GRAD is a five-year USAID-funded project designed to help the Government of Ethiopia find sustainable solutions to chronic food insecurity. The project supports households currently enrolled in the government’s Productive Safety Net Program (PSNP) so that they may access microfinance, improve on and off-farm productivity, and improve links to markets. In addition, GRAD improves household and community resilience by: increasing women’s empowerment; improving nutritional practices; and introducing local climate change adaptation mechanisms. CARE Ethiopia leads a consortium that includes REST, ORDA, CRS, Agri Service Ethiopia, and SNV. The project works in 16 districts in Amhara, Tigray, Oromia and SNNPR.

Innovation Brief # 3: Orange-Fleshed Sweet Potato for Nutrition

Background: Improving nutrition and nutritional behaviors of target households has been one of the key components of GRAD. To that end, the project has collaborated with the International Potato Centre (CIP) and others to introduce orange-fleshed sweet potato (OFSP) households in selected GRAD woredas. This is a new crop in most of Ethiopia and a food unknown in local diets. The project built awareness about OFSP in 13 GRAD woredas with adoption taking place at varying rates. The project also worked with CIP to build linkages with producers of OFSP planting material. Overall, households in the Guraghe Zone have been the most receptive to this new crop and strange addition to the family diet.

Why OFSP: OFSP is rich in Vitamin A, which is an essential nutrient especially for children, pregnant, and young moms. According to CIP, just 125 grams of (OFSP) contains enough beta-carotene to provide the daily Vitamin A needs of a pre-schooler. The nutrient is essential for fighting infections, for bone development, and the overall health of women and children. In spite of this fact, Vitamin A Deficiency (VAD) is a public health challenge in sub-Saharan Africa; in Ethiopia VAD affects 61% of under five children and leads to 150,000-200,000 deaths per year.

All GRAD households were initially food insecure and supported by the government’s safety net program. Improving their nutritional status was a key project objective. The introduction OFSP is an important contribution towards that objective and households benefit not only from a nutritional point of view but when gaining additional income through selling OFSP tubers and vines to their neighbors.

The process: Promoting a crop like OFSP is not so different from other crops, except that acceptability as a part of the household diet is a necessary complement to production. The following is the sequence of activities that was followed by the project.

1. Orientation and awareness for VESAs on what OFSP is and why it should be grown and consumed.

2. Training for VESA members, most often women, on best practices for growing and storing OFSP and other root crops.

3. Cooking demonstrations [in collaboration with Egna Legna Ethiopia] to show mothers how to prepare different foods using OFSP.
4. Provide households sweet potato vine procured through a variety of sources. (Ideally, a market-based seed supply will be established but none exists for this new crop.) Once vines were distributed, however, farmers were able to preserve vines for their own use as well as share with others in their communities.

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<th>Case #1: A mother profits from OFSP</th>
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<td>My name is Jemanesh Mande and I live in the Mareko Woreda of Gurage with my husband and seven children. GRAD introduced OFSP to me earlier this year and we planted it on about 100 sq. meters of land. The harvest was good and I've sold vines to other VESA members who are interested in growing it. I make many different foods made from OFSP for my children based on training received through the project. Sometimes I mix it with maize flour and pasta. My children like the taste very much. We want to expand our OFSP farm in the future.</td>
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<th>Case #2: Producer making big gains</th>
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<td>Mechale Bekele, from Mareko Woreda was one of the early adopters of OFSP. He was so keen to try it after attending a training even though he had never heard of the crop before. Mechale bought 200 vines from another farmer in his village, at a cost of 50 birr. Ultimately, he succeeded in growing 180 plants on 100 m² of land. He expanded the plot to 600 m² the next season. So far, Mechale harvested 50 quintals of OFSP tubers and sold 7,000 vines to other VESA members for 2,100 birr. This income, in part, helped him buy three sheep. “OFSP has become one of the regular foods in my family”, he reported. However, one doubt remains. Mechale worries whether there will be enough market demand if his production increases much more.</td>
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**GRAD Learning**

After a relatively short experience promoting household production of OFSP, GRAD has learned the following:

- **With proper training, women are fully capable of cultivating OFSP.** The only major production constraint observed was the plants sensitivity to the extreme drought conditions of 2015-16. In years of even slightly better weather conditions, a reasonable harvest will be expected for most farm households.

- **Economic benefits:** Production of OFSP helped some households to earn additional income from sales in local markets. The market demand remains low for this still relatively unknown crop and a commercial market for planting material does not yet exist.

- **Value for money:** Farmers commented that they got more value from OFSP than from most other crops as both the tubers and vines are edible and can fetch good price in the local market. It is also possible to harvest higher yields from a small plot of land in a relatively short period (about three months).

- **Incorporated into households’ diet:** OFSP has become part of a regular diet for many households in areas where the promotion has been done. A combination of training on how to prepare different foods using OFSP and its nutritional values is enough to convince women to include it in family meals.