

Vegetables For All

**THE WHOLE VEGETABLE
CHAIN FROM SEED TO
STOMACH**

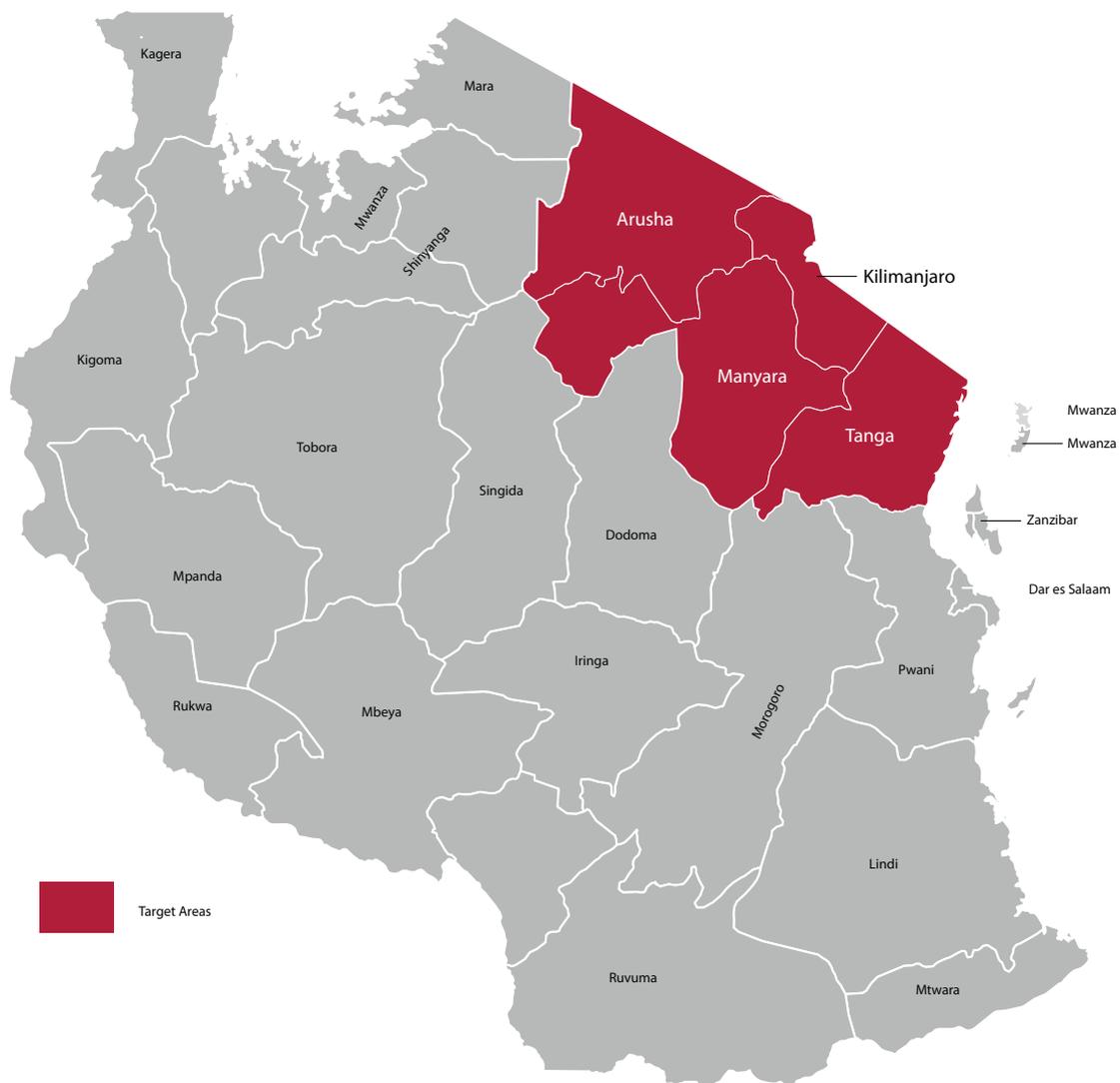


#Vegetables4All

 **gain**
Global Alliance for
Improved Nutrition

VEGETABLES FOR ALL

Areas of intervention



Impact



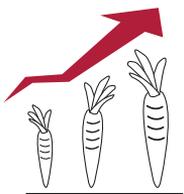
Increased availability of nutritious vegetables



