

The Accelerated Value Chain Development Program: Orange Fleshed Sweetpotato (OFSP) Value Chain in Kenya

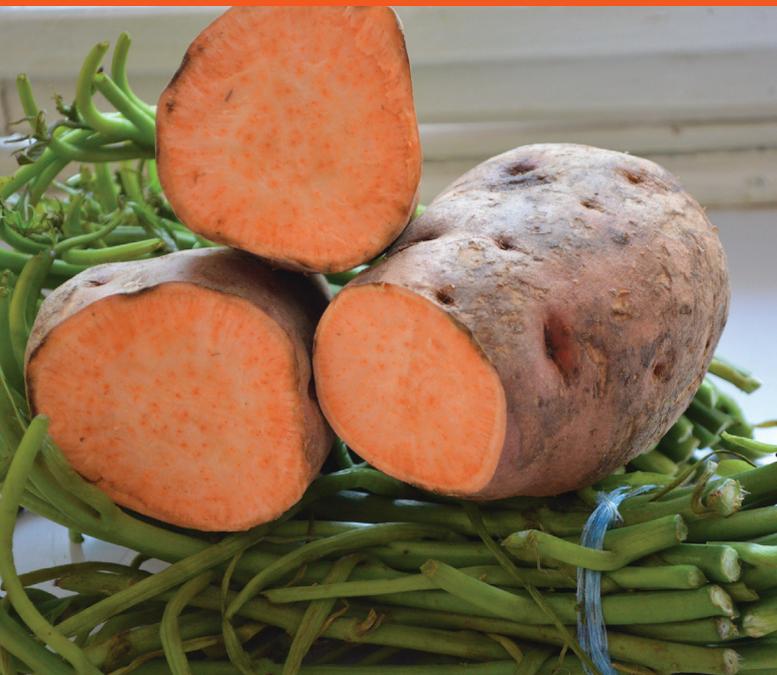


Fig 1. OFSP Variety Kabode and its cuttings for planting (Credit: J. Onyango)

What was the problem?

Culturally in Western Kenya, sweetpotato is cultivated for food security rather than for commercial purpose. It is particularly grown in the short rains between September and November for the crop to be used between February to April, when household stocks of maize and beans are low. OFSP varieties (Kabode and Vita) were introduced to these households to improve nutrition status and improve on income from sale of surplus produce. However, households grew sweetpotato on small plots (mostly less than a ¼ acre) with planting material shared among neighbors, friends and family. Production is essentially rain-fed, as such planting and harvesting is done at the same time leading to a glut on the market and lack of roots next season. These practices impeded commercialization of sweetpotato value chain. Baseline findings indicated high knowledge of Vitamin A among households. However, consumption of vitamin A-rich foods among women of reproductive age and children 6-23 months old was very low.

What objectives did we set?

The Accelerated Value Chain Development (AVCD) Program's OFSP value chain component was a three-year USAID funded (October 2015- December 2018) effort under the Feed the Future initiative implemented by International Potato Center (CIP) with the following objectives:

1. Increase productivity and production of OFSP among 65,000 smallholder households
2. Improve nutrition knowledge and practice at household level through OFSP utilization
3. Improve storage and marketing of fresh OFSP roots

- Through contract farming, about 160 tons of OFSP roots worth USD 22,400 were produced in 2018.
- Fresh orange-fleshed sweetpotato (OFSP) roots were introduced to both urban and local markets through traders' orientation, free samples and cooking demonstrations .
- In 2018, farmers linked to the project supplied roots worth USD 11,760, doubling the quantity supplied in 2017 by Organi Limited farmers.
- Mean dietary diversity score for women of reproductive age and children 6-23 months of aged increased by 16.7% and 14.6%, respectively, between baseline and endline.



AUGUST
2019

Where did we work?

The project was implemented in four counties of Western Kenya covering Bungoma, Busia, Homa Bay and Migori with Nairobi, Kenya's capital, as the main center for marketing roots.

What did we achieve?

