In order to address nutrition security across cash crop value chains worldwide, the Global Alliance for Improved Nutrition (GAIN) aims to develop a global, effective, adaptable and sustainable program model to improve nutrition of farming families among the supply chain. The SEEDS OF PROSPERITY program is designed to enhance nutrition awareness levels and increase the availability and accessibility of nutritious foods amongst small-holder farmers and farm and estate workers, as well as their families. The focus of the program is a 9-week BEHAVIOUR CHANGE COMMUNICATIONS (BCC) strategy to promote dietary diversity, supported by the promotion of home gardens. Dietary diversity was chosen as the focus as greater diversity of food groups is associated with better nutritional adequacy of diets and the concept is easily understood.

In an effort to build up evidence for the impact of the ‘Seeds of Prosperity’ program on worker nutrition, GAIN teamed up with Unilever (sponsor), Solidaridad (implementer) and Catalyst Management Services (CMS) (evaluator) to pilot the program in India. The program was implemented in 2016 among 2,700 farm and estate workers and small-holder farmers across 4 tea factories and estates in Coonoor, Tamil Nadu. The Behaviour Change Communication program was delivered in the current delivery mechanism of tea estates by Master Trainers, selected from among supply chain workers, following initial training from GAIN and Solidaridad staff. Comprehensive process and impact evaluations of this pilot program provide evidence of impact, lessons learned, and how the program should be improved and adjusted to scale up and reach 30,000 farmers and workers.

Overall, the program was well received by all stakeholders, resulting in an increase in mean DIETARY DIVERSITY SCORE (DDS) (Fig 1) and the percentage of women meeting the MINIMUM DIETARY DIVERSITY FOR WOMEN (MDD-W) (Fig 2), defined as at least five food groups consumed in day. Greater dietary diversity was also seen among survey respondents in the comparison group (people from the same area who did not receive the program), but the change was smaller than among program beneficiaries, suggesting a positive effect that can be attributed to the program.
The intervention led to increased awareness levels about nutritious foods, diverse diets and the benefits of healthful diets, as well as increased home production of vegetables (Fig 3). Two-thirds of program beneficiaries reported having a home-garden, whereas just over one-third of non-participants kept a garden. Keeping home-gardens was challenging for workers because they lack access to land near their homes. Program satisfaction among beneficiaries was high, with 98% indicating that the program was likely to affect their decision to continue with the same tea estate or factory.

Lessons learned in this pilot study included that some BCC materials were not well utilized and could be scaled back, some language barriers existed for non-Tamil speaking immigrant workers, and more training on ‘how to effectively communicate and teach the BCC material’ would be useful. A similar pilot in the gherkin supply chain did not achieve a net increase in dietary diversity among small holder farmers, and process evaluation suggested that commitment among the supply chain actors who implement the program is critical for adequate delivery.

The success of this intervention lies in its simplicity. Farmers are familiar with the cultivation of crops and know about the different types of foods. As such, the concept of a diverse diet is easily understood and, as long as they have access to water and some land or space outside their home, many workers and farmers are able to start their own home-garden. Key to program success is the simplicity of the training and the focus on critical topics. The combination of creating awareness and reinforcing positive behaviour increases the chance of sustainable behaviour change. The delivery of the program must make use of the existing infrastructure to increase efficiency and the potential to scale up. Engagement and commitment from the supply chain, stakeholder and policy makers are critical.

The tea sector offers opportunities for further refining and scaling up of the ‘Seeds of Prosperity’ program and extending the program to tea value chains in other locations. Furthermore, there are opportunities to adapt the program to other value chains such as palm oil, rubber, cocoa and coffee, as families in these value chains also suffer from poor nutrition. Implementation and scaling up of the nutrition program can contribute to brand integrity and sustainable supply chains with healthy farmers and workers.

GAIN has partnered with the Unilever and the Sustainable Trade Initiative (IDH) for the next steps in the development of the program model to improve nutrition. These include the scale up the ‘Seeds of Prosperity’ program in the tea supply chain in Tamil Nadu, and the adaptation of the model for implementation in Assam, Kenya, and Malawi. GAIN continues to monitor and collect evidence for the nutrition benefits of the model to support further improvements and justify scale up in different contexts. Further effort and planning is still required to ensure that the program and its benefits are sustained within the supply chain, to maintain interest and make the program available to new workers.