

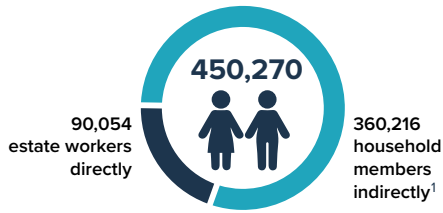


HEALTHY DIETS FOR TEA COMMUNITIES

ASSAM PROGRAMME RESULTS

PROGRAMME SUCCESSES IN ASSAM

TOTAL PEOPLE REACHED



The programme was successful in implementing models that reached tea workers at scale.

82%

of programme participants were aware of fortified cooking oil by the end of the programme, compared to 68 per cent beforehand.



The percentage of women in the programme eating minimally diverse, nutritious diets (5 out of 10 food groups) increased by 28 per cent.

There was overall a 20 per cent increase in the use of fortified cooking oil by households in the programme. Areas with Dharmalife entrepreneurs drove fortified oil use up by 50 per cent while Healthy Line Shops drove its use up by 17 per cent.



The programme led to a 40 per cent increase in consumption of nutrient-dense vegetables.



The programme successfully introduced sustainable, innovative market-based solutions. Local Healthy Line Shops reached **76,000** tea workers and family members in Assam with nutrient-rich, healthy foods and hygiene products; by the end of the programme, these products were 64 per cent more available in those shops. **Dharmalife entrepreneurs** reached **34,710** tea workers and family members. Each entrepreneur sold on average just under 100 USD of products per month: a win-win for female livelihoods and improved nutrition.



The programme innovated successfully in the face of COVID-19, bringing digitised behaviour change messages to participants' phones.



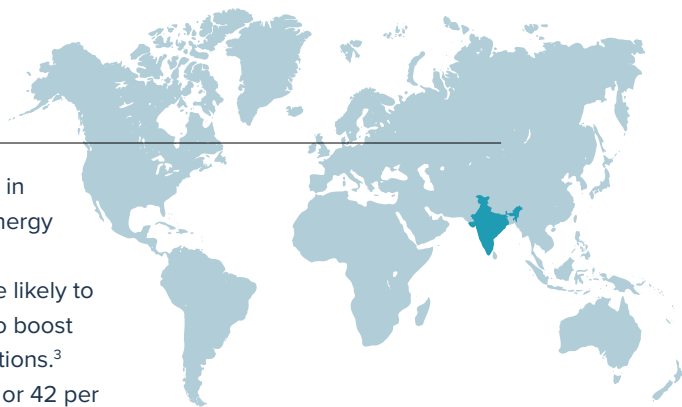
The programme contributed to changed handwashing behaviours, including reaching over **11,000** pregnant and breastfeeding women with key messages about hygiene.

BACKGROUND

Poor diets are the leading cause of global ill health, resulting in malnutrition and deficiencies such as anaemia, decreased energy levels, diminished health, and decreased productivity.²

A diverse diet containing a wide variety of food types is more likely to provide the vitamins and minerals needed for good health, to boost brain and body development, and bolster resistance to infections.³

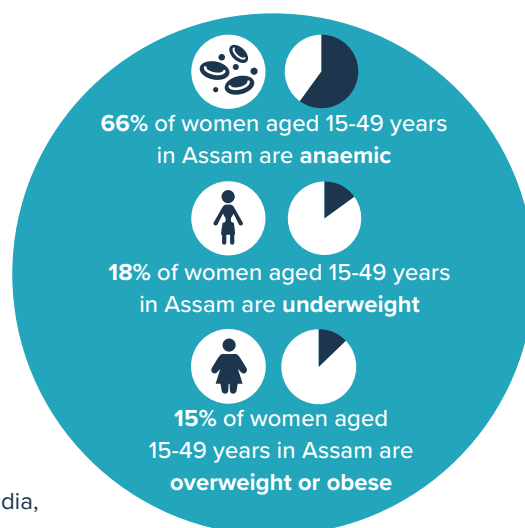
However, in 2021, more than 3.1 billion people in the world – or 42 per cent of the global population – were unable to afford a healthy diet.⁴ Tea workers and farmers, predominantly women, often contend with high rates of malnutrition due to diets lacking essential nutrients. Healthy Diets for Tea Communities is a public-private collaboration between the Global Alliance for Improved Nutrition (GAIN), the Ethical Tea Partnership (ETP), and eight leading tea companies⁵ which aims to promote healthy diets in tea supply chains in India, Malawi, and Kenya. This document summarises programme results in India between 2020 and 2023.



MALNUTRITION IN TEA COMMUNITIES IN ASSAM

Global tea production totals over USD 17 billion annually, and the sector continues to grow. In many countries, the tea sector contributes significantly to income and employment for millions of rural families, with smallholder farmers producing 60 per cent of world production.⁶ However, tea workers and farmers often suffer from high malnutrition rates because their diets, which consist largely of staple foods such as rice, bread, maize, and wheat, often lack foods rich in essential nutrients and vitamins needed for good health. Nutritious foods are often less affordable and available to this population, and they may be less aware of the importance of healthy diets.

