Tackling food insecurity and malnutrition in Ethiopia through diversification



Sweetpotato is ideally suited as a post-emergency rehabilitation crop in

Progress in being made in introducing pro-vitamin A rich sweetpotato in Tigray, where sweetpotato is a brand new crop as highest sweetpotato production in Ethiopia.



■ Mums for Mums performing at the Asheda Festival in Mekelle, Tigray

*What is the problem?

Ethiopia, with a population of about 81 million, is the second-most populous country in sub-Saharan Africa. Food insecurity is a major and ever worsening problem. Underlying causes include rapidly increasing population pressure, low productivity of the agricultural sector, widespread environmental degradation and recurrent droughts. Efforts to improve food security through a grain-led approach have failed, not even keeping up with population growth. In addition to insufficient energy in the diet, there are also major micronutrient deficiencies. Among the latter, lack of sufficient vitamin A intake is a serious national problem that can lead to impaired sight or blindness, increased morbidity and mortality in young children and increased illness in pregnant and lactating women.

Sweetpotato is an underutilized crop in Ethiopia with a high potential to improve food security and nutrition, especially through exploiting the use of orange-fleshed sweetpotato varieties (OFSP) which are rich in pro-vitamin A.

♦ What do we want to achieve?

The project "Better Potato for a Better Life" (BPBL) is a four-year initiative, funded by USAID and implemented by the International Potato Center in collaboration with public and private partners. The project seeks to significantly improve food security and diet quality of 150,000 vulnerable households in two of Ethiopia's nine administrative regions i.e. Tigray and Southern Nations, Nationalities and Peoples Region (SNNPR) (Figure 1). The second project titled "Alleviation of Food Insecurity and Malnutrition in Tigray, Ethiopia through Promotion of Potato and Orange fleshed Sweetpotato" is programmed to run for two years, and is being implemented in five food insecure districts in Tigray region. The project uses household health extension package workers, village level women development groups, science school clubs as well as agricultural extension workers to encourage women and children to consume OFSP and potato.



Figure 1: Map of Ethiopia depicting the two project intervention regions (SNNPR and Tigray) and the location of the project office in

The objectives of these two projects will be accomplished by:

- · Improving vine multiplication and conservation techniques
- Introducing sweetpotato into food insecure lowlands where agronomic conditions for its production exist









- Developing and promoting OFSP to combat vitamin A deficiencies
- Promoting fodder and dual purpose sweetpotato varieties
- Promoting community understanding on the nutritional and health value of potato and OFSP and creating awareness about the need for adequate vitamin A intake
- Training of public and private actors

White-fleshed sweetpotatoes are commonly grown and consumed in SNNPR; however, it is a relatively new crop in Tigray (Figure 1). In contrast, orange-fleshed sweetpotatoes are a new crop in both regions. A key objective of the two projects is to reduce widespread vitamin A deficiency through the consumption of orange-fleshed sweetpotatoes. The changing of food habits is a challenging task, requiring a comprehensive strategy. For this, the project pursues a four-pronged approach:

- 1. Quality planting material is produced by the national research system, farmers and the private sector and distributed for the production of OFSP roots. Involved stakeholders are trained and receive technical backstopping. The OFSP producers will be linked to markets by establishing contact with wholesale and retail traders.
- 2. Two NGOs (Mums for Mums and Egna Legna), specialized in the promotion of new food products, apply participatory approaches to develop locally acceptable dishes and other food products that incorporate use of OFSP into existing food habits using mobile kitchens. This work will be scientifically supported through MSc level research carried out by a university partner (Hawassa University).
- 3. In villages and urban areas, OFSP will be promoted with the assistance of an advertising agency (billboards, radio spots), guiding interested consumers to orange-painted market stalls selling OFSP and providing recipes for the production of OFSP dishes.
- 4. In rural areas, promotional activities will involve radio spots, the establishment of sweetpotato clubs, especially at schools as well as training and awareness creation measures for farming families.

→ What have we achieved so far?

As indicated above, the major outcome of the BPBL project is to reach 150,000 vulnerable households with both white-fleshed sweetpotato and OFSP. By March 2012, two and a half years since the project started, we have been able to



Preparing vines for distribution in SNNPR

reach over 65,000 needy households. In addition, over 5,000 farmers have been trained on sweetpotato agricultural practices such as vine multiplication, root production and utilization. With respect to promotional activities carried out by the Irish Aid nutrition project, over 630 extension agents, school teachers, women development groups' leaders and farmers received training on different sweetpotato food recipe preparation, nutritional value and agro-processing techniques using OFSP.

→ What have we learned so far?

Sweetpotato is ideally suited as a post-emergency rehabilitation crop. It as a hardy, drought resistant once established and "low maintenance" crop that is easy to grow even for inexperienced farmers. Large quantities of planting material can be transported at reasonable costs and will produce substantial amounts of food and feed within a short period of time (3 to 4 months). So far, OFSP has been well-accepted in both SNNPR and Tigray.



Harvesting sweetpotato in Tigray





Partners include:

- Bio-tech micropropagation plc
- Bureau of Agriculture and Rural Development (BoARD) in SNNPR
- Bureau of Agriculture and Rural Development (BoARD) in Tigray
- Ethiopian Institute of Agricultural Research (EIAR)
- Egna Legna, local NGO
- EZRA plc.
- GOAL Ethiopia, an Irish NGO
- Hawassa University
- Hawassa Green Wood plc.
- Muluneh plc.
- Mums for Mums, an Ethiopian NGO
- Southern Agricultural Research Institute (SARI)
- Tigray Agricultural Research Institute (TARI)
- · Vita, an Irish NGO
- Wamole plc

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