Smallholder farmers and workers contributing to global tea supply chains remain nutritionally vulnerable. The Seeds of Prosperity program is working through commodity supply chains to improve diets and hygiene practices of workers, farmers and their families.

Reach

A successful pilot has reached 2,600 farmers in Tamil Nadu, India and the programme will now be scaled up in Tamil Nadu and replicated in tea farming communities in Assam as well as Kenya, benefiting a further 290,000 people.

Strategic partners

[Logos of various partners]

Implementation partners

[Logos of various partners]
## Programme Framework

<table>
<thead>
<tr>
<th>Immediate Outcomes</th>
<th>Dietary diversity</th>
<th>Handwashing with soap at five key occasions every day.</th>
<th>Handwashing with soap.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outputs</strong></td>
<td>Daily consumption of at least five out of ten food groups.</td>
<td>Increased home production of diverse, nutrient-dense foods (e.g. fruits and vegetables).</td>
<td>Increased awareness and knowledge of handwashing with soap.</td>
</tr>
<tr>
<td></td>
<td>Increased awareness and knowledge of nutrition and dietary diversity.</td>
<td>Increased dietary diversity.</td>
<td></td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td>Behaviour change communication</td>
<td>Providing guidance to the farmer and worker families</td>
<td>Awareness building on handwashing with soap.</td>
</tr>
<tr>
<td></td>
<td>Awareness generation</td>
<td>Usage of communication tools</td>
<td>Providing seeds for vegetable garden</td>
</tr>
</tbody>
</table>
The Minimum Dietary Diversity for Women (MDD-W), defined as a dietary diversity score of at least five out of ten food groups, is used as a proxy indicator to reflect the micronutrient adequacy of women’s diets.

Companies can report to SDG Indicator 2 and 6 (Dietary Diversity and Handwashing).

98% indicates that the program is likely to positively affect their decision to stay with the tea estate or factory.

41% increase in the number of households which grew vegetables in home-gardens.

78% of tea growers washing their hands before lunch daily, compared to 51% of growers in the comparison group.

2,600 farmers and workers reached

<table>
<thead>
<tr>
<th></th>
<th>Treatment</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline – Dec 2015</td>
<td>309</td>
<td>309</td>
</tr>
<tr>
<td>Endline – Apr 2016</td>
<td>206</td>
<td>208</td>
</tr>
<tr>
<td>Drop-out rate</td>
<td>33%</td>
<td>33%</td>
</tr>
</tbody>
</table>

Percentage of women meeting the MDD-W

- Treatment: 26% Baseline, 67% Endline, +41%
- Comparison: 33% Baseline, 57% Endline, +24%

- +17%

Companies can report to SDG Indicator 2 and 6 (Dietary Diversity and Handwashing).
# Nutrition tools based on four levers of change

<table>
<thead>
<tr>
<th>AWARENESS</th>
<th>MAKE IT EASY</th>
<th>COMMITMENT</th>
<th>REINFORCEMENT</th>
<th>REWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food groups poster</strong></td>
<td><strong>Interactive board</strong></td>
<td>I pledge to include at least 5 food groups in my daily diet for a healthy and prosperous family</td>
<td><strong>Consumption tracking sheet</strong></td>
<td><strong>Snake and ladder game</strong></td>
</tr>
<tr>
<td><strong>Healthy and unhealthy tea plant</strong></td>
<td><strong>Healthy and unhealthy tea plant</strong></td>
<td></td>
<td><strong>Shopping list</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Iodized salt kit</strong></td>
<td></td>
<td></td>
<td><strong>Kitchen garden tracking sheet</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Seeds</strong></td>
<td></td>
</tr>
</tbody>
</table>
Benefits on all levels are interlinked

- Farmers & workers
  - Improved dietary quality
  - Beyond certification
- Supplier
  - Improved knowledge and awareness of nutrition and hygiene
  - Report on Sustainable Development Goals
- Unilever
  - Satisfaction
  - Loyalty and trust
  - Perceived productivity
  - Less absenteeism
  - Brand reputation
- Tea sector
  - Happy consumers
  - More energy to work
  - Tea sector is front runner in nutrition
Monitoring and evaluation tools

