

# Scaling-out sweetpotato and potato-led interventions to improve nutrition and food security in Tigray and Southern Nations, Nationalities, and Peoples' Region

A school-based model (school gardens and school feeding) is proving to be an effective strategy for disseminating nutrition and agriculture knowledge to farmers and influencing behavioural change at household level.

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Cooking demonstration during farmers field day, 2013 Mekelle, Ethiopia (credit H. Tesfaye)

## What is the problem?

**Chronic food insecurity and malnutrition** are major public health problems facing Ethiopia, particularly in two regions: Tigray region (northern Ethiopia) and Southern Nations, Nationalities and Peoples' Region (SNNPR) (southern Ethiopia). The prevalence of vitamin A deficiency (VAD) is of particular concern among pregnant, lactating women, and children below five years of age. In Tigray, more than 60% of children are vitamin A deficient, while in SNNPR, data obtained from formative research suggests a VAD prevalence of 61%. To address this problem, effective integration of more nutritious crops into local farming and marketing systems is needed. This will help create an environment in which vulnerable populations have access to key nutrients in an affordable and sustainable manner. The Irish Aid funded project "Scaling out sweetpotato and potato-led interventions to improve nutrition and food security in Tigray and Southern Nations, Nationalities and Peoples' Region, Ethiopia" contributes to this solution through expansion of production, utilization,

and consumption of nutritious orange fleshed sweetpotato and potato varieties. The project is programmed to run from November, 2013 to December, 2016.

## What do we want to achieve?

**The overall goal of this project is to improve** nutrition and food security in vulnerable households with young children in Tigray and SNNPR through increased production and consumption of micronutrient-rich sweetpotato, especially orange-fleshed sweetpotato (OFSP), and potato varieties as part of diversified diets.

The project seeks to achieve 4 main objectives in the two regions:

- Expand smallholder production of nutritious sweetpotato and potato varieties
- Increase consumption of OFSP and potato as part of more nutritious diets
- Improve and diversify market access for OFSP and nutritious potato
- Increase institutional and policy support to nutrition-focused agriculture.

## Where are we working?

**The project is being implemented in the** southern (SNNPR) and northern (Tigray) regions of Ethiopia. At present, the project covers 5 woredas (districts) covering 20 kebeles (villages) in the SNNPR region and 10 woredas (30 kebeles) in the Tigray region. However, the project expects to expand activities to 45 kebeles in the 10 woredas in Tigray and reach 10 woredas (30 kebeles) in SNNPR by the year 2016.

## How are we making it happen?

**A key objective of this project is to reduce** widespread vitamin A deficiency through enhanced production and consumption of orange-fleshed sweetpotatoes.



### Key Partners:

- Bureau of Agriculture and Rural Development (BoARD) in Tigray
- Bureau of Agriculture and Rural Development (BoARD) in SNNPR
- Bureau of Health in Tigray
- Bureau of Health in SNNPR
- Bureau of Education in Tigray
- Southern Agricultural Research Institute (SARI)
- Tigray Agricultural Research Institute (TARI)
- Mums for Mums
- Women Association of Tigray
- Egna Legna
- Goal Ethiopia
- Farm Radio International
- Hawassa University
- Mekelle University
- University of Wisconsin



OFSP School feeding at Adibereay primary school, Hawzien woreda of Tigray (credit S. Quinn)



OFSP flour on sale in Tigray (credit S. Quinn)



OFSP promotion event in SNNPR, (credit M. Fofanah)

To achieve this, CIP, in collaboration with implementing partners, is employing a four-pronged approach:

- i. Quality planting material is produced by the national research system, private sector and farmers and distributed for the production of OFSP roots. Stakeholders are trained and receive technical backstopping from CIP.
- ii. Promotion activities. Four NGOs (Mums for Mums, Egna Legna, Goal, Farm Radio International), specialized in the promotion of new food products and behavioural change programs, will implement community level nutrition and behavioural change approaches to raise nutrition awareness and promote consumption of vitamin A rich OFSP-based products.
- iii. A variety of nutrition and behavior change approaches are being used including cooking demonstrations, OFSP recipe tasting, mass media, participatory radio programs, nutrition counselling, information, education and communication tools (flyers, brochures, posters, leaflets and bill boards), nutrition education sessions at schools, school gardens and school feeding programs.
- iv. Improvement and diversification of value chains for OFSP and nutritious potato. In addition to linking OFSP producers to markets, potential new processed products that use OFSP as an ingredient will be identified and value chain linkages for these products established

and strengthened. These activities will be supported by research on value chains and trainings on OFSP processing and product development, marketing and business skills.

- v. To support institutionalization and policy support of nutrition-focused agriculture, the project collaborates with the Bureau of Agriculture and the Bureau of Health and will strive to foster collaboration between the two entities through joint trainings of staff from the two departments and technical roundtables.

## What have we achieved so far?

**During the period 1 November, 2013 to 31 May, 2014 the project achieved the following:**

- 40,000 virus-free plantlets of two sweetpotato varieties were produced and acclimatized in screenhouses in Tigray and SNNPR
- In Tigray 143,000 foundation clean vine cuttings were distributed to 14 decentralized secondary OFSP vine multipliers in seven woredas of Tigray. The 14 OFSP vine multipliers have been linked with suppliers of quality foundation material.
- In addition, sweetpotato demonstration plots were also established at 10 elementary schools. In SNNPR, 98,000 OFSP vine cuttings and about 444 quintals of potato seed reaching 14 newly-established pilot school gardens and 444 farmers, respectively.
- 30 trainers were trained in sweetpotato product development and marketing.
- 95 government extension staff were trained in various aspects of potato and sweetpotato production including vine production, crop management, pests and disease management and post-harvest management
- In SNNPR, 16,800 people were reached through different nutrition and OFSP promotional activities including cooking demonstrations, nutrition counseling by model women and at health posts, print media (brochures, posters, flyers, calendars, recipe booklets) and school promotion activities (school drama, arts, science clubs).



OFSP drying in SNNPR (credit M. Fofanah)