

Helen Keller International (HKI)OFSP Update – Africa Region

Across six countries in Africa, HKI is working in partnership to support OFSP development, production, and consumption as part of an integrated nutrition-sensitive agriculture approach. We have achieved numerous successes and continue to search for new ways to innovatively support the growth of OFSP.



Fig. 1 Wife of vine multiplier on their OFSP plot in Pampangou Village, East region of Burkina Faso (Credit A. Yonli)

What is the problem?

Over the past several years, promising steps have been made by governments and several agencies, towards harnessing the contribution of agriculture to improve nutrition in Africa. This includes supporting research, technology, policy and program initiatives to develop and promote the adoption and consumption of biofortified crops across the continent. Orange-fleshed sweetpotato (OFSP), one of such crops promoted in several African countries, is proven to contribute significantly to improved dietary intakes and resolving nutrient deficiencies (especially of vitamin A). OFSP has also contributed to improved household food security and incomes, particularly of women, thereby enhancing women's status and contribution to household decision making. Despite these benefits, the coverage of OFSP interventions remains inadequate, particularly the extent to which these crops reach and are adopted by rural farmers, as well as consumed by nutritionally vulnerable populations, like women and young children. Production and marketing capacities of OFSP are often limited in most communities due to poorly developed and inefficient OFSP value chains including inadequate access to the sweetpotato vines, poor agronomic practices, limited access to land, water and technology, among other factors.

What do we want to achieve?

HKI is working to scale-up the adoption, production, marketing and consumption of OFSP to improve nutrition in many rural communities. Our goal is to support the integration of OFSP into local food systems, and thereby to improve OFSP availability year-round, raise the quality of local diets, boost family incomes and protect women and children from the serious consequences of vitamin A deficiency.

Where and with whom are we working?

HKI collaborates with governments, research agencies (like the CGIAR centers and other national research institutions), international and local NGOs, private businesses, and communities to integrate OFSP production and consumption within its nutrition programs in six African countries: Senegal, Mali, Côte d'Ivoire, Burkina Faso, Mozambique, and Sierra Leone.

How are we making it happen?

Where appropriate, HKI includes OFSP production and consumption within its integrated nutrition-sensitive agriculture programs, often referred to as "Enhanced Homestead Food Production" or EHFP program. HKI promotes the knowledge, acceptance, access to, and increased production and consumption of OFSP in food insecure rural communities through many activities that range from training smallholder farmers in vine cultivation, to marketing and social and behavior change strategies that improve OFSP image and household consumption. HKI also supports identifying opportunities to embark on semi-processed and processed OFSP products in support of better nutrition. We use diverse delivery platforms to facilitate farmer access and production of OFSP, including farmer field schools, demonstration plots and multiplication and distribution of the sweetpotato vines by local farmers. Our social marketing and behavior change interventions are guided by the Essential Nutrition Actions and Essential Hygiene Actions Frameworks and are delivered through multiple channels at the community level including home visits, group discussions, community theatrical

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Sweetpotato Profit and Health Initiative performances, videos, cooking demonstrations and dissemination of locally appropriate OFSP recipe books, flyers and radio messages, to boost demand and consumption. To encourage ownership and sustainability of our interventions, we focus on building local capacity through trainings offered to government officers, NGO partners, community groups and farmers on improved agronomic practices, nutrition, hygiene and health practices and gender sensitization.

What have we achieved so far?

As part of HKI's CHANGE project in Cote d'Ivoire, six high-performing OFSP varieties were introduced in villages in four different regions, grown alongside a local white variety. As the crops developed, local farmers helped test the varieties' performance under real-world conditions. Three of the six varieties were retained based on farmers' assessments of yield, disease resistance, taste, texture, and ease of cooking.

Through the rapid multiplication of vines in greenhouses, with an impressive capacity of 75,000 vines produced every two months, the CHANGE project provided women's groups in 42 villages with over 250,000 vines. These women also received training on the role of OFSP in nutrition and best practices for cultivation. National Agency for Support of Rural Development (ANADER) and HKI also supervised farmers who were newly adopting the crop, to provide assistance if needed. Through close collaboration between



Fig. 2 Group of women in the Association of Educating Mothers, preparing OFSP lunch meal for school children in Bandaoghin community, East region of Burkina Faso (Credit A. Yonli)

researchers, extension agents from the ANADER, local NGOs, and farmers, CHANGE was thus able to select and distribute a set of well-adapted and highly appreciated OFSP varieties in a short time.

Average yields of OFSP reached 20 tons per hectare in farmers' fields, about twice those of their locally grown white varieties—and tubers grew as big as 5 kg, five times larger than the average for local white varieties. This increased productivity was a major motivating factor for participants: in addition to diversifying their family's meals, they had enough to sell and earn additional income. Women trained through CHANGE started selling both the raw tubers and value added products like cakes and breads made with OFSP flour.

Project survey showed average agricultural income per person to be about \$155 per season after the introduction of OFSP—double pre-project levels. This increase in revenue for women likely translated into better nutrition and wellbeing for the entire household. While increased revenues were very welcome, the main goal of introducing OFSP was improved nutrition—which would not happen if people did not eat the roots. CHANGE thus worked with local NGOs to create, test, and promote several dishes based on OFSP leaves and roots, such as attiéké, a popular local dish typically made from cassava; these were aimed at improving the nutrition of the whole family, but particularly that of children under age two (Fig. 2). This strategy was just one part of a comprehensive approach to behavior change, which included training parents on best practices for feeding and care of young children, including providing dishes based on OFSP.

As part of its AGRANDIS project implemented in Burkina Faso and Mozambique, HKI increased production and consumption of OFSP (and other nutritious fruits and vegetables) to many rural families. The AGRANDIS projects provided OFSP vines to more than 25,000 smallholder farming families using a network of decentralized vine multipliers (DVMs) at the community level, who made extra income by selling vines to local farmers. In Burkina Faso alone, over 150,000 vines were produced during one planting season by 15 farmers who were trained as vine multipliers in their communities. The AGRANDIS project also established six OFSP cooperatives in Burkina Faso to enhance the OFSP value chain.

What's next?

HKI actively seeks to include OFSP within its integrated nutrition and agriculture programs in places where white or cream-fleshed sweetpotatoes are grown and consumed as a secondary staple. Enabling women, who serve as major household food producers as well as decision-makers on children's nutrition and household diets, to sustainably grow OFSP will bolster the fight against malnutrition and vitamin A deficiency in many contexts in Africa.

List of strategic partners for OFSP dissemination

Ministries of Agriculture and Health of Burkina Faso, Côte d'Ivoire, Mali, Mozambique, Senegal, Sierra Leone; International Potato Center (CIP); Centre National de Recherche Agronomique (CNRA), Côte d'Ivoire; Institut National de l'Environnement et de Recherches Agricoles (INERA), Burkina Faso; Institut Sénégalais de Recherche Agronomique (ISRA), Senegal; Agence Nationale d'Appui au Développement Rural (ANADER), Côte d'Ivoire.

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