Stronger and more sustainable vegetable supply chains



Improved access to vegetables for Base of the Pyramid (BoP) consumers



Increased consumption of vegetables by BoP consumers



Increased income for farming families

The project

Vegetables for All (VfA) targets the whole vegetable chain from seed to stomach. In north-eastern Tanzania, the availability of vegetables is intrinsically linked to the dry and wet seasons causing fluctuations in access to nutritious vegetables. This problem is compounded by poor access to high quality seeds and other inputs and high levels of post-harvest loss which prevent vegetables reaching markets in the region. Meanwhile, consumers are not fully aware of the need to include vegetables in a balanced and diverse diet, resulting in irregular access and consumption patterns of nutritious vegetables, and contributing to high regional levels of stunting, anaemia, and iron deficiency.

Objective

Increase dietary diversity and micronutrient intake through increased consumption of fresh and dried vegetables by bottom of the pyramid (BoP) consumers.

Our approach

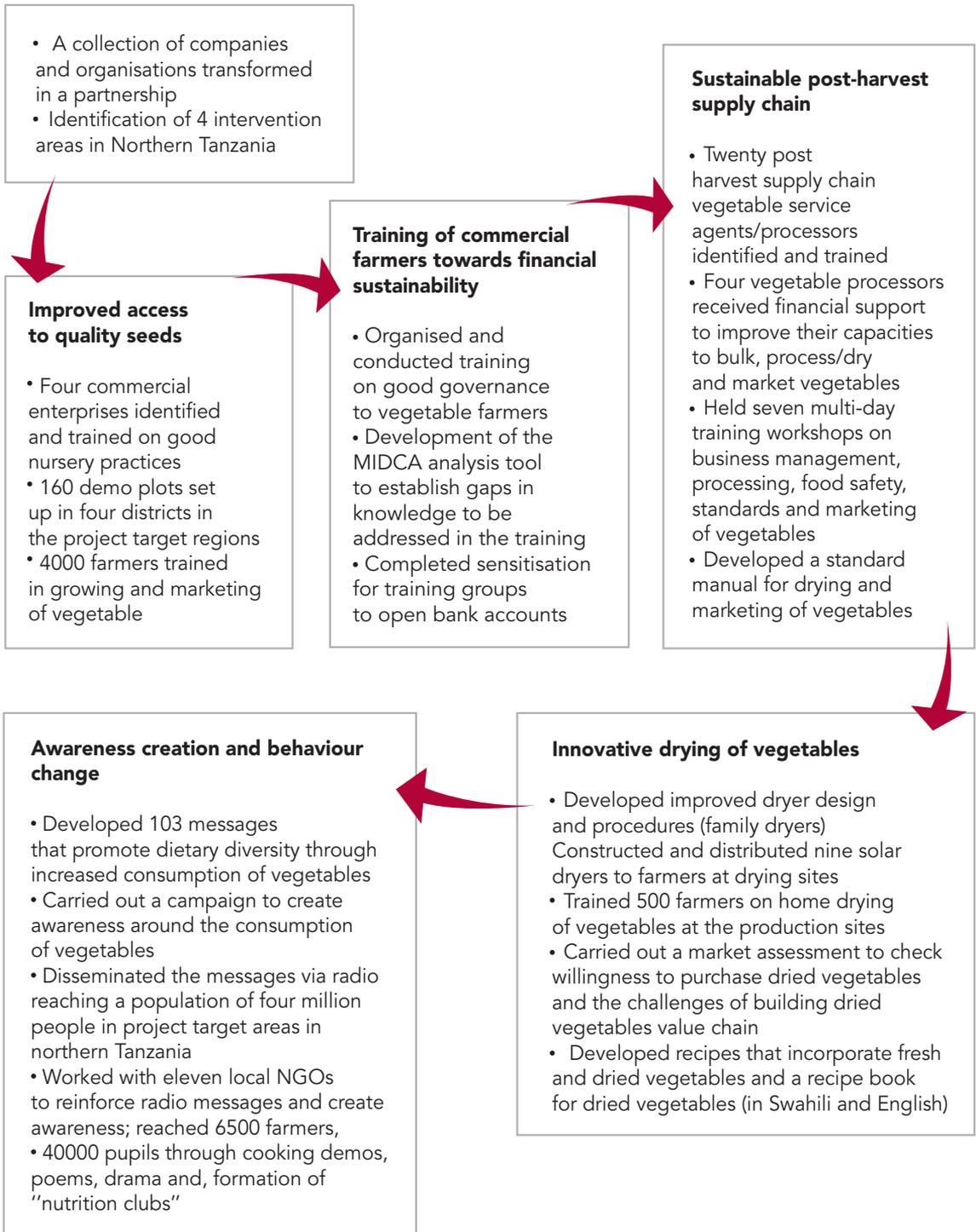
Vegetables for All adopts a value chain approach. This means combining interventions that stimulate the supply and demand of vegetables, and improving processes in between to increase the quantity, quality, and diversity of vegetables that complete the journey from seed to stomach. A key strength of Vegetables for All is the partnership. The project is implemented by private sector, NGOs, and knowledge institutes, and is supported by the Dutch government. Combining the expertise of the different partners is essential to achieve the project's ambitious goals and impact.