Program Effectiveness

Routine Monitoring
Internal monitoring conducted by implementer

ELMA Platform

Third Party Process Monitoring
Ongoing program improvement

Process Monitoring Protocol

Impact Assessment
Treatment and comparison group

Phase 1
Phase 2
Phase 3

Phased Implementation:
9 weeks intervention

Baseline and Endline Questionnaire

Pre-Screening Tool
Assess need for nutrition program

Pre-Screening

Control group

Phase 2

Phased implementation: endline survey after 12 months of implementation.
Vision for the future

- Improve upon this model with more sound evidence around not only the impact but the indicators along the pathway to impact and their role in any outcome seen.
- **Strengthen and standardize program implementation** for relevance across contexts and value chains.
- Examine more points along the outcomes from knowledge generation to behavior change and over a longer period of time.
- **Scale up** to other value chains and other tea origins.

Interest from the tea sector:
- India
- Kenya

Interest from other sectors:
- Cocoa
  - Ghana and Ivory Coast
- Palm oil
  - Indonesia
- Horticulture
  - Kenya
- Coffee
  - India
Synergies with company components
Examples from Unilever

Current synergies

Annapurna iodized salt
Part of the training for farmers and workers.

Lifebuoy
Part of the training for farmers and workers.

BlueBand national Good Breakfast Campaign in Kenya
A diverse diet can already start at breakfast.

Lipton tea
Unilever tea brand.

Potential synergies

Acumen Cookstove program in Kenya
Link a diverse diet to efficient cooking.

Knorr fortified products
Potential synergies.

Unilever Women Empowerment Program
The tea sector has the biggest female workforce.
Film

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Annex
Theory of change

Dietary diversity
Purchase and cultivate nutritious foods

Supplemental sources

Hand-washing
Increased dietary diversity and intake of more nutrient dense foods

- Increased purchase / acquisition of diverse nutritious foods
- Increased home production of diverse, nutrient-dense foods (e.g. fruits and vegetables)
- Increased awareness and knowledge of nutrition and dietary diversity
- Participate in BCC on dietary diversity (education and materials)
- Receive materials to support and reinforce BCC for dietary diversity
- Participate in BCC on home gardening
- Receive tracking materials and seeds for vegetables or fruit
- Participate in BCC for use of fortified foods
- Receive or have access to adequate amounts fortified foods
- Production or procurement of fortified food to specifications

Increased motivation to grow own fruits and vegetables

- Increased home production of diverse, nutrient-dense foods (e.g. fruits and vegetables)
- Increased awareness and knowledge of nutrition and dietary diversity
- Participate in BCC on home gardening
- Receive tracking materials and seeds for vegetables or fruit
- Participate in BCC for use of fortified foods
- Receive or have access to adequate amounts fortified foods
- Production or procurement of fortified food to specifications

Increased utilization of fortified foods

- Increased knowledge of importance of key nutrients
- Motivation to utilize fortified foods
- Receive or have access to adequate amounts fortified foods
- Production or procurement of fortified food to specifications

Increased awareness and knowledge of handwashing

- Participate in BCC on handwashing
- Receive tracking materials and seeds for vegetables or fruit
- Participate in BCC for use of fortified foods
- Receive or have access to adequate amounts fortified foods
- Production or procurement of fortified food to specifications

Dietary diversity
Purchase and cultivate nutritious foods

Supplemental sources

Hand-washing
Increased dietary diversity
The Minimum Dietary Diversity for Women, defined as at least five of the ten food groups, is used as a proxy indicator to reflect likelihood of micronutrient adequacy of diets of women of reproductive age (15-49 years).

Improved Handwashing
Handwashing with soap helps maintain health and prevent spread of diseases. Measured as....

Farmers and workers receive a weekly training for 9 weeks. The first five weeks focus on nutrition and the last four weeks focus on hygiene.

