

Scaling Sweetpotato-led Interventions to Improve Smallholders' Nutrition and Food Security in Tigray Region, Ethiopia



Fig 1. Participants in training on sweetpotato production and management (Credit: H. Azeb)

What is the Problem?

Tigray is one of the regions in Ethiopia with the highest levels of maternal and child malnutrition and food insecurity, where most households depend on a few staple foods, and intake of meat, fish, and vegetables is too low to meet the daily nutrition requirements, resulting in micronutrient deficiencies. In Tigray, 44% of children under the age of five are stunted, 30% are underweight, and 14% are wasted. According to data pooled from several population-based surveys, Ethiopia struggles with 40-59% Vitamin A Deficiency (VAD) rates among children under five years of age. A national food consumption survey conducted in 2013 reported lower than national average levels of vitamin A intake and higher risk of VAD in the Tigray region. Around 96% of females aged 19-45 years in Tigray are also at risk of VAD due to inadequate dietary intakes.

Efforts to address the problem of food and nutrition insecurity through a grain-led approach (cereals are the predominant staples throughout the country) alone have failed to keep up with population increase, climatic changes and socio-economic transformation. New approaches are needed, by promoting production and consumption of nutrient-dense, high yielding, early maturing and resilient root and tuber crops. Potato and sweetpotato are particularly well-suited for addressing the problems of food insecurity and malnutrition because they can produce more nutritious food per hectare per day than the cereals. This project contributes to this solution through the expansion of production, utilization, and consumption of nutritious orange-fleshed sweetpotato varieties. The project is programmed to run from August 2018 to January 2021.

1 million vines have been distributed to 1,072 households in Tigray region of Ethiopia. The capacity of extension service delivery partners (agriculture and health extension), model farmers, and women development team leaders for sustainable production of orange-fleshed sweetpotato (OFSP) was strengthened. Additionally, 457 trainers including extension officers, model farmers and other officials from the bureaus of health and agriculture were trained in various aspects on OFSP agronomy, post-harvest handling, processing, and marketing.



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What do we want to achieve?

The overall goal of the project is to contribute to improved nutrition and food security in vulnerable households with young children (under two years) and women of reproductive age in target *woredas* in Tigray region. The immediate purpose of the project is to scale up the production and consumption of vitamin A-rich OFSP as part of diversified diet among at least 16,000 vulnerable households in the target areas. The project seeks to achieve three objectives:

- Expand smallholder production of nutritious OFSP varieties.
- Create increased demand for OFSP as part of more nutritious diets in diversified value chains.
- Create/develop increased institutional and policy support for nutrition-sensitive agriculture.

Where are we working?

The project is being implemented in the Tigray region of Ethiopia. At present, the project covers a total of 22 *kebeles* (villages) in 5 *woredas* (districts) in the region.

How are we making it happen?

A key objective of this project is to reduce widespread vitamin A deficiency through production and consumption of nutritious orange-fleshed sweetpotatoes. To achieve this, CIP in collaboration with implementing the partners, is employing the following approach:

- Technical and financial support to the Tigray Agricultural Research Institute (TARI) to support quality planting material production and to conduct participatory variety evaluation and demonstration to compare old OFSP varieties with newly released varieties at FTCs and on model farmers' plots.



Fig 2. Participants in practical trainings on-farm about sweetpotato production and management (Credit: H. Azeb)

- Establishment of OFSP vine multiplication demonstrations at Farmer Training Centers (FTCs) and school gardens.
- Capacity building to service delivery department government staff and model farmers through Training of Trainers (TOT) and video-based training and extension model: Cascading training of implementing partners (IPs), *woreda/kebele* Development Agents (DAs) and Health Extension Workers (HEWs), model farmers & farmers and field days (Fig. 2).
- Collaboration with Bureau of Health (BOH) and NGOs (Women's Association of Tigray and Relief Society of Tigray) to carry out intensive nutrition awareness and behavior change campaigns and to promote consumption of OFSP as part of diversified diets.
- Different promotion approaches include mass media use, participatory radio programs, Information, Education and Communication tools (flyers, brochures, posters, leaflets and bill boards), nutrition education sessions at health centers, schools and school gardens.
- Linking OFSP raw root producers to nearby urban markets and supplying OFSP roots to retailers, supermarkets, and restaurant.
- Engagement and presentation of evidence-based policy advocacy and networking in different platforms and fora for sensitization and advocacy.

What have we achieved so far?

So far, the project has distributed 1 million vines reaching 1,072 households. The capacity of extension service delivery partners (agriculture and health extension), model farmers, and women development team leaders for sustainable production of OFSP was strengthened (Fig. 3). 457 trainers including extension officers, model farmers and other officials from the bureaus of health and agriculture were trained in various aspects on OFSP agronomy, post-harvest handling, processing, and marketing. To facilitate sharing of knowledge and experiences, the project organized



Fig 3. Wro Abeba on her sweetpotato garden. (Credit: H. Azeb)

experience-sharing field days attended by 95 participants, which included farmers, DAs, and *woreda* Bureau of Agriculture (BoA) experts. With respect to promotional activities, CIP, in collaboration with project partners, developed and distributed OFSP information, education, and communication (IEC) materials to raise awareness and create demand for OFSP within and outside of project area; and developed an updated OFSP recipe book adapted to peri-urban and rural communities. A learning workshop on Agriculture-Nutrition-Health linkages was organized to better coordinate agriculture and health services to assure effective implementation of nutrition-sensitive agriculture activities.

What's next?

The project will continue to promote OFSP through school gardens and train school science and agricultural clubs in production and utilization of OFSP. We will train *woreda* Bureau of Health (BoH) and Bureau of Agriculture (BoA) experts on OFSP nutrition and storage, skills for effective behavioural change communication techniques and principles of adult learning. We will conduct cascade training/orientation on "seed" conservation and production using the root-based seed approach known as Triple S (Storage in Sand and Sprouting) with demonstrations, video-based training and flip-charts produced by the RTB project for training to 16,000 direct beneficiary households; expanding video-based training and extension. Additionally, the project will conduct participatory variety evaluation and demonstration to compare old OFSP varieties with newly released varieties. Regarding promotion activities, participatory radio programs, Information, Education and Communication tools (flyers, brochures, posters, leaflets and bill boards), nutrition education sessions at health centers and schools will be conducted.

Contact

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