

Scaling Up Orange-fleshed Sweetpotato Through Agriculture and Nutrition (SUSTAIN) in Mozambique

SEPTEMBER 2016

Since April 2014, 28,335 households have received OFSP vines in three provinces. In mid-2016, ZebraFarm started the production of OFSP juice and OFSP-soy biscuits and Padaria Papú started baking OFSP bread and Swiss rolls. Efforts to increase urban demand for OFSP roots in Maputo City, the capital, are beginning to pay off.



Fig 1. OFSP rolls at Papu's Bakery in Manhica (credit R. Brouwer)

What is the problem?

In Mozambique, sweetpotato is grown mainly for home consumption on plots with an average acreage of 300 m². National surveys suggest that the area is stable and the proportion dedicated to OFSP is not growing as fast as desired. Supply to urban markets is small relative to its potential. Mozambique's capital city Maputo has a population of 1.2 million, of which 85% eat sweetpotato. Total annual market supply is estimated at something between 15,000 to 30,000 tonnes, with OFSP consumption around 7,000 tonnes.

What do we want to achieve?

SUSTAIN faces the challenge to increase production and open up the market so that more people can enjoy the health and economic benefits of OFSP. The main targets for SUSTAIN Mozambique are:

- Create a seed system covering all target districts;
- Disseminate planting material and achieve a diversified diet among at least 35,000 households with pregnant women and/or children under five years old.
- Ensure that at least 175,000 households start farming OFSP;
- Reach out to urban residents through a diversified market with at least one OFSP-derived product achieving a US\$100,000 annual turnover;

- Extract valuable lessons from the Mozambique experience for the general upscaling effort.

Where are we working?

In Mozambique SUSTAIN works along the Beira and Maputo corridors in 15 districts in three provinces: seven districts in Manica and three in Sofala along the Beira trade corridor, and five along the Maputo corridor. These districts have about 3.2 million inhabitants. The 0.7 million households have an average of 4.8 members; about 0.4 million have children under five (data for 2007). The area includes important cities. Maputo City with 1.2 million residents is the key potential market for OFSP.

How are we making it happen?

At the core of SUSTAIN stand the farmer, the consumer and the researcher. While CIP focusses on seed system and value chain development, partners have been engaged to set up local networks of facilitators to ensure vine dissemination and promote dietary change. The drivers of change are higher productivity, more value creation along the commodity chain and improved health through a higher Vitamin A intake among consumers.



SUSTAIN is a 5-year program (2013-2018), coordinated by CIP with support from UKAid, to scale up the nutrition benefits of biofortified orange-fleshed sweetpotato (OFSP) to 1.2 million households with under-5 year old children in Kenya, Malawi, Mozambique, Rwanda, and Bangladesh. SUSTAIN 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. Beneficiaries at vine distribution day (credit R. Brouwer)

What have we achieved so far?

Almost all planting material is produced by CIP-assisted decentralized multipliers (DVMs). In the 2015/16 season (until 1 August 2016), 63 DVM (90% in Manica/Sofala) received for vines sold to CIP 647,910 Meticais (approximately US\$11,000). About 40% was paid to women. Partners ensure vine distribution and dissemination of dietary information: ADEM in Manica/Sofala and UCAM in Maputo. Since April 2014, in total 28,335 households (88% in Manica/Sofala, 96% in the target group) have received vines directly through these partners. Data collected by CIP show that in Manica between December 2014 and December 2015 the percentage of households growing OFSP increased from 25% to 54%, with an estimated 60,000 additional households growing OFSP.

In 2016 El Niño brought drought; rainfall started to recover only in March, at the end of the rainy season. Most maize was lost and sweetpotato planting delayed. Nutrition training/demonstration events in rural areas are aligned with the first sweetpotato harvest and were resumed only in July 2016. Since SUSTAIN's take-off and despite these delays, in Manica/Sofala, 63 local facilitators organized 620 training/demonstration sessions attended by 20,306 persons. In Maputo, 15 facilitators carried out 10 sessions with about 500 participants. These trainings are still ongoing. In the urban areas of Maputo and Matola, CIP's third partner Zizile has educated 223 residents (83% women) from eight peri-urban neighbourhoods and 52 managers and cooks of 24 kindergartens.

Value-chain development has made significant progress as well. In June 2016, ZebraFarm started the production of OFSP juice and OFSP/soy biscuits. Turn-over is expected to grow as constraints in water, power and fresh roots supply are being resolved. In July 2016, Padaria Papú started baking OFSP bread and Swiss rolls. It processes about 15 kg of roots daily generating a gross revenue of about 2000 Meticais (US\$30). In Maputo City, women retailing OFSP roots received T-shirts, caps and *kangas* (decorated skirt



Fig 3. Young child trying OFSP at FACIM fair (credit R. Brouwer)

material) to promote visibility. They also received brochures to hand out to clients to raise interest in OFSP and awareness of its nutritional benefits. The facebook page *odocequedasaude* (4,200 "likes") is a channel for promoting producers, traders and processors and provides information on OFSP benefits and recipes.

What is next?

SUSTAIN is entering its final year. During this year distribution and dissemination will level off to reach the 35,000 household target. Efforts will be made to ensure that the best DVMs will survive the end of project support as an increased demand for roots from the fresh market and processed products keeps pulling sweetpotato production and the demand for vines.

Key Partners

- Key partners for distribution and dissemination are Agência de Desenvolvimento Económico da Província de Manica (ADEM) in Manica/Sofala, the farmers' association União de Cooperativas Agrícolas de Marracuene (UCAM) in Maputo province, the NGO Zizile – Instituto de Desenvolvimento da Criança in Maputo City;
- Government support is ensured through the Provincial Directorates of Health, Agriculture, Industry and Trade and Education in Manica and Sofala;
- District governments of 15 districts and the municipal authorities of Manhíça, Maputo and Beira help implementing the project;
- SETSAN – the Technical Secretariat for Food and Nutritional Security provides a platform for cross-sector coordination at the national and provincial levels;
- ZebraFarm and Padaria Papú produce and market OFSP juice, biscuits and bread.