and body development. Adults who were malnourished as children earn at least 20% less on average than those who weren’t3, and national economies lose on average 10% of GDP annually due to malnutrition4, as a result of early deaths and decreased productivity.

1 Funding sources: 60% Unilever, 35% IDH, 5% Dutch Government.
2 This document covers findings from India and Kenya, where 275,000 people were reached.
Poor hygiene is also a major challenge: diarrhoea is the second biggest killer of children under five years old. Simply washing hands with soap could reduce the number of diarrhoea cases by up to 47%\(^5\), but many people are not aware of the link between hygiene and health.

**The Seeds of Prosperity**

The Seeds of Prosperity programme works through commodity supply chains to improve workers’ diets and hygiene practices. The programme operated in tea supply chains in Kenya, Tanzania and in Tamil Nadu and Assam states in India\(^6\). It aimed to increase the number of food groups that supply chain workers consumed daily, improve their intake of essential vitamins and minerals, and improve their hygiene practices. The programme measured its impact through measuring the number of food groups included in women’s diets, with the assumption that other household members consume at least the same number of food groups as women.

The headline message of the Seeds of Prosperity programme is ‘our families are our most important crop’. Supply chain workers were selected to be ‘master trainers’ and trained on why a diverse diet matters, what it looks like, and how other estate workers or farmers can increase the diversity of their diets. Using a toolkit of materials and posters, master trainers then led a nine-week, interactive behaviour change programme with groups in their community.

Investments in community development initiatives such as the Seeds of Prosperity aim to contribute to a healthier workforce, help build worker wellbeing, loyalty and secure a more resilient future for tea.

“A worker having a better diet will not only become healthier, but will be more productive as well.”

Suranjit Chakraborty, Manager, Tengpani tea estate, Kothari Group

Dietary diversity is eating foods from as many different food groups as possible. Women eating foods from at least 5 of these food groups daily are more likely to consume a diet with adequate essential vitamins and minerals.


\(^6\) This document covers results from evaluations in the Tamil Nadu, Assam and India, where 275,000 people were reached.
Impact

The programme reached 300,000 people in tea farming communities in Kenya, Tanzania, and in Tamil Nadu and Assam in India. This document covers programme evaluations in three sites across India and Kenya.

More diverse diets. In Assam and Tamil Nadu, dietary diversity scores increased significantly in all groups after six months. This means that programme participants reported consuming more food groups daily. In Assam, participants reported consuming more pulses, beans and dark green leafy vegetables; in Tamil Nadu, participants reported eating more fruits, vegetables, pulses and eggs. The percentage of women in the programme meeting the minimum dietary diversity (at least 5 food groups) increased by 15-24% among farmers and estate workers in Tamil Nadu.

Home gardens doubled in Tamil Nadu. Other locations saw a slight increase, but not relative to people who were not on the programme - meaning that home gardens increased independent of the programme.

Handwashing practices increased among estate workers in Assam and farmers in Tamil Nadu, increasing to an average four to seven additional moments across the possible 35 handwashing moments in the week. In Kenya, where handwashing levels were already high, the programme did not impact this behaviour.

Loyalty and trust: anecdotal evidence suggests that the programme improved supply chain workers’ perceptions of their employers in Assam and Kenya, especially among estate workers. In Kenya, 97.7% of supply chain workers valued the programme, and in Assam workers felt more trust for their employers as a result of the programme.

Programme implementation. In all three areas, the programme was implemented as intended - all modules and materials were provided by over 550 master trainers, most of whom were women. Attendance rates were over 90% among estate workers across the programme.

Lessons learned

Mixed results. The programme brought more mixed results across locations and populations than partners expected. For example, the largest change in Tamil Nadu was amongst tea estate workers: they had very high attendance levels. In Assam we saw a promising improvement in average dietary diversity in just nine weeks: a more intensive programme will be needed for better results. In Kenya, dietary diversity did not improve relative to people

Why do diverse diets for women matter?

Women of childbearing age often don’t get the nutrition they need. This matters because most pregnant and breastfeeding women more nutrients than usual in order to have a healthy pregnancy and baby. Even outside of pregnancy, because women may be smaller and eat less, they need more nutrients in all the foods that they eat.

“Usually, I felt so tired after coming home from work. Attending the training, made me think that perhaps not having enough food might be the reason. Now I am starting to eat enough food along with five food groups.”

Jitamani, Estate Worker, Assam, India

7 Solidaridad was our implementation partner in India, Unilever Tea Kenya in Kenya.
not on the programme, possibly because the area had a number of other organisations running concurrent programmes which may have overlapped with the Seeds of Prosperity programme, making it hard to establish our impact. And although diets diversified in all locations, the minimum diversity that indicates lower risk of deficiency was still not met in some cases. This may be because program duration or intensity was insufficient, or farmers could not access the necessary foods to improve their diets (indicating that sometimes behaviour change alone is not enough to overcome barriers). Further efforts are needed to help workers consume a more diverse diet: this may include addressing the constraints to accessing certain nutritious foods.

**More time is needed to change behaviour.** Future programmes need a longer period of engagement, should focus on contexts with the greatest potential for impact, and may need to adapt as barriers to change in behaviour are identified.

**Go beyond knowledge.** Behaviour change communications to improve knowledge is an important component of improving the quality of diets among some workers, but knowledge alone is not sufficient to change behaviour. Additional interventions to improve access to nutritious foods such as fortified foods, or encouraging nutritious and safe food supply to shop keepers, are a critical complement to remove barriers to improved diversity of diets.

**NEXT STEPS**

GAIN, Unilever and IDH are working together to design the next generation of workplace nutrition programmes based on these findings, with the aim of developing an approach which can be adapted to suit different businesses and contexts. The scale is ambitious: we believe we would need to reach 20% of estate workers and farmers engaged in tea production to bring about transformational change across the tea sector. Partners are also keen to move beyond tea, and bring in other businesses interested in improving their workforce nutrition - and engagement - for a more sustainable future.

**For more information or to get involved, please contact:**
Dr. Bärbel Weiligmann: bweiligmann@gainhealth.org or Dr. Christina Nyhus Dhillon: cynhus@gainhealth.org

**Program partners**
www.gainhealth.org / @GAINalliance
www.unilever.com / @unilever
www.idhsustainabletrade.com / @idh_buzz

“Engaging on nutrition makes the brands competitive in the eyes of an increasingly conscious consumer.”

Jasmer Dhingra, Senior Programme Officer, IDH

“The programme is unique because it aims to work within businesses to improve nutrition outcomes, and to develop an approach which can be adapted to suit different businesses and contexts.”

Daleram Gulia, Procurement Manager, Sustainable Sourcing, Tea & Coffee, South Asia, Unilever