European Union finances new project addressing malnutrition in Southern Nations, Nationalities and Peoples Region (SNNPR), Ethiopia by combining orange-fleshed sweetpotato with innovative nutrition education and value chain development.

What is the problem?
Malnutrition and vitamin A deficiency are widespread in Ethiopia. Prevalence of stunting among children under 5 is 38%. A diet built around only a few staples means that many people have an insufficient intake of micronutrients. Complementary feeding practices for infants and young children are often deficient in frequency, quantity and nutrient density. Only 7% of infants 6-23 months of age meet the criteria for a minimum acceptable diet (EDHS 2016).

What do we want to achieve?
The project started in January 2017. By 2020, the project will support 15,000 rural households (15,000 mothers and 10,000 fathers of young children) to improve their infant feeding practices and diets after receiving OFSP vines and training in farming and nutrition. Over 61,000 urban consumers will have access to OFSP roots and at least three different OFSP based products. At least one private sector operator will be engaged in OFSP value addition.

Where and with whom are we working?
The project is financed by the European Union. It works in three woredas (districts) in the Sidama and Gedeo zones in the Southern Nations, Nationalities and Peoples Region (SNNPR) in Ethiopia, where farming systems are dominated by perennial enset (basic staple), coffee and khat (important cash crops). These are: Dila Zuria and Wonago in Gedeo and Aleta Chuko in Sidama. Holdings are small and tenure combines owned, sharecropped and rented parcels.

The project is implemented by the International Potato Center (CIP) with People in Need (PIN) and the Rollins School of Public Health (Emory University) in collaboration with Ethiopian governmental agricultural, health and market development agencies and the Southern Agricultural Research Institute (SARI) and the University of Hawassa.

How are we making it happen?
The project tests the combination of a specific agriculture-nutrition-market based approach that brings OFSP roots and leaves as key ingredients to achieve dietary diversity and increase the intake of vitamin A by young children and their households. It will evaluate the use of a feeding toolkit (Fig 2) combined with “Healthy Living Clubs” (HLC) to ensure that parents participate at all levels of the commodity chain but give their children enough nutritious food. Value chain development is expected to ensure additional income for women, but prefer training separated by gender.

What are the next steps?
Formative research on gender roles: The study established that lack of land and planting material are the main constraints to sweetpotato production. Some stakeholders (one woman) of the regional, zonal and woreda bureaus of Health, Agriculture and Markets and Cooperatives discussed and agreed with the basic methodology for implementation and roll-out.

Stakeholder meeting: In the beginning of May 2017, 37 (29) participants, of which eight were women, will subsequently train extension workers who operate at the grass roots level.

Vine multiplication: Three sites – a private farm, SARI’s Hawassa research station and a smallholding near Lake Kulafo (Fig 1) – were chosen for multiplication. The 29 participants, of which eight were women, will serve as multipliers and will train 58 (36 women) farmers in the TOT methodology for implementation and roll-out.

The buy-in of government partners and the outcomes of the studies will guide the design and implementation of a specific agriculture-nutrition-market based approach that brings OFSP roots and leaves as key ingredients to achieve dietary diversity and increase the intake of vitamin A by young children and their households.

Formative research on nutrition: The studies will guide the design and implementation of a specific agriculture-nutrition-market based approach that brings OFSP roots and leaves as key ingredients to achieve dietary diversity and increase the intake of vitamin A by young children and their households.

Fig 1. Agronomist Abiyot Aragaw at Hawassa rapid multiplication site. (credit J. Low)

Fig 2. Health Extension staff discussing the feeding toolkit, Dila, SNNPR, Ethiopia. (credit R. Brouwer)
with “Healthy Living Clubs” (HLC) to ensure that parents give their children enough nutritious food. Value chain development is expected to ensure additional income for male and female farmers and traders and initiate a substantial flow of OFSP roots and derived products to urban consumers. The feeding toolkit consists of a counselling card, a specially designed feeding bowl and a slotted spoon that help mothers in understanding the appropriate size and consistency of a serving.

For training and capacity building the Southern Agricultural Research Institute (SARI), the University of Hawassa, and the Technical and Vocational Education and Training (TVET) College in Sodo are the main partners. During the first year, seven new varieties (three from SARI and four from Uganda) are being evaluated through participatory appraisals. Selected varieties will be scaled out during the following years. Formative research on gender, nutrition and the sweetpotato commodity chain will provide the key inputs to agricultural and nutrition health trainings led by local agricultural and health extension workers and volunteers and guide interventions in the value chain.

By the end of the project, we want to see OFSP integrated into government agriculture and health programs in SNNPR, with TVET Sodo having incorporated OFSP in their training programs for extension personnel.

**What have we achieved and learned so far?**

**Stakeholder meeting:** In the beginning of May 2017, 37 representatives (one woman) of the regional, zonal and woreda Bureaus of Health, Agriculture and Markets and Cooperatives discussed and agreed with the basic assumptions of the project, its targets and the proposed methodology for implementation and roll-out.

**Vine multiplication:** Three sites – a private farm, SARI’s Hawassa research station and a smallholding near Lake Hawassa (Fig 1) – have provided planting material for 26 demo-plots/multiplication sites (Fig 4).

**Training of Trainers (TOT):** The *All You Want to Know About Sweetpotato* manual was translated into Amharic. CIP and SARI ran the TOT in two five-day programs (Fig 5). The 29 participants, of which eight were women, will subsequently train extension workers who operate at the grass roots level.

**Formative research on gender roles:** The study established that lack of land and planting material are the main constraints to sweetpotato production. Some Gedeo farmers produce sweetpotato in neighbouring Oromia where soils are more suitable. Women and men participate at all levels of the commodity chain but women have less decision-making power and trade smaller volumes. Retailers are all female.

**Formative research on nutrition:** This study revealed that unavailability of diversified food items, unawareness, and poverty underlie inadequate infant and young child feeding practices. Sweetpotato is perceived as an inferior food that may retard the development of speech in infants. People don’t eat the leaves. They trust the government’s Health Extension Workers. Feeding bowls are acceptable as a tool but cannot be transparent. Men and women agree that HLCs should reach both men and women, but prefer training separated by gender.

**What are the next steps?**

The buy-in of government partners and the outcomes of the studies will guide the design and implementation of training interventions by PIN and government extension workers. Further studies will improve the understanding of the value chain and assess the effectiveness of OFSP, the HLCs and the feeding toolkit. Outcomes will steer implementation of the various agricultural, nutrition and value-chain activities and support out-scaling into new areas at the end of the project.