

Orange Fleshed Sweetpotato is here to stay in Angola

Women farmers of Ukuma in Huambo Province process orange-fleshed sweetpotato (OFSP) roots to make bread, juice, and cakes for their families. They are very conscious about the high nutritional value of OFSP, especially for vitamin A. Improved sweetpotato varieties produced yields three times higher than existing local varieties, and were sold in the market, augmenting farmers' income.



OFSP hits the markets in Benguela province (credit A. Londa).

What did we set out to achieve?

The Integrated Research and Development Project of the Production and Marketing of Vegetatively Propagated Crops in Angola, was a five year initiative (2009-2013) funded by Chevron-Sonangol via the Program for the Revitalization of Angola, and implemented by the International Potato Center (CIP) and the national research program (IIA) in collaboration with public and private partners.

The project's main objective was to initiate a sustainable increase of the economic contribution of the four major vegetatively propagated crops-- banana, cassava, sweetpotato, and potato – for improved food security and poverty reduction in the rural areas of 4 provinces with diverse agro-ecologies: Uige, Kwanza North, Huambo and Huila (Fig. 1). Specific attention is given to developing and multiplying varieties resistant to economically important diseases that will benefit at least 146,000 households.

The development of novel processed products from OFSP (Golden Bread, cakes and cookies, juice) is also being promoted to generate income from a crop traditionally grown by women as a subsistence crop. The project is currently exploring ways to bring together OFSP producers and processors to ensure a continuous supply of OFSP roots. The focus is on developing pilot examples of sustainable value chains.

The project contains a strong component of training and capacity strengthening of persons involved in research, extension, and the

integration of techniques and methods for working with vegetatively propagated crops into educational institutions to ensure the continued availability of quality vegetative material, of improved genotypes, and the dissemination of technical information and research results.

What have we achieved with sweetpotato?

During the first project year new OFSP clones (as botanical seed, virus tested advanced clones, and released varieties) were introduced from CIP's Sweetpotato Support Platform in Mozambique. These were multiplied and trialed for three years. Twenty-eight clones and varieties have been identified as potential candidates for release in Angola.



Figure 1. The 4 intervention districts in Angola

AUG
2013

• INTERNACIONAL •
• DE LA PAPA •
CIP
A member of the
CGIAR Consortium





■ Woman participating in OFSP bakery training (credit H. Martínez).

Since work began in November 2008, 5 central rapid multiplication fields containing test OFSP materials were established in the IIA experimental stations (EEAs) of 4 provinces and 227 OFSP rapid multiplication fields were established in 8 provinces with 118 farmer associations and individual farmers. Two farmers' associations are now participating in a massive distribution program of OFSP vines. By the end of the first project phase in July 2013 the project had reached 35,438 direct beneficiary households, with 177,190 household members.

Numerous displays of OFSP-based products and roots have taken place at the experimental station and the faculty in Chianga, as well as at fairs hosted by the Ministry of Agriculture and on special occasions such as Peace Day. One bakery in Huambo has been producing Golden Bread since 2011, with seasonal interruptions due to lack of OFSP roots during the dry season. Consumers have widely accepted Golden Bread and there is significant demand.

To date, a total of 2,050 persons have been trained in the four provinces, with emphasis on rapid multiplication techniques for sweetpotato, OFSP processing and research, with the aim to improve the implementation of research results by working closely together with farmers. The largest group of persons trained were farmers (1,719), followed by students (132) and technicians (201) of from public sector research and extension, non-governmental organizations, and 18 bakers. Twenty-two students from the university in Huambo (FCA) worked on OFSP related subjects and 6 have defended their end of term theses.

The farmers and consumers participating in the evaluation selected nine varieties (Zapallo, Nemanete, LO326 (Camuto), LO323 (Cenoura), MUSG13 (Helena), Musg 21 (Lombe), Musg 26 (Morena), Huambachero and Mayai (Banza Luanda) based on market demand and taste of cooked roots. Seven varieties were released by the Instituto de Investigação Agronómica (IIA), the research institute of the Ministry of Agriculture (MINAGRI) for production in Angola in 2012.

The project is now negotiating a second five year phase with Chevron support.

✦ What have we learned?

Sweetpotato is very well suited as a crop in a post-war context, especially the orange fleshed kind to address nutritional imbalances. Given the scarcity of genetic diversity in Angola due to the decades of war, and the intense interest of farmers in acquiring new varieties and planting material, the time is favorable for promotion of new OFSP varieties.

- OFSP are a good source of income for the farmers.
- OFSP varieties adapt more easily in the warmer districts of Uige and Cuamba Norte districts than in the Angolan highlands. OFSP varieties for the Angolan highlands need to express resistance against temporary drought periods, be competitive against weeds and have some cold tolerance.



■ Rapid multiplication field in Kwanza Norte province (credit M. Mutunda).

Partners include:

- Institute for Agricultural Research (IIA).
- Ministry of Agriculture, Rural Development and Fisheries (MINADERP)
- Faculdade de Ciências Agronómicas (FCA)
- Institute for Rural Development (IDA)
- Stations for Rural Development (EDA)
- Institute for Midlevel Technical Education (IMA)
- Municipal Administrations
- IMVF (EU)
- IOM
- CNFA (USAID)
- Action against Hunger
- World Vision
- Cooperative Leagues of the USA (CLUSA)
- Save the Children
- Farmer's associations
- Bakeries
- FAO (Field Schools)
- Schools
- Churches

CONTACT

Britta Kowalski (CIP)
b.kowalski@cgiar.org