Indicator SDG target 2
Indicator SDG target 6
## Translating a Successful Approach to Nutrition

### Lifebuoy approach

<table>
<thead>
<tr>
<th>AWARENESS</th>
<th>COMMITMENT</th>
<th>REINFORCEMENT</th>
<th>REWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>(MAKE IT EASY)</td>
<td>Pledge to handwashing at key occasions</td>
<td>Repeated practice of the behavior</td>
<td>Positive strokes for practicing the behaviour</td>
</tr>
<tr>
<td>Why is handwashing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>important?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Translated to Dietary Diversity

<table>
<thead>
<tr>
<th>AWARENESS</th>
<th>COMMITMENT</th>
<th>REINFORCEMENT</th>
<th>REWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>(MAKE IT EASY)</td>
<td>Make farmers pledge to eat 5 food groups a day</td>
<td>Make farmers repeat this every day! (Provide incentives)</td>
<td>Give rewards / incentives to keep farmers to feel emotional bond to the behavior</td>
</tr>
<tr>
<td>Raise awareness why</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>good nutrition is</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>important</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Agricultural supply chain

- SUPPLIER
- MASTER TRAINERS
- FIELD OFFICERS
- FARMERS
- WORKERS
Value of the program for tea workers and farmers

Program satisfaction
98% of participants felt the program was extremely valuable to them

Loyalty to tea estates / factories
98% indicating that the program was likely to affect their decision to continue with the same tea estate or factory

Overall, the program was positively received
Estate workers, the most vulnerable group, benefited more than growers or land owners.
Reach and benefits


Tamil Nadu, India

Gherkins 5000
Tea 2,500

Assam, India

Tea 6,500

Kericho, Kenya

Tea 7,500

July 2016 – June 2017

Gherkins 5000
Tea 10,000

Tea 3,500

July 2017 – June 2018

Tea 17,500

Tea 12,700

70,000 farmers and workers reached
350,000 beneficiaries reached
500 master trainers trained

“Earlier I did not know what a healthy diet was, but since I am aware of this, I include five food groups in my daily cooking. My husband finds it even tastier.”
Layla, 44 years, estate worker, Tamil Nadu

“Since I take care of better nutrition and hygiene in my family, I am able to reduce the medical fees for my children.”
Poornima, 32 years, farmer, Tamil Nadu

Workers discuss during the plucking how many food groups they ate and Neha says: “I am less tired during my plucking.”
Neha, 39 years, estate worker, Tamil Nadu

“In the nutrition program, I can feel from the reaction of the workers and trainers that I do a great job to improve their lives!”
Deivanai, 34 years, master trainer, Tamil Nadu

“Earlier, cooking was a duty for me, but now I realize that the health of my family lies in my hand.”
Rashika, 25 years, master trainer, Tamil Nadu

“Before the program I only consumed staples, other vegetables and beans. Now I try to include green leafy vegetables, orange vegetables and curd.”
Savitha, 23 years, farmer, Tamil Nadu
### Various indicators to estimate dietary diversity