- By the end of the three years, farmers under the AVCD program had increased production of OFSP during the long rainy season as well as the crop area in both seasons. 62,251 households were supplied with OFSP varieties, 96% of the target. This improved the consistency of supply and access to OFSP roots by traders and processors and for home consumption.
- With the introduction of contract farming, farmers showed remarkable willingness to invest in purchase of clean planting materials. This gradual change of behavior was evident when 40 acres of OFSP was cultivated in the long rains in 2018. Farmers paid up for the seed to produce 160 tons of sweetpotato roots worth USD 22,400 for this season.
- Supply of roots to the purée processor, Organi Limited, was more stable in 2018 as compared to 2017. Farmers supported by the project supplied roots worth USD 11,760, double the quantity supplied in 2017.
- Fresh OFSP roots were introduced to both urban and local markets through orientation of traders, free samples and cooking demonstrations. By end of 2018, traders in Muthurwa and City Park markets (the biggest markets for fresh roots) were trading freely, sourcing on average six tons of OFSP roots weekly.
- Through intense promotional events on major root markets of Bungoma and Homa Bay counties between October and December 2018, 18 tons of roots worth USD 2,520 were



Fig 2. Training of bakers on integration of OFSP puree into baked products

locally traded within Bungoma County. An estimated 11 tons of OFSP, worth USD 1,512 were procured from farmers in Homa Bay, Busia, and Bungoma counties.

- To expand OFSP puree utilization, the project trained 21 bakers from Nairobi, 10 from Kericho and, 7 from Migori 8 from Busia counties (Fig. 2). These bakeries were linked to Organi puree processing with hope that they would start taking up purée for processing.
- By the end of the project households were now consuming sweetpotato at least twice a week throughout the year, beating the norm that sweetpotato is only consumed during times when a cereal crop is not available.
- By end of the project, mean dietary diversity score of women of reproductive age had increased by 17% from baseline while that of child 6-23 months old had increase by 14% among sampled households.

Contact

Monica Parker, CIP-Kenya, M.Parker@cgiar.org

Partners • Ministry of Health- MOH • Ministry of Agriculture- MOA

Where there any key challenges or lessons learned?

- It emerged that some bakeries produce low-cost bread, trading at about 0.4 USD/loaf for competitiveness and to attract consumers into puree-based products. This shows there is need to lower the cost of the puree from the current USD 0.65 per kg thus calling for further discussions regarding pricing of the purée.
- A market trial indicated that brokers, who determine varieties traded in the market had a negative attitude towards OFSP. This is because of previous experience where it did not sell as fast as the other varieties. Therefore, brokers need a targeted forum of engagement to address their concerns about OFSP.
- The demand for roots for processing or the fresh root market is instrumental in commercialization of the whole value chain. Contracting farmers to supply roots or at least some sort of written Memorandum of Understanding (MOU) helps build trust among the parties.
- Behavior change activities among targeted households must be implemented consistently over a period for one to realize adoption. One-off activities will not realize the desired change. This explains why consumption of Vitamin A rich foods is lower than desired.

What's next?

As part of exit strategy, the project collaborated with other organizations in the region promoting sweetpotato production. The 43 project DVMs were linked to the Global Alliance for Nutrition (GAIN) effort which is on-going. Trained health workers and community health volunteers were handed on to CRS Mwendo project. Commercial farmer groups were linked to RTI International and other financial institutions; for instance, a women group in Bungoma involved in OFSP root processing received a USD 50,000 grant from the USAID funded Kenya Crops and Dairy Market Systems Project.

Several contact points were also made during the three years to create OFSP interest at various levels. These platforms will continue to be explored to finally yield markets for OFSP farmers soon. The biggest challenge was logistics around procuring puree and pricing. As a project we recommend new OFSP projects to leverage on these trained bakers by working on puree pricing, through improved efficiencies in the factory operation.

VISIT THE SWEETPOTATO KNOWLEDGE PORTAL

www.sweetpotatoknowledge.org



CIP thanks all donors and organizations which globally support its work through their contributions to the CGIAR Trust Fund. <https://www.cgiar.org/funders/>



© 2019. International Potato Center. All rights reserved.

This work by the International Potato Center is licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0).

To view a copy of this license, visit <https://creativecommons.org/licenses/by/4.0/>. Permissions beyond the scope of this license may be available at: <http://www.cipotato.org/contact/>