Feed the Future Malawi Improved Seed Systems and Technologies (MISST) Project: Orange-fleshed Sweetpotato Component

The project (December 2014-June 2019) enabled more than 63,000 households to produce and consume pro-vitamin A rich orange-fleshed sweetpotato (OFSP). We have built the capacity of private sector, government and NGO’s to scale out OFSP technologies for the betterment of smallholder farmers in Malawi.

What was the problem?
In rural Malawi, limited crop and food diversification results in consumption of diets that are lacking in essential micronutrients. The risk of Vitamin A deficiency is high, affecting especially women and children under the age of five. Households were often not aware that consuming OFSP is a proven and easy way to enhance their vitamin A intake. Moreover, farmers who have heard about the nutritional benefits of the crop often struggled to access the planting material of these improved varieties. This was because multiplication of OFSP planting material was not commonly occurring near the farmers. Farmers with access to OFSP are often unaware of the various options for its utilization at household level, or how best to store or market the freshly harvested roots.

What did we want to achieve?
We aimed to:
• Increase productivity and production of OFSP among smallholders
• Improve nutrition knowledge, OFSP utilization, and OFSP consumption at household level, in particular, to improve the diets of women and children under 5 years
• Improve storage and marketing of fresh OFSP roots and vines
• Enhance human and organizational capacity for scaling up OFSP

Where were we working?
The project activities are implemented in the Feed the Future Zone of Influence in most Extension Planning Areas (EPAs) in seven districts in Malawi: Mchinji, Lilongwe, Dedza, Ntcheu, Balaka, Machinga and Mangochi.

How did we make it happen?
We have built the capacity of private sector, government and NGOs through training of trainers on all aspects of the sweetpotato value chain, including commercial and community-based multiplication of planting material, on-farm variety demonstrations and evaluations by farmers, participatory evaluation of post-harvest root storage technologies, nutritional messaging and recipe preparation as well as vine and root marketing. Partners have subsequently trained others in their organization and rolled out activities to the rural households they are supporting by integrating OFSP work into on-going projects. Much of the farmer trainings took place around the ‘mother-baby’ demonstration plots. On a ‘mother plot’ a host farmer demonstrated the six available OFSP varieties: Zondeni, Anaakwanire, Kaphulira, Mathuthu, Kadyaubwerere and Chipika. Fifty farmers around the mother plot received a bundle of planting material of one of the varieties to plant in their own garden as a ‘baby plot’. We also involved media and drama to create more awareness on the benefits of OFSP.

Who did we work with?
We worked with the government Departments DARS (Agricultural Research), DAES (Agricultural Extension) and DNHA (Health). NGO partners included We Effect, Concern Worldwide, Welthungerhilfe, and CADECOM Dedza. We integrated part of our activities with other USAID funded projects including INVC, Ag Diversification, PERFORM, and NJIRA. We have also been involved in sweetpotato fertilizer trials with Ex-Agris Africa Limited, a private commercial farm in Lilongwe district, and Farmers World Ltd (Fig. 1).

What have we achieved so far?
• Over 56,000 direct beneficiaries received planting material and training on agronomic practices, vine conservation and nutrition messages.
• More than 40 commercial vine multipliers (CVMs) and 200 Decentralized Vine Multipliers (DVMs) have received training on vine multiplication and are selling OFSP planting material to date. This has increased access.
to clean OFSP planting material for farmers and other stakeholders.

- Over 7,000 beneficiaries reached with nutrition-sensitive messages for MISST value chains (OFSP, soybean, groundnut, pigeon peas, millet, sorghum and orange maize
- More than 1,100 technical staff from ten project partners received training on mother-baby demonstrations, vine multiplication, post-harvest and root storage (Fig. 2), marketing, nutrition and M&E.
- Popular comedians, Chindime and Samalani, and musician Skeffa Chimoto were engaged to conduct live comedies and promotional audio and video song to improve awareness on Vitamin A benefits during field days and in 21 markets across the MISST Zone of Influence districts.
- There is increased demand for OFSP roots and vines created through media involvement, field days and demonstrations. We provided input in a mass radio awareness campaign on OFSP with FiF Ag Diversification project.

We took a lead role in linking agriculture and nutrition in the country by building capacity of district and community nutrition structures on nutrition-sensitive agriculture. Our main target has been pregnant and lactating mothers and households with under-five children.

What are key lessons for the future?

We have learned that technical support to commercial vine multipliers and DVMs played a key role in ensuring a more sustainable supply of planting material and reduced need to transport perishable planting material over long distances. We learned about the importance of partnering for impact at scale and the key role that a research institute can play in this process to take technologies off the shelf and into the hands and fields of smallholder farmers. We also learned about the important role the biofortified crops developed by the CGIAR and DARS can play in increasing the linkages between agriculture and nutrition. We will continue to engage partners that can help us strengthen our agriculture to nutrition linkages to ensure farmers receive the nutrition messages, have access to planting material and understand agronomic practices, achieve good yields and receive maximum benefits from investing in crop diversification with OFSP.