<table>
<thead>
<tr>
<th>Interpretation</th>
<th>Household Dietary Diversity Score (HDDS)</th>
<th>Infant and Young Child Feeding-Minimum Dietary Diversity (IYCF MDD)</th>
<th>Women’s Dietary Diversity Score (WDDS)</th>
<th>Minimum Dietary Diversity-Women (MDD-W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic access to kilocalories per capita in a hhd</td>
<td>Adequacy of micronutrient density of IYC diets</td>
<td>Probability of micronutrient adequacy of women’s diet</td>
<td>Probability of micronutrient adequacy of women’s diet</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>the number of different food groups</td>
<td>% of children consuming at least 4 of the 7 food groups</td>
<td>Score: average number of food groups consumed by women</td>
<td>% of women consuming at least 5 of the 10 food groups</td>
</tr>
<tr>
<td># of Food Groups</td>
<td>12</td>
<td>7</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Staples</td>
<td>Cereals</td>
<td>Grains, roots, tubers</td>
<td>Starchy staples</td>
<td>Grains, white roots, tubers and plantains</td>
</tr>
<tr>
<td></td>
<td>White Roots, tubers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits &amp; Veggies</td>
<td>Vegetables</td>
<td>Vitamin A rich fruits and vegetables</td>
<td>Dark Green leafy vegetables</td>
<td>Dark green leafy vegetables</td>
</tr>
<tr>
<td></td>
<td>Vegetables</td>
<td></td>
<td>Other vitamin A rich fruits and vegetables</td>
<td>Other vitamin A rich fruits and vegetables</td>
</tr>
<tr>
<td></td>
<td>Fruits</td>
<td>Other fruits and vegetables</td>
<td>Other fruits</td>
<td></td>
</tr>
<tr>
<td>Animal-source foods</td>
<td>Meat</td>
<td>Flesh foods (meat, fish, poultry and organ meat)</td>
<td>Organ meat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fish &amp; other seafood</td>
<td></td>
<td>Meat and Fish</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eggs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legumes, nuts and seeds</td>
<td>Legumes, nuts and seeds</td>
<td>Legumes and nuts</td>
<td>Legumes, nuts and seeds</td>
<td>Pulses (beans, peas, and lentils)</td>
</tr>
<tr>
<td>Dairy</td>
<td>Milk and milk products</td>
<td>Dairy products</td>
<td>Milk and milk products</td>
<td>Dairy</td>
</tr>
<tr>
<td>Misc</td>
<td>Oils and fats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sweets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spices, condiments and beverages</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Various indicators to estimate dietary diversity

<table>
<thead>
<tr>
<th>Interpretation</th>
<th>Minimum Dietary Diversity- Women (MDD-W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>Probability of micronutrient adequacy of women's diet</td>
</tr>
<tr>
<td>Validated by</td>
<td>FAO/USAID/FANTA 2014 &amp; 2016 (updated)</td>
</tr>
<tr>
<td># of Food Groups</td>
<td>10</td>
</tr>
<tr>
<td>Staples</td>
<td>Grains, white roots, tubers and plantains</td>
</tr>
<tr>
<td>Fruits &amp; Vegs</td>
<td>Dark green leafy vegetables</td>
</tr>
<tr>
<td></td>
<td>Other vitamin A rich fruits and vegetables</td>
</tr>
<tr>
<td></td>
<td>Other vegetables</td>
</tr>
<tr>
<td></td>
<td>Other fruits</td>
</tr>
<tr>
<td>Animal-source foods</td>
<td>Meat, poultry, fish</td>
</tr>
<tr>
<td>Legumes, nuts and seeds</td>
<td>Eggs</td>
</tr>
<tr>
<td>Dairy</td>
<td>Dairy</td>
</tr>
<tr>
<td>Misc</td>
<td></td>
</tr>
</tbody>
</table>

There are a number of dietary diversity indicators. The indicator used by GAIN’s Seeds of Prosperity Project is the MDD-W, which is a globally accepted and validated indicator by FAO/FANTA/USAID. MDD-W is defined as the percent of women who consumed at least 5 (of 10) food groups in the previous day and can be interpreted as a proxy for the probability of micronutrient adequacy in women’s diets in a given population. Dietary diversity indicators group foods together when they are considered nutritionally similar and/or play the same role in the diet (Ruel, 2003). The group of 10 listed here, which has been re-published in 2016, had a stronger correlation to micronutrient adequacy than other groupings (Martin-Prevel et al, 2005). [adapted from FAO/USAID/FANTA 2016: MDD-W A Measurement Guide]

The table on the previous slide shows interpretation of and food groups used within the following global indicators: Household Dietary Diversity Score, the IYCF MDD, the Women’s Dietary Diversity Score and the Minimum Dietary Diversity – Women.

Recently, FAO, USAID, EU and FANTA reached a consensus on a global dietary diversity indicator for women: Minimum Dietary Diversity- Women with a cut-off of 5 groups (MDD-W, July 2014). Dietary diversity was a proxy for micronutrient adequacy of a woman’s diet; it reflects only one dimension of diet quality: micronutrient adequacy. To be counted at least 15g consumed per food group).