In Assam State, one of the main tea producing states in India, 18 per cent of women are underweight, 66 per cent of women are anaemic, and 15 per cent of women are overweight.⁷



THE HEALTHY DIETS FOR TEA COMMUNITIES PROGRAMME

In Assam, GAIN and the Ethical Tea Partnership focused on improving the availability of - and demand for - nutritious foods through promoting healthy diets and handwashing to tea estate workers who are employed to produce and pick tea, and their families. The programme also promoted hygiene and handwashing practices among pregnant and breastfeeding women.

- > **Dharma Life Entrepreneurs**, local women who go door-to-door, raise awareness of the importance of good nutrition and hygiene, particularly handwashing, during their home visits. They also sell fortified oil, various types of pulses, spices, and hygiene products such as soap and sanitary napkins.
- > **'Healthy Line Shops'** - neighbourhood retail shops, close to communities - sell healthy and nutritious food and hygiene products to tea workers and their families. Some of the products they offer include cooking oil fortified with vitamins A and D, eggs, milk, soya chunks, fruits and vegetables, pulses, and soaps. The

shop owners are trained to raise awareness of healthy diets and fortified oil, and the shops prominently display posters and information about good nutrition and hygiene.

> **Interactive activities within communities enhance people’s knowledge of healthy food and their food choices.** These activities include community street plays, cooking demonstrations, and competitions.

> **Tea estates are made aware of the importance of a healthy workforce,** for instance, through their involvement in community events for tea workers.

SCORING DIETS: MINIMUM DIETARY DIVERSITY, AND WHY IT MATTERS

A diet that includes a wide range of different foods and food groups is best for ensuring the right balance of protein, essential fatty acids, vitamins, and minerals (also known as micronutrients) for good health. Dietary diversity refers to a diet that contains a higher concentration of micronutrients. Women who consume a minimum of 5 out of 10 possible food groups are considered to have achieved the minimum adequate diet diversity. To assess this, women are surveyed about their food intake over the past 24 hours and assigned a score. A score exceeding 5 suggests that they are more likely to meet the minimum required level of micronutrients; the higher the score, the more micronutrients likely consumed. Although the minimum dietary diversity indicator is obtained by surveying individual women, it provides valuable insights into the nutritional status of a population. A key programme objective was to increase the minimum dietary diversity scores for programme participants.



Grains, white roots and tubers and plantains



Pulses



Nuts and seeds



Dairy



Meat, poultry and fish



Eggs



Dark green leafy vegetables



Other vitamin A-rich fruits and vegetables



Other vegetables



Other fruits

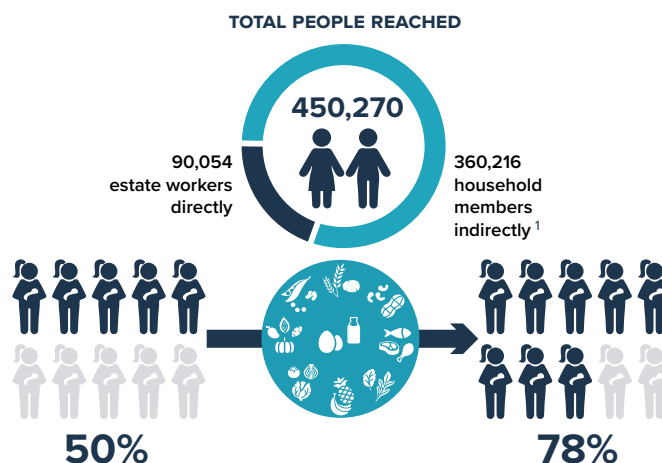
PROGRAMME IMPACT

The programme reached

450,270 people: 90,054 estate workers directly with interventions and 360, 216 household members indirectly¹.

Women were eating more diverse, nutritious foods.

The percentage of women in the programme meeting the minimum dietary diversity (at least 5 out of 10 food groups) increased significantly over the course of the programme.



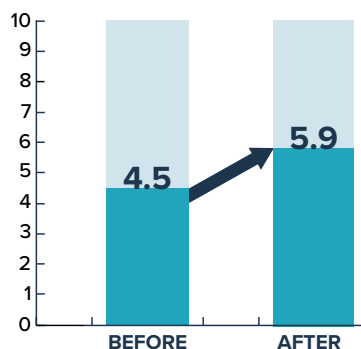
By the end of the programme, 28 per cent more women were consuming at least 5 out of 10 food groups. In addition to this, the dietary diversity score for women improved from 4.5 food groups on average per day to 5.9 food groups. This increase in 1.4 food groups came from increases in dairy, eggs, pulses, green leafy vegetable and orange fleshed fruits and vegetables. This means women are eating more micronutrient-rich diets.

