OFSP market penetration in Maputo City, Mozambique: Eating OFSP by Choice not by Chance

The dissemination of locally adapted orange-fleshed sweetpotato (OFSP) varieties among producers combined with the development of market linkages ensures the breakthrough of OFSP on the fresh-root market.





Fig. 1 Trader at the Manhiça bulking market reading informative SUSTAIN leaflet (Credit: R. Brouwer)

What is the problem?

In Mozambique OFSP has been promoted for several years. However, until 2015 it was difficult to find roots on the market of Maputo City. In part, this is due to dissemination efforts being concentrated in rural areas, where rates of vitamin A deficiency are higher. But it appears that there were also barriers along the value chain significantly effecting supply and demand.

What is SUSTAIN?

The SUSTAIN project started in 2014 in four countries (Kenya, Malawi, Mozambique and Rwanda) to promote the wider adoption of OFSP by farmers and consumers and to develop the commodity chain as a tool to enhance demand and pull production. In Mozambique, SUSTAIN worked in two different "development corridors": the Beira corridor in the center and the Maputo corridor in the south. In these corridors, it promoted the dissemination of 15 improved OFSP varieties with the aim to achieve nutrition benefits for rural and urban residents. "Bela" emerged as a particularly successful variety, with 27.5% dry matter and an average yield 26 ton/ha. Activities in Mozambique ended in 2017.

SUSTAIN partners in Mozambique

SUSTAIN worked with the Mozambican NGO ADEM to implement its activities in the Beira corridor. Around Maputo local governments and a local farmers' organization called UCAM were the most important partners to disseminate planting material. The Natural Resources Institute (NRI) from Greenwich collaborated on the project's commodity chain study.

Key market development activities

SUSTAIN studied the commodity chain to identify the sources of the roots and key agents along the chain. About 40% of all roots on the Maputo market come from one district: Manhiça. The district's bulking market is the main meeting point between local smallholder farmers and the traders from the city. Farmers and traders are women, making the chain female dominated (Fig. 1). SUSTAIN provided planting material to the farmers, set up vine multipliers in the production areas and established direct contacts with traders on the bulking and retail markets. Retailers received branded caps, T-shirts and capulanas to increase their visibility and raise their commitment to OFSP (Fig. 2). They were also given leaflets with key information about the nutritional benefits of OFSP and three simple recipes to hand out to their customers. SUSTAIN ensured the visibility of OFSP at the annual national trade-fair FACIM (with about 90,000 visitors), the use of social media through the Facebook page













SUSTAIN is a 5-year program (2013-2018), coordinated by the International Potato Center (CIP) with support from UKAid, to scale up the nutrition benefits of biofortified orange-fleshed sweetpotato (OFSP) to 1.2 million households with children under five years of age in children in Kenya, Malawi, Mozambique, Rwanda, and Bangladesh. SUS-TAIN supports an integrated set of interventions in agriculture, nutrition, and marketing to increase production and consumption of OFSP. SUSTAIN emphasizes rigorous monitoring, operational research, and independent evaluation to assess the scalability of these interventions and contribute to global evidence on achieving large scale nutrition outcomes through biofortified crops.



Fig. 2 Trader in Maputo cuts the root to show potential clients that it is orange inside (Credit J. Low).

"Odocequedasaude", open-air advertising (Fig. 3) and other mass communication activities. The visibility of OFSP was further enhanced by a dedicated story line in the UNICEF/ WHO sponsored radio-soap "Ouro Negro" ("Black Gold") broadcast on national, provincial and local radio stations and by the Ministry of Health's awareness campaign to promote the consumption of vitamin-A rich food by pregnant and lactating mothers and by infants. OFSP is explicitly mentioned in that campaign.

Achievements

Better understanding the commodity chain: The commodity chain study shows that there are two different sweetpotato chains. One chain is specialized in OFSP. It is based on a small group of farmers who operate near to an agricultural research station 40 km to the south-west of Maputo city. The second is much larger and based on smallholders such as those in Manhiça about 70 km to the north. The first chain involves few producers, most with access to irrigation. They target the better-off urban markets and capitalize on a premium price for OFSP. The second chain involves hundreds of farmers in the Umbeluzi river floodplain. They are not specialized and produce any kind of sweetpotato; they do not make a distinction between varieties as in their area, there is no price difference between white and orange-fleshed varieties. The success of OFSP in this second chain depends mainly on its capacity to compete at the farm level with common, white-fleshed varieties; in other words, out-yield the white-fleshed. Successful penetration of the urban market depends on successful adoption of OFSP by this second chain.

Better understanding the consumers: Prior to SUSTAIN no systematic study had been made of OFSP consumption

in Maputo city. This gap was filled in 2014 and 2017, about 600 Maputo residents at more than 40 locations dispersed over the city's neighborhoods were interviewed about OFSP to assess their awareness, consumption and perception of OFSP.

Increased awareness of OFSP: Between 2014 and 2017, the percentage of Maputo residents that knew about OFSP increased from 85% to 98%.

OFSP eaten by choice, not by chance: According to the 2017 survey, the availability and the quality of OFSP roots improved since 2014. This is probably due to the increase in dry matter that was achieved with the introduction of new varieties in 2011. In 2014, many people explained that they ate OFSP because it was mixed with white varieties; in 2017, 39% of the respondents said that they ate OFSP by choice, not by chance. The percentage of households consuming OFSP increased from 69% to 90% and the percentage of meals with sweetpotato containing orange-fleshed varieties grew from 31% to 50%.

Access to OFSP may not be equally distributed: 64% of the residents of Maputo's wealthier central district said availability has increased compared to 36% in the city as a whole.

Less use of OFSP for infant feeding: The most surprising result of the 2014 and 2017 surveys is that while more people consume OFSP the percentage of mothers who use it to feed their child decreased from 77% to 60%. This suggests that adoption may not driven by the mother-and-baby health campaigns.

What are the next steps?

In 2018, a follow-up study is being carried out to determine the positioning of OFSP on the market in terms of image and type of consumers. The results of this study may be used to adjust OFSP promotion and align it better with consumer segments.



Fig. 3 Open air publicity on Vladimir Lenin Avenue, Maputo (Credit R. Brouwer)

