

# Nutritious Orange-Fleshed Sweetpotato for Niassa, Mozambique

The project expanded into 3 new districts in its second year, undertook research to better understand how to improve young child feeding practices, and initiated market development activities for fresh roots and orange-fleshed sweetpotato bread. Over 6,200 households received improved OFSP varieties.

AUGUST 2014



One plant of variety Delvia produced 4 kg of vines in 3 months (credit B. Rakotoarisoa)

## What is the problem?

Niassa is the most remote and sparsely populated of Mozambique's provinces with a population density of just 11-12 persons per km<sup>2</sup> of land (compared with the national average of 30 persons per km<sup>2</sup>). Niassa suffers from very high rates of child malnutrition. Forty-five percent of children under five years of age are stunted, levels of vitamin A deficiency are high, and nutritional knowledge among caregivers low.

## What do we want to achieve?

The key aim of the 3.5 year project, which began in November 2012, is to improve vitamin A and energy intake for at least 20,000 rural households with women and young children using orange-fleshed sweetpotato focused, food-based approaches that ensures at least 20% of households growing OFSP earn 50 USD or more per year from OFSP sales, and increase average sweetpotato yields by 50% by mid-2016.

Capacity building and testing novel approaches to maximize impacts from OFSP-based nutritional and agricultural programming are keys to achieving these objectives.

## Where are we working?

The project is working in 8 districts of in Niassa Province, Mozambique (Lago, Muembe, Sanga, Chimbunila, Lichinga, Mandimba, Cuamba and Mecanhelas), covering 23 Administrative Posts and 113 communities.

## How are we going to make it happen?

CIP and partners (IIAM, MOA, and NGOs) are providing access to quality OFSP planting material by creating a network of decentralized multiplication sites and trained farmer multipliers to serve surrounding communities through vine distribution. The implementation strategy includes:

- Testing of drought-tolerant OFSP varieties in participatory On-Farm-Trials (OFT) with farmers, capturing any distinct preferences of men and women
- Identifying and training decentralized vine multipliers (DVMS) so that quality planting materials of the new varieties preferred by farmers can be easily accessed
- Conducting training programs, field days and technical backstopping
- Informing communities about the nutritional value of OFSP through demand creation campaigns
- Coordinating distribution of vines to rural households in collaboration with partner organizations
- Linking to nutrition efforts led by others to increase impact on dietary practices
- Facilitating fresh root market development and OFSP processed product utilization



### Partners

- Instituto de Investigação Agrária de Moçambique (IIAM)
- Progresso
- Diocese of Niassa
- SETSAN-Niassa



Expert Antonio Magnaghi works with staff to develop OFSP bread for Padaria Maria (credit B. Rakotoarisoa)



Consultant Rebecca Vander Muellen learning about how this mother feeds her child (credit Anonymous)



OFSP on sale at decorated stall in Lichinga market (credit B. Rakotoarisoa)



## What have we achieved so far?

- To date, eight project partner staff members have participated in the 10 day training course on “Everything you ever wanted to know about sweetpotato”, conducted by the University of Eduardo Mondlane with CIP backstopping in Maputo.
- Fifteen first tier Decentralized Vine Multipliers (DVM1s), five of whom are women, across 8 districts identified and trained in rapid multiplication and use of net tunnels. Each one was provided with a net tunnel (5.4 sq m) that protects disease-free cuttings from insects.
- Farmers managing net tunnels are producing 40 kgs per tunnel per cutting and are cutting 4 times per year. These quality vines are multiplied once in the field before distributing to farmers.
- Twenty nine farmers (of whom eight are women) have been identified and trained as second tier Decentralized Vine Multiplier (DVM2s) (thirteen in the north and sixteen in the south);



Bread of Strength on sale in Lichinga (credit B. Rakotoarisoa)

- Thirteen trained multipliers supplied 10,000 kg of vines of Delvia, Gloria and Bela varieties to 6,216 HHs (3,128 men – 3,088 women) until the end of June 2014, with the distribution linked to adult literacy classes and other farmer associations.
- A baseline survey among 396 households during July-August 2013 was conducted and report produced. Sweetpotato is grown by 76% of households in small plots (average 300 sq m), with 40% of growers selling some sweetpotato. These are benchmarks against which progress will be measured in 2016.
- Formative research relating to “best bet” behavioral changes in dietary practices and childcare conducted in March-April 2014 produced 11 key sets of messages on educational cards that were subsequently provided to nutrition change agents during training in July 2014
- 250 T-shirts and caps produced; forty sets of nutrition messages; two vehicles painted in orange with logos and market stalls decorated with messages to promote OFSP.
- In 2013/2014 eight OFSP varieties were tested in thirty on-farm trials (OFTs) in three districts in southern Niassa with evaluation done by 1,141 farmers (47.2% women) for leaf and root taste acceptability and yield assessments. 42 OFTs being conducted in lowland areas in Lago and Chimbunila from April to September 2014.
- Thirteen individuals (including community representatives and nutritionists) from four northern districts and from local bakeries were trained in production of OFSP bread, juice and biscuits in Lichinga. The varieties Gloria and Bela were the most preferred for making all products.
- In a pilot test of OFSP processed product acceptance, “Pão de Força” (Bread of Strength), a bread with 30% of wheat flour replaced by OFSP puree was prepared by the bakery Padaria Maria in Lichinga and sold successfully to consumers for 6 weeks in July and August 2014.