Consortium members

This project is a joint public-private partnership between the Dutch Ministry of Foreign Affairs, Rijk Zwaan, Rabobank Foundation, the Global Alliance for Improved Nutrition (GAIN), Tanzania Horticultural Association (TAHA), Wageningen CDI, The World Vegetable Center (AVRDC) and ICCO Cooperation. The project has five responsible partners, all of which are responsible for separate results.

	<p>Rijk Zwaan is responsible for overall coordination and training on vegetable production.</p>
	<p>GAIN supports project management through their representation in the Netherlands, while they also contribute to the components on drying vegetables, post-harvest losses and social behaviour change (nutrition).</p>
	<p>Wageningen Centre for Development Innovation (WUR-CDI) experts contribute to drying vegetables and are responsible for the overall M&E design and implementation in close coordination with experts from ICCO-Cooperation.</p>
	<p>The Rabobank Foundation is involved in training of farmers to become eligible for external financing.</p>
	<p>The World Vegetable Center (AVRDC) provides support for drying vegetables.</p>
	<p>NMB Foundation is involved in training of farmers to become eligible for external financing.</p>
	<p>ICCO-Cooperation contributes to the M&E mechanism and are responsible for the base and end-line surveys.</p>
	<p>The Tanzanian Horticulture Association (TAHA) leads the project implementation at national level.</p>

Project accomplishments



Project participants



Francisca Massawe

Fruit and Spice Processor
Karanga Ward, Moshi, Tanzania

Francisca Massawe, 26, has processed spices for the last four years. Based out of her family home in Moshi, she processes ginger, coriander, black pepper, cardamom, cinnamon, and spice mixes such as tea masala, beef masala and fish masala.

“I started really small so it has been a challenge growing,” she explains “but thanks to a grant from this project, I’ve been able to expand what I do.”

Through Vegetables for All (VfA) Francisca is receiving financial support to improve her capacity to bulk, process and package vegetables. The first disbursement allowed her to procure a sorting table and electric dryer, which she is using to dry vegetables, particularly during the rainy season. Typically, Francisca is unable to produce soy and ginger during this season, and her income dips by 20 to 30%. She believes the electric dryer will help her maintain a steady income year-round.

Francisca currently produces 150 kilograms of dried vegetables and spices per month and expects the electric dryer will help increase production to 900 kilograms monthly.

Through the second disbursement Francisca received through Vegetables for All (VfA), Francisca is more efficient through the purchasing a grinding machine and a peeling machine.