There was a 20 per cent increase in the use of fortified cooking oil. Among estates with Dharmalife entrepreneurs there was an increase in fortified oil consumption by 50 per cent. Among estates with a Healthy Line Shop, fortified oil use increased by 17 per cent.

By the end of the programme, 40 per cent more households were consuming nutrient dense vegetables - vitamin A-rich orange fleshed or iron-rich green leafy vegetables.

The programme successfully implemented models that reached tea workers at scale, introducing innovative market-based solutions to provide nutrient-rich, healthy foods to tea communities. These solutions are self-sustaining, operating independently without any need for project support well into the future.

Number of food groups (out of 10 possible) women consuming average before and after the programme*



* Number of food groups women consumed in 24 hours before and after programme

HEALTHY LINE SHOPS: BREAKING DOWN BARRIERS TO NUTRITIOUS FOOD



Healthy Line Shops bring fortified products, healthy foods, and hygiene products closer to communities. © GAIN/ Frederick Dharshie.

In Assam, tea workers and their families typically reside in tea estate housing located in rural areas far from main towns. They depend on shops within the tea estate and small local markets for their food supplies. If nutritious foods such as fortified items, eggs, and vegetables, are not available in these shops and markets, it becomes challenging for workers and their families to maintain a diverse diet. At the same time, local suppliers often find these healthier products expensive to acquire due to a lack of reliable linkage with wholesalers.

The programme worked with Ecociate to test a unique model addressing this challenge. They worked with local distributors to alleviate the burden and costs of sourcing healthy products from wholesalers in nearby towns. This collaboration aimed to enhance business skills such as stock management and sales tracking while teaching retailers how to effectively promote nutritious food products to their customers. The result was the establishment of 152 Healthy Line Shops in 30 tea estates, providing access to approximately 76,000 tea workers and family members in Assam. As a result of this work, 67 per cent of Healthy Line Shops customers were using fortified cooking oil at the end of the programme, compared to 12 per cent at the beginning.



Dharmalife Entrepreneur Lakhinayak (R) uses her phone to teach a woman about healthy diets and hygiene during one of her home visits. © Dharmalife Foundation

DHARMALIFE ENTREPRENEURS: HARNESSING THE POWER OF FEMALE ENTREPRENEURS

The programme collaborated with the Dharmalife Foundation to train 78 female entrepreneurs from tea estates to sell products door-to-door such as: iodine and iron-fortified salt; oil fortified with vitamins A and D; pulses; soybean; and handwash. Their goal was to raise awareness of healthy diets and to promote handwashing. This programme was successfully implemented across 76 tea estates in Assam, benefiting 34,710 tea workers and family members. By the end of the programme, 71 per cent of Dharmalife Entrepreneur customers were eating at least 5 food groups, compared to 37 per cent at the start of the programme. Each Dharmalife entrepreneur sold on average just under 100 USD of products per month: a win-win for female livelihoods and improved nutrition.

Handwashing. Messages about handwashing and hygiene were disseminated through community street plays, Dharmalife Entrepreneurs and Healthy Line Shops, reaching over 11,000 pregnant and breastfeeding women. Although COVID-19 messaging had already increased awareness before the programme started and may have boosted results, the programme saw a significant increase in the percentage of women who believed that handwashing was necessary after using the toilet, before preparing food, and before eating meals.

Gender dynamics changed. The evaluation suggests that the programme influenced gender dynamics within households, with women reporting increased decision-making power about how household income is spent and major household purchases.

Successfully engaged tea estates to promote healthy diets: the programme worked with 112 tea estates to promote healthy diets for tea workers. The support of the estates was a crucial factor in making this complex programme successful, in the form of time and space for workers to learn about better nutrition, and support for day-to-day operations of the programme.

Sustainability. Healthy Line Shops and female Dharmalife entrepreneurs will continue to reach thousands of people in Assam with nutrient-rich, healthy foods and hygiene products long after the programme's conclusion.

LEARNINGS

Digitisation offers significant opportunities to reach more people. In Assam, the digitisation of cooking demonstrations and other activities in response to COVID-19 allowed people to access them on their phones, reaching a broader audience compared to in-person demonstrations. Digital tools such as apps and web-based dashboards helped track progress across all project phases.

Affordability was a global challenge which was beyond the programme's influence. Although Healthy Line Shops and Dharmalife Entrepreneurs led to improved access to nutritious products for tea workers, global food price inflation and COVID-19 meant that the affordability of these products decreased.

Market-driven delivery mechanisms, such as shops and door-to-door entrepreneurs, hold significant potential to enhance sustainable access to nutritious foods like fortified cooking oil, milk, eggs, pulses, and fruits and vegetables. Healthy Line Shop owners and Dharmalife Entrepreneurs would benefit from further training to enhance their skills and confidence as they sell nutritious products to customers and households. The programme tracked sales data for all Healthy Line Shops and Dharmalife Entrepreneurs to better understand which foods are locally acceptable at what price point: future programmes could use this data to curate and promote locally acceptable products.