Why Invest in Orange-fleshed Sweetpotato in Mozambique?

A Vitamin A and Food Security Powerhouse Packed into One Root

Children and their mothers love OFSP (credit J. Low)

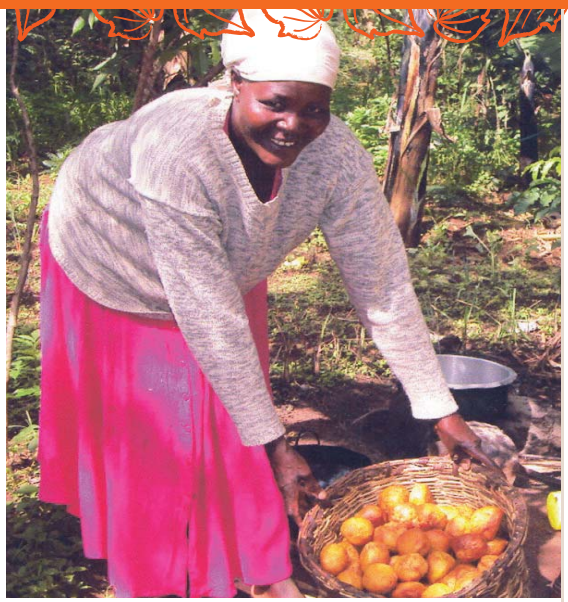
Sweetpotato, with roots that are white or yellow inside, is widely grown in Mozambique. This easy to grow, resilient crop is known as the classic food security crop that is there when the maize fails. Area under sweetpotato has expanded in Mozambique, in part because this crop provides more food (194 MJ) per hectare per day than maize (145 MJ) and cassava (138 MJ). Its short production cycle (3-5 months), ability to grow under marginal conditions and in post-disaster situations, and flexible planting and harvest times, are also driving its expansion.

So why invest in ***orange-fleshed*** sweetpotato (OFSP)? The answer is simple: to cost-effectively improve nutrition, empower women, and increase income earning opportunities, even for the poorest households. Mozambique has been at the forefront of breeding more drought-tolerant OFSP varieties and has 15 new OFSP varieties available for use, 6 of which are broadly adapted and 9 which are for specific agro-ecologies.

Invest for better nutrition

Every year, an estimated 114,000 Mozambican children die before the age of 5. Over a third of these deaths is attributed to undernutrition. Infant and young child feeding in Mozambique is characterized by low rates of exclusive breastfeeding, poorly time introduction of complementary foods, and a high prevalence of deficiencies of essential micronutrients (vitamin A, zinc and iron). An estimated 69% of preschool aged children in Mozambique are deficient in vitamin A, a micronutrient that helps young children grow and develop normally and stay healthy. Women of childbearing age, and food insecure and HIV/AIDS affected households are also at high risk of vitamin A deficiency (VAD). Research conducted in Mozambique has shown that OFSP introduced with a nutrition education campaign can reduce VAD in young children.

The National Sweetpotato Research Program in Mozambique has already incorporated OFSP into its conventional breeding efforts because it values **biofortified** crops -staple foods with very high levels of at least one essential micronutrient. OFSP is extremely rich in bioavailable beta-carotene, which the body converts into vitamin A (retinol) at a ratio of 12 to 1. **Just one small root (100-125 grams) of most OFSP varieties can supply the recommended daily allowance of vitamin A for children under five years of age.** Even at low yields (6 tons/ha), just 500 square meters can generate an adequate annual supply of vitamin A for a family of five. That is why **OFSP is a vitamin A powerhouse.**



Woman selling OFSP golden donuts for extra income (credit J.Low)

OFSP can be used as an entry point for changing behaviors that lead to large increases in vitamin A intakes among young children and mothers. In addition, OFSP contributes significant amounts of vitamins C, E, K and several B vitamins. Leaves also have good micronutrient contents and adequate protein (4%) for use as food and animal feed.

Urban consumers in Mozambique are increasingly conscious of the need to avoid consuming foods like refined white breads that increase the risk of diabetes (reflected in high glycemic index values). Sweetpotato is a good source of dietary fiber (2.5-3.3 g/100 gm) and is classified as a low glycemic index food.

Invest to empower women

In most parts of Mozambique, sweetpotato is grown, sold and processed in small quantities by women. OFSP provides women, as producers who also play a key role in making decisions about child feeding and household nutrition, with a low cost product that addresses both VAD and undernutrition. Due to its relatively low cost of production and the higher productivity of many OFSP varieties, women can grow surplus OFSP and sell both roots and processed products. The orange color attracts consumers. Women can make significant profits from selling sweetpotato products. Higher female income typically translates into better household nutrition and welfare.

Invest to improve income-generating opportunities

High rates of urbanization in Mozambique have given rise to the need for inexpensive but healthy foods for the urban poor and created concurrent demand for fast food outlets and healthier foods by a growing middle class. The nutritional advantages of OFSP offer a unique opportunity to promote increased marketing and processing of sweetpotato, which will boost demand and ultimately producers' incomes. A campaign just to eat a boiled OFSP root for breakfast instead of bread would vastly improve vitamin A intakes and create market opportunities. Backed by an effective nutrition awareness campaign, OFSP roots often sell at a higher price than white-fleshed roots.

OFSP can substitute for potato in making chips and crisps and serve as a partial substitute (20-50%) for wheat flour in bakery products. OFSP products have a golden color that make it easy for marketing campaigns to promote them as vitamin A enhanced products, thus increasing demand. Since all classes of farmers can grow OFSP, investing in fresh root and product marketing can easily be pro-poor if governments provide a supportive policy environment. The Mozambican government has OFSP integrated into both its food security and nutrition strategies and is committed to healthier diets for all. What is now needed is public and private sectors investors to work together to enable the Mozambican-bred OFSP drought tolerant varieties to reach both rural and urban consumers.

OFSP is the Sweet that Gives Health to All.

The Reaching Agents of Change (RAC) Project advocates for increased investment in orange-fleshed sweetpotato food-based approaches to combat vitamin A deficiency (VAD) among children less than five years old and their mothers. RAC also builds institutional capacity to design and implement gender sensitive projects to ensure wide access and utilization of orange-fleshed sweetpotato in selected African countries. Its efforts contribute to the broader Sweetpotato for Profit and Health Initiative (SPHI) which aims to improve the lives of 10 million African families by 2020.

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