

Boosting demand for orange-fleshed sweetpotato through nutrition counseling at Ghana health service facilities

We introduced the pro-vitamin A-rich orange fleshed sweetpotato (OFSP) to the nutrition counselling program of the Ghana Health Service in the Northern and Upper East Regions of Ghana. In 2015 and 2016, over 8,000 pregnant or lactating women received counselling (Fig. 1), including cooking and feeding demonstrations, and were encouraged to grow or buy OFSP. In 2016, over 4,000 women received vouchers to get free samples of planting material and roots from local producers and were encouraged to buy more. At the end of the season, more than 90% indicated a willingness-to-pay for OFSP planting material and roots, and 15-16% had actually done so.

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Fig. 1 Training on OFSP utilization for expecting and lactating mothers at the Ghana Health Service facility (credit E. Dery)



What was the problem?

Undernutrition, including micronutrient deficiency, is a widespread public health problem in Ghana, and is particularly severe in two northern regions, where over 30% of children under five are underweight or stunted. Sustainable solutions to solving this problem are needed, and improving nutritional knowledge and access to healthy foods complement efforts such as industrial fortification of foods and vitamin A supplementation and are particularly relevant for rural dwellers. The provitamin A-rich orange fleshed sweetpotato (OFSP) is a biofortified crop that can be effective in

combating vitamin A deficiency at the community level, but for sustainable impact, it needs to be present on farms, in gardens, and in markets, and sought after by consumers. In northern Ghana, OFSP was unknown when we started this effort.



What did we want to achieve?

We wanted to introduce OFSP to pregnant and lactating women to benefit them (Fig. 2) and their families, particularly their children under two years of age, who are the most at risk for vitamin A deficiency. We wanted to do this in a way that would have sustainable impact, by encouraging consumption and production at the household garden level, while also encouraging the broad popularization and commercialization of OFSP as a nutritious, climate-resilient crop suitable for rain-fed and irrigated production in northern Ghana. We wanted to evaluate whether we could use the antenatal nutrition counselling and infant and young child feeding (IYCF) efforts of the Ghana Health Service (GHS) as entry points to help to achieve the sustainable inclusion of OFSP in household diets.



Where did we work?

We conducted our work at pilot sites in the Northern Region (NR) and Upper East Region (UER) of Ghana. We worked with Ghana Health Service staff through the Community Health Planning Services (CHPS) compounds, 7 in 2 districts of NR and 25 in 7 districts of UER. We chose locations for this intervention where we were working with agricultural extension and NGO partners to introduce OFSP to farmer groups as a commercial crop.



Sweetpotato
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Reaching 10 million
African households by 2020



**Jump
Starting**

Orange-Fleshed
Sweetpotato
in West Africa through
Diversified Markets



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Implementing partners:

NGOs

- iDE-Ghana
- Association of Church-Based Development Projects (ACDEP)

National programs

- CSIR – Savanna Agricultural Research Institute (SARI)
- Ghana Health Service (GHS)
- Ministry of Food and Agriculture





Fig. 2 An expecting mother is eating a complete OFSP meal comprising leaf stew and mpotompoto (mashed OFSP prepared with fish and Ghanaian spices) (credit E. Abidin)

How did we make it happen?

- In 2014, we developed information, education and communication (IEC) materials following the essential nutrition actions guidelines of the global Scaling Up Nutrition (SUN) movement. These included counselling cards to be used by health workers, a facilitator's guide, a training of trainers' manual on OFSP utilization and processing, a "Golden Sweetpotato" recipe-book, a poster showing 15 different ways to prepare local dishes using OFSP, and a brochure about the program, with contact information for OFSP planting material suppliers.
- In 2015, we worked with GHS nutrition department staff to train and organize volunteer health workers (VHW) to work with mother-to-mother and IYCF groups at the community level. Over 7,000 pregnant or lactating women received counselling, or participated in cooking or feeding demonstrations through 33 CHPS compounds in 9 districts where we were working to establish OFSP as a commercial crop.
- In 2016, we continued counselling activities and used the VHW network to distribute vouchers to enable beneficiaries of counselling to access small quantities of planting material (100 cuttings) and roots (2 kg), with the



Fig. 3. Counseling at ante-natal care services at GHS facility in Nyankpala (credit E. Abidin)

encouragement that they should buy more. In all, over 5,000 women received vouchers for vines and over 4,000 received vouchers for roots.

What did we achieve?

- The IEC materials were distributed to GHS District Nutrition officers and GHS staff through 33 CHPS in nine target districts.
- 332 CHPS workers comprising 221 health service staff and 111 volunteers were trained on nutrition counseling, including information on OFSP and its cultivation and utilization.
- Through individual counselling (Fig. 3), cooking, and feeding demonstrations (Fig. 4), 8,437 pregnant or lactating women received information on OFSP cultivation and use as part of a healthy diet for their young children and families.
- Using subsidized vouchers, 5,060 of the counseled woman obtained OFSP planting material during the planting season, and 4,110 received OFSP storage roots during the harvest season in 2016, with encouragement to purchase more.
- Vine producers received \$6,313 and the root producers \$2,055, giving a boost to their businesses.
- A survey of 419 of the voucher recipients conducted in early 2017, showed that:
 - over 95% knew about vitamin A
 - 100% ate OFSP at least once a week, when available, with most eating 3 to 4 times a week;
 - almost 100% indicated a willingness to pay for OFSP planting material and roots at reasonable prices, and 16% actually reported having done so. Similar results were found in both regions.

What are the next steps?

This integrated approach, with or without the use of subsidized vouchers, appears to have considerable potential for continuing at the locations where it was implemented and for upscaling to other Districts in Ghana. As awareness of the nutritional value and uses of OFSP and market demand for it develop, it will be increasingly easy and reasonable to include in the counselling efforts of the GHS and the extension programs of District Departments of Agriculture.



Fig. 4. GHS staff demonstrate how to incorporate OFSP into local dishes (credit E. Dery)