

Sweetpotato for Health and Wealth in Nigeria Underway

Over 12,000 households in 6 States and the area around the capital Abuja have received orange-fleshed sweetpotato (OFSP) planting material, raising their access to OFSP roots for consumption and income generation. For the first time in sub-Saharan Africa (SSA), OFSP pottage (thick soup made of OFSP) has been included in a school feeding program.

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Fig. 1 The former Honourable Minister of Agriculture and Rural Development appreciating OFSP products at the 2015 Agrifest (credit I. Oyerinde)

What is the problem?

Nigeria is known as one of the top producers of staple crops like cassava, yam and sweetpotato. The country is the second largest sweetpotato producing country in SSA. Because of its broad agro-ecological adaptability, sweetpotato is grown in all of Nigeria's 36 states. Nigeria still has high levels of poverty and food insecurity. Nutrient deficiency remains a matter of public health concern as over 41% of children below five years of age are stunted and the prevalence of vitamin A deficiency is 29.5%. The orange-fleshed sweetpotato (OFSP) is a vitamin A powerhouse that can address the high percentage of vitamin A deficiency in Nigeria. However, significant investment in OFSP promotion only started in March 2014.

What do we want to achieve?

In order to reduce the incidence of vitamin A deficiency, we plan to establish committed Decentralized Vine Multipliers (DVMs) so that by

2019 in each state at least 17,500 households, especially those with children below five years of age and women of reproductive age, receive quality vines. We want to create demand for OFSP in both formal and informal sectors, which in turn will drive market development for fresh roots and OFSP-based processed products. We want to ensure OFSP adoption by farmers and consumers while we build capacities of relevant stakeholders for enhanced productivity with ultimate aim of improving health and wealth of the people, especially in rural areas.

Where are we working?

We are working in the Federal Capital Territory (FCT), and Nassarawa, Benue, Ebonyi, Kaduna, Kwara, and Osun states.

How are we going to make it happen?

We are improving the entire value chain of OFSP. We invest in improved varietal selection. Several decentralized vine multipliers (DVMs) are established throughout a given state to facilitate vine access by farmers for root production. We leverage on the existing Infant and Young Child Feeding (IYCF) programs, to reach out to this target group through their support groups. In addition, we advocate for higher investments to scale up adoption of OFSP as a tool to combat vitamin A deficiency among young children and women of reproductive age. At the same time, we sensitize and create awareness among consumers and informal processors to influence their behaviour and attitudes towards OFSP; we provide them with education on processing and consumption. To increase commercialization and consumption of OFSP, we identify and support small and medium scale processors to develop OFSP into diverse food products. Our



Partners:

- Federal Ministry of Agriculture and Rural Development (FMARD)
- Helen Keller International (HKI)
- National Root Crop Research Institute, Umudike (NRCRI)
- Federal University of Agriculture, Abeokuta (FUNAAB)
- Selected State Agricultural Development Programs (ADP)





Fig.2 Practical demonstration of planting OFSP in a community in Nigeria (credit B. Chima)

research activities are focussed on diversified food product development and appropriate vine management (Fig. 2) and root storage technologies.

What have we achieved so far?

We successfully completed a consumer baseline to gauge the level of awareness and knowledge of OFSP. Findings of the baseline study provided us with information to plan for strategic public outreach and media messages, which we packaged and distributed as communication and educational materials and through media sensitization. Sensitization was aimed at raising awareness and adoption of OFSP in six states. We targeted fried yam and sweetpotato vendors, markets and ante-natal clinics; and we participated in national and local campaigns like National Agricultural show, AgricFest (Fig. 1), World Food Day, Ijakadi day in Offa, Kwara state; community forums and Osun state school-feeding stakeholders' sensitization.

We carried out sensitization and advocacy targeting the government in Osun state, known for its successful school feeding program. A consumer acceptability exercise was conducted as part of the sensitization strategy for OFSP inclusion in the school feeding program. Vendors cooked OFSP pottage and shared the roots and recipe. All the participants assessed and expressed high acceptability of the pottage on the sensory attributes (Fig. 3), with the result that it was officially included in the school menu on a pilot basis once a week starting in January 2015 . Through the school feeding programme, 4,160 children are consuming OFSP regularly in 8 pilot schools. Furthermore, the programme is creating jobs for women and youth; and boosting farmers' productivity and livelihoods.

To date, over 12,000 households, especially those with children under five years of age, have received at least 100 OFSP vine cuttings each for planting. Over 850 Infant and

Young Child Feeding (IYCF) members covered by the SPRING project that was promoting nutritious feeding practices, also received vines as well as sensitization and training on planting and processing.

Not less than 70% of trained vine multipliers in Nigeria are making money from sales of vines. A bundle of 100 cuttings sells between NGN 300 and 500 (\$1.5-3.0 USD). Through our efforts to sensitize and advocate for increased adoption with developmental organizations, OFSP has become so popular that it is being included as one of the focus crops for improving food and nutrition security. Catholic Relief Services (CRS) is promoting OFSP in five states. The Raw Material Research & Development Council, Family Health Care Foundation, Nassarawa State, Farm Forte LTD, Edo State, and Farmers' Cooperatives also purchased vines from our DVMs for their programs.

There is an increase in grassroots adoption of OFSP through product development. Women farmers and DVMs have been innovative in utilizing OFSP at the household level. They enrich some indigenous starchy based foods (Alibo, Kunu, Gari, bread, etc.) with OFSP to increase pro vitamin A intake for improved nutrition and income generation. Over 1,000 persons have been trained by the project in different aspects of the value chain. In addition, a survey was carried out in Abuja that identified 3 businesses interested in investing in fried or baked products. Developed products are being tested for their nutritional content.

What's next?

We will work to release more improved OFSP varieties with higher dry matter content and carotenoid content, and higher resistance to virus and pests. We will continue to explore industrial food production with OFSP and identify market outlets for the products. We are hoping to raise finance that will permit us to scale out OFSP value chains within and beyond the six states and FCT in which we currently operate. There is no doubt that Nigeria has the potential to be an OFSP powerhouse.



Fig. 3 Osun school meal vendors expressing their acceptance of OFSP pottage for inclusion in the school menu (credit I. Oyerinde)