Although she currently only distributes her products locally, Francisca is in the process of acquiring certifications that will allow her to distribute in supermarkets and export her products outside Tanzania. “I have a dream and a plan to cross borders and sell in international markets,” she says proudly.

Francisca says GAIN has been in touch with her through phone calls, email, and visits to her home where she processes vegetables and spices. “I feel thrilled. It’s nice to know there are people out there who care about small enterprises who are trying to make a difference.”



Sheila Wilson

Tomato and Onion Market Vendor
Mbuyuni, Moshi, Tanzania

At a roadside market in Mbuyuni, Moshi, a mini pickup truck is parked on the road, amidst vendors selling a variety of fruits and vegetables. The truck has large speakers in the back that play nutritional messages in Swahili, developed as part of Vfa's efforts to improve dietary diversity through consumption of vegetables.

Over 100 commercials — designed messages specifically for Tanzanians — play on rotation, educating both customers and vendors at the market about nutrition and the importance of consuming vegetables in order to help them develop better habits.

Sheila Wilson, a market vendor who sells tomatoes and onions, is at her regular spot, just a few metres away from where the speakers are set up. As she sits, a commercial plays, sharing the message of the importance of eating vegetables in the morning.

Sheila has been hearing similar commercials for the last several months, which have influenced her habits. "I understand the importance of vegetables now. I used to eat snacks like chapati, not vegetables" she says. "Now I snack on cucumbers when I want to eat something small."

Sheila adds that she used to peel vegetables such as tomatoes before eating them, but no longer does this as the commercials have taught her it accounts for a nutrient loss.



Dominic Mathias

Managing Director, Business
Entrepreneurship Support Tanzania (BEST)
Moshi, Tanzania

Awareness of healthy eating and nutrition in Moshi has increased, in part because of Dominic Mathias' efforts to organise cooking demonstrations across the region.

"Because of the nature of our lifestyle, we are very busy. People tend not to prepare fresh food often. They will eat leftovers and reheat it, which makes vegetables lose their nutritional value."

According to Dominic, about half of the people who attended the workshops were unaware that the way vegetables were prepared would impact their nutritional value.

The training participants were so happy with the information they learned that they brought their neighbours to future trainings, and requested their children get involved as well.

"People in the villages said they wanted their children to grow up with this knowledge too" he says. "Thank God GAIN extended the project to the children as well, so now we are running this programme in schools."

Through the Vegetables for All project, demo plots have been established at schools in the project implementation area in northern Tanzania and students have received training on growing vegetables and their nutritional value. "They need to be educated about these things because some vegetables like cauliflower are not common and it takes effort to learn how to grow this properly and care for it." Dominic shares that students have been encouraging their parents to grow vegetable gardens as a result of this initiative.

"It's a process, it goes slowly" Dominic says about changing people's habits and improving their nutrition — and he is convinced that VfA is helping move the needle on this.

Dominic is the director of Business Entrepreneurship Support Tanzania (BEST). BEST is one of the eleven local NGOs/service providers spread across the project target regions that the project has worked with to carry out campaigns aimed at improving dietary diversity through increased consumption of vegetables. The NGOs have reached and created awareness among 6500 farmers in the project target regions.



Josephine, affectionately called Bibi Afya by children, participates in a nutrition training with students at Himo Primary School in Moshi, Tanzania.

Josephine Saria

Community Worker & Small Trader

Himo, Moshi, Tanzania

Josephine Saria, 71, a community worker in Moshi, Tanzania, has been committed to shifting the nutritional habits of her community ever since she participated in a training of trainers training, as part of Vegetables for All's campaign to create awareness around the consumption of vegetables.

Through her church, Josephine has organised trainings for groups of women, teaching them the importance of eating vegetables, avoiding chemically-treated vegetables, and how to cook vegetables appropriately to retain their nutritional value. "Women carry the biggest load at home, which is why I focus on training women" she says.

Josephine also feels strongly about training pregnant women, in order for them to both benefit from this knowledge and raise their children with it as well.

