Project name

Sustained Diet Quality Improvement by Fortification with Climate-smart, Nutrition-Smart Orange-fleshed Sweetpotato in Southern Nations, Nationalities and Peoples' Region (SNNPR), Ethiopia; also known as Quality Diets for Better Health (QDBH).

Summary

The QDBH project aims at improving the nutrition situation of pregnant and lactating women and young children through dietary education and the incorporation of bio-fortified orange-fleshed sweet potato (OFSP) varieties in the local farming system and diets. These varieties are highly nutritious and rich in vitamin A and have the potential to reduce vitamin A deficiency among in particular pregnant and lactating women and young children. QDBH works with smallholder families in four woredas in the Sidama and Gedeo zones in Southern Nations, Nationalities and Peoples' Region (SNNPR) in southern Ethiopia, who are trained in improved sweet potato farming techniques and infant and young child nutrition practices in so-called Healthy Living Clubs (HLCs). These clubs are facilitated by members of the Health Development Army (HDA) supervised by local Health Extension Workers (HEW) and receive support in sweet potato farming techniques from Development Agents (DAs) from the local Farmer Training Centers (FTCs). In addition, the project aims to reach urban consumers through the fresh root market and the incorporation of biofortified, orange-fleshed sweet potato varieties in processed foods such as injera, ambasha, dabo and bombolino.

Partners

QDBH is implemented by the International Potato Centre (CIP) with People in Need (PIN) and the Rollins School of Public Health (Emory University). The Ethiopian governmental agricultural, health and market development agencies, the Southern Agricultural Research Institute (SARI), the University of Hawassa and the Agricultural Technical and Vocational Education and Training (ATVET) College in Sodo are the main partners.

Figure 1: Production of OFSP planting material at an FTC in Wonago.

Objectives

QDBH's objective is to contribute to the reduction of vitamin A deficiency (VAD) and improved food security among children and women living in SNNP Region of Ethiopia. For that aim, it works towards four targets:

1. Provide 15,000 households with locally adapted, improved orange-fleshed sweetpotato (OFSP) varieties with the appropriate technological package for multiplication and retention of planting stock, farming, and storage among rural households;
2. Provide nutrition training and education to 15,000 women and 10,000 men belonging to rural households with children under two years of age enlisted in 500 HLCs using a curriculum and tools adapted to local conditions and needs for behavior change;
3. Develop the commercialization and processing of OFSP roots reaching 60,000 urban consumers;
4. Provide evidence of the effectiveness of QDBH's approach to encourage its adoption by at least another thirty woredas.

Achievements to date

Project implementation started in January 2017 and is now in its third year. Together with SARI it has achieved the evaluation of seven new OFSP cultivars; SARI proposed three for official release. The selected cultivars have a higher dry matter content, contain more beta-carotene, are better yielding and more resistant to diseases and drought than the available varieties.

Figure 2: Beneficiary with OFSP planting material in Aleta Chuko.

Out of the 500 planned HLCs QDBH already established 345; 135 completed the nine-months training cycle using a curriculum and tools designed by Emory University. Preliminary results show a significant improvement in dietary diversity and the intake of vitamin A among participant households. The remaining HLCs will be created in 2020.

Figure 3: HLC meeting in Wonago.

QDBH trains and equips local FTCs and champion farmers to produce the OFSP planting material for the HLCs. Since 2017, 10. HLC members in the four target woredas and 1,480 farmers and FTCs in twelve additional woredas received 4.7 million cuttings with a total value of 1.6 million Birr or US$ 58,600. At least 800 farmers have started the production of roots for the market.

Sweet potato consumption in Hawassa rounds 2 kg per capita per year. This is much lower than the national average of about 10 kg. Prior to QDBH, there were only white fleshed sweet potato roots on the market. These varieties are less nutritious as they are poor in beta-carotene. The newly recruited 800 OFSP producers have now started to supply to the Hawassa market. With an expected yield of 17 to 20 tonnes per hectare their expected total gross revenue arounds one million birr (US$ 40,000). QDBH has started piloting the use of different media to raise the awareness of the importance of healthy diets among urban consumers and to increase the demand for healthy food items such as OFSP.

Figure 4: Injera made with orange-fleshed sweet potato In Hawassa.

Experience from other countries shows that OFSP can substitute wheat and teff flour in bread and other bakery products. After training 15 small and medium food processors, five (two-female managed) have started making injera, dabo (conventional bread) and ambasha (flat bread) enriched with OFSP. Quantities are still low as OFSP root supply is just taking off.

Looking forward

During the remaining period QDBH will work to achieving the project's targets in terms of nutrition and food security and value chain development. In addition, QDBH will document the results to build a solid case for OFSP as a nutritious crop and biofortification as a strategy to reduce micronutrient deficiencies.

KEY INFORMATION

Total Budget EUR 5,000,000.00

EU Contribution EUR 4,000,000.00 (80%)

Duration January 2017 – June 2021