



## Orange-fleshed Sweetpotato is Gradually Becoming a Commercial Crop in Western Kenya

As the Accelerated Value Chain Development (AVCD) program completes the third and final year, strong linkages have been established between private buyers, processors, traders, commercial root farmers and decentralized vine multipliers (DVMs). The linkages developed by the program over the past 3 years have accelerated OFSP marketing, giving rise to a self-sustaining business model.

Two private OFSP processors-- Safe Produce Ventures and Organi Limited-- and several sweetpotato local and urban traders have been linked up to over 715 OFSP commercial root producers through contract farming and mutual understanding, where each party understands quality standards of roots sold. The root producers are further linked to a network of 43 DVMs for supply of vines, 259 trainers of trainers (ToTs) and 23 trained Ministry of Agriculture (MOA) extension officers for capacity building and recurrent support supervision. Overall, the project has reached 43,000 households with integrated interventions of production, home utilization and marketing of OFSP.

### What is the Problem?

Inadequate market access for OFSP roots, inconsistent supply, limited options for commercial application and lack of timely access to quality vines have characterised sweetpotato production in western Kenya. Root production as a result has been marginal, with low yields but with potential to contribute to reduction of vitamin A deficiency among the community and income as a commercial crop. This is even more urgent with the declining performance of sugarcane, tobacco and maize, which traditionally have been the commercially important crops in western Kenya.

### Where are working and with whom?

The AVCD program has over the past 3 years actively worked in Tongaren and Webuye East sub-counties in Bungoma County, Nambale and Matayos sub-counties in



Fig. 1 Farmers washing roots for shipping to Kenya's largest open-air market, Muthurwa

Busia County, Ndhiwa and Rangwe in Homa Bay County and in Uriri and Rongo sub-counties in Migori County. For commercialization however, neighbouring sub-counties and wards have been brought in based on willingness-to-buy vines from DVMs.

The county governments of Bungoma, Busia, Homa Bay and Migori have been active partners. The Natural Resources Institute (NRI) continues to close the knowledge gap on root storage for medium and short-term support for sweetpotato puree processors. Farm Concern International has contributed in organizing farmers for collective action in production and marketing. Safe Produce ventures has built contractual farming arrangements with various farmers across the four counties.

### What have we achieved?

As an indicative case of the change that is occurring, in August 2018, 36 acres of OFSP were planted by farmers in Bungoma county and an additional 10 acres by farmers in Kericho (the district that neighbours Organi Limited). This translated to 147,500 Ksh (USD1,475) in income to decentralized vine multipliers. This indicates behaviour change. At baseline, purchase of OFSP vines was not reported. Now there is willingness-to-pay for quality vines. It is gratifying for the project's agronomist to receive a

phone call from a farmer saying that he would like to pay 7,000 Ksh (USD70) for vines and would like to know the location of the nearest vine multipliers. Moreover, business transactions among vine multipliers and root producers are also emerging and growing steadily.

During the long rainy season, 215 farmers, planting around 172 acres, were contracted by Safe Produce Ventures. The farmers paid up front for 50% of the planting material received. The other 50% is being deducted when the company collects roots from farmers. A more significant behaviour change is the increasing number of farmers planting OFSP during the long rains. At baseline, most reported that sweetpotato was only planted during the short rains. Clearly, the project has demonstrated to many farmers that OFSP competes favourably with other staples including maize, which is currently facing substantial production and marketing challenges.

Vine multiplication has also moved from small plots of a few square meters to acres per vine multiplier (Fig. 2). Currently, 20 outstanding vine multipliers have a total of over 21.5 acres of planting material with some of them having as much as 2 acres. This expansion resonates well with the growing demand from root producers. While the project has supported with start-up material, it has been worthwhile to see farmers investing substantial resources in vine multiplication as a business. Among these are youthful farmers, an indication that the value chain has created sufficient visibility and business sense that attract youth to get involved.

A key milestone in 2018 is the steady sale of fresh OFSP roots by a trader in the large, urban market of Muthurwa in the capital city Nairobi. In part this has been possible through establishment closely-linked farmer-trader relationships where the trader and the farmer discuss the roles and responsibilities of each other. The current demand



Fig. 2 The average size of vine multiplication plots has grown



Fig. 3 Consumer providing feedback about the taste and appearance of OFSP bread

stands at 10 bags per week (about 10 tonnes) of roots. The gradual appreciation of OFSP by retailers that purchase from this wholesaler is a remarkable achievement since at the start of the project, OFSP was not available in the market and that several myths and perceptions affected its sensory acceptability and willingness of traders to sell it.

We have continued to work with the private sector to understand consumer perceptions about the OFSP bread. Among other feedback, an overwhelming 95% of the consumers interviewed buy OFSP bread because of its nutritional value (Fig. 3). During this study, it was observed that the OFSP bread is often sold out by noon, an indication that an opportunity exists to further create incomes for farmers through increased purchase of roots for puree production.

### What is next?

Efforts will concentrate on enhancing business skills, ethics and good agronomic and post-harvest practice among farmers. Linkages will be facilitated between Safe Produce Ventures and outstanding vine multipliers for contracts of vines that will be supplied to root producers. Coupled with mentorship provided in vine production and sales, provision of vine supply contracts will support the essential pillars for a robust seed system. Linkages that have been created between the three bulk buyers will be strengthened and additional buyers will be lobbied to join in.

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