Her passion for educating others about nutrition has led her to be involved in a nearby school, Himo Primary School, where she takes on a mentorship role to the students and advises the school on health issues when needed. A few months ago, Josephine found out that children were getting diarrhoea and were being admitted to a hospital. She then helped identify the cause — the maize given to them through the school feeding programme was treated with chemicals.

Josephine helped the school acquire organic maize and says the children's health has improved. "When I was growing up, we didn't have many chemicals being used and now it's common, so people need to know" Josephine says.

In addition to sharing her knowledge with her community, Josephine is committed to improving her own health through simple lifestyle modifications. For example, instead of buying packaged juice, she now makes her own.

"I changed [my habits] once I understood the importance of eating healthy. I even eat watermelon with the seeds for their nutritional value. I don't get sick now, even though I'm 71 years old."

Josephine, affectionately called Bibi Afya by children, participates in a nutrition training with students at Himo Primary School in Moshi, Tanzania.



Dora Frumenee

Maize Farmer

Majengo, Moshi, Tanzania

Dora Frumenee, 54, a maize farmer, has been a member of the Kilimanjaro Natural Foods Cooperative for the past four years. Through VfA, the cooperative participated in business management and vegetables drying trainings and has received four solar dryers through financial support from GAIN. Members of the cooperative will use the solar driers to dry their respective fruits and vegetables — namely tomato, lemongrass, and avocado.

Dora says the cooperative members are excited to use the solar dryers because this will help reduce the manual labour involved in their work, enabling them to increase production. She explains the solar dryers are more hygienic than their current method of drying vegetables in the open sun. In addition, Dora says the machines will help retain the nutrients of the vegetables as when they dry in the open sun, they lose nutritional value.

After using the solar dryers, the cooperative plans to find a larger market to sell their products. “This will help us boost our income we can better manage our households” Dora says enthusiastically.



Esther Lokuro Nekkisa

Sweet Potato Farmer

Karanga Ward, Moshi, Tanzania

Esther Lokuro Nekkisa, 45, a farmer who grows sweet potatoes, amaranth and rosella. She is also a member of the Kilimanjaro Natural Foods Cooperative. She has eagerly participated in the agricultural and business management trainings offered to her through the Vegetables for All project and is looking forward to using the solar dryers through her cooperative.

“We can produce and dry to sell throughout the year. When the sun is out, everyone produces and the market prices are low but with this [solar dryer], we can produce ear-round and sell at better prices” Esther shares.



Haikasia Chaki

Farmer and Fruit Processor

Moshi, Tanzania

When Haikasia Chaki, 60, made the decision a few years ago to enter the farming industry, she was hopeful it would help her generate a more sustainable income than her previous occupation, selling clothes at the local market. It has — and she is now looking forward to growing her business even more, through support from the Vegetables for All project.

Haikasia currently produces amaretta, mlonge (local vegetable), mangoes, sweet bananas, pineapple, pumpkin, and pumpkin seeds. She sells packages of dried pineapples and mangoes, and also processes nutritional flour using ground vegetables including: carrots, banana, maize, and mushrooms.

At times, acquiring packaging materials locally is a challenge, and Haikasia sources them from Dar Es Salaam instead — over 500 kilometres away — but there are often shortages, so she also orders materials from China when needed.

Through VfA, Haikasia has received additional packaging materials. She also participated in agricultural and business management trainings which taught her how to improve the quality of her produce, and more notably, how to market her business, which helped her increase her customer base. She also learned how to label her dried fruit packages and improve her nutritional flour mix, in order for it to be certified by the Tanzania Bureau of Standards, which now gives her the option of selling her products commercially.

“I’m hopeful that more people will trust my products now and that I’ll be able to sell them in more formal places [such as supermarkets]” she says.

In addition to the trainings, Haikasia received financial support for procurement of a sorting table, solar dryer, grinding machine and milling machine. She currently processes her fruits and vegetables in multiple locations and having access to these machines in one location will help her meet the criteria needed to certify more of her products in Tanzania. This will allow her business to expand its market.

“Of course this will boost my income because the work will be easier and the process will be much faster and production will increase” Haikasia shares.

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