



Funding support

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Additional support is being sought from USAID, Irish Aid, CIDA, and other donors with a long-standing interest in combating poverty and malnutrition through food-based approaches in Sub-Saharan Africa.

The **SPHI** is the outcome of a comprehensive consultative process initiated by the **International Potato Center** (known by its Spanish acronym, CIP)



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Enhancing the Lives of **10 million African Families** in **10 Years**

What is SPHI?



The Sweetpotato for Profit and Health Initiative (SPHI) is a 10-year, multi-donor initiative that seeks to reduce child malnutrition and improve smallholder incomes through the effective production and expanded use of sweetpotato. It aims to build consumer awareness of sweetpotato's nutritional benefits, diversify its use, and increase market opportunities, especially in expanding urban markets of Sub-Saharan Africa.

What are we waiting for?

Sweetpotato is the third most important food crop in terms of production in East Africa and the fourth most important food crop in Southern Africa.

But there has been a lack of investment to improve sweetpotato yields, address its market potential, or redress its negative perception as a poor person's food.



Huge potential return on investment

Investment in disease-free planting material and in the development of sweetpotato varieties that meet the needs and preferences of producers and consumers leads to high returns. For example, China's Shandong province experienced a 30% increase in yields from just such an investment. Moreover, the value of the increased productivity was \$145M per annum, with an internal annual rate of return of 202%.

The potential health impact is considerable. Vitamin A deficiency is endemic in Sub-Saharan Africa, leading to increased risk of blindness, disease, and premature deaths, particularly in children. Studies estimate that widespread uptake of orange-fleshed sweetpotato would significantly reduce Vitamin A deficiency in over 50 million children under the age of five in Sub-Saharan Africa.



Repositioning sweetpotato in African food economies

SPHI has a vision of boosting the profile and position of sweetpotato in the food economies of Sub-Saharan Africa. Several areas of focus will help tap more fully into sweetpotato's potential, including:

- Expanding market opportunities for sweetpotato, including processed products such as bread, chips, or juice; different fresh varieties adapted to consumer preferences; and its use as animal feed
- Responding to a growing urban food market with products that adapt to urban tastes and promote the image of sweetpotato as a healthy food for all
- Increasing access to quality planting material that is disease free and resistant to threats such as drought or insect infestation
- Building capacity for effective sweetpotato research and development programs
- Broadening the dissemination and consumption of orange-fleshed sweetpotato as a highly effective food-based approach to combating Vitamin A and other nutritional deficiencies, especially among young children
- Boosting the yield, control over resources, and income-generating potential to producers, most of whom are small-scale women farmers

Projected impacts

At the end of 10 years, SPHI is expected to improve the lives of 10 million households in 10 years. It also aims to achieve an annual value of \$241 million in additional production in 17 African countries. The vast majority of beneficiaries will be non-commercially oriented producers, mostly women, and their families. Capacity in the sweetpotato community of practice will be significantly strengthened through the presence of strong support platforms. The organizational structure of the SPHI is shown in additional page.



A two-phased approach

Phase I of SPHI has a heavy emphasis on breeding. It seeks to build an integrated breeding system to significantly boost yields, and explicitly address the preferences of resource-poor women and children, as both producers and consumers. Other components of Phase I address increased consumption of orange-fleshed sweetpotato to combat Vitamin A deficiency, the testing of delivery systems that can potentially be scaled up for greater impact, and the establishment of improved breeding capacity in Africa, for Africa. Phase II focuses more resources on broad dissemination of the technologies developed in Phase I.

Areas for further investment in the SPHI

Many components of the SPHI remain unfunded, for example:

1

PROOF-OF-CONCEPT PROJECTS

These are intervention projects with strong research components to build the evidence base for sweetpotato impact. Potential efforts include linking orange-fleshed sweetpotato to school feeding programs in Ghana, integrating an already developed text book on science research activities using sweetpotato into the Ugandan school system, and building an effective value chain for producing sweetpotato biscuits with a large agro-processing firm in Malawi.

2

CROP MANAGEMENT

With good varieties and clean planting material, farmers can double yields under good rainfed conditions. If we add improved agronomic practices, soil management, and water management we could triple those yields. In South Africa, where irrigation and fertilization is used, yields of 40-55 tons/ha are attained. This is a completely under-researched area regarding smallholder practices in the varied agro-ecologies of Sub-Saharan Africa. We believe that crop management research should be undertaken in areas where sweetpotato marketing occurs as farmers are willing to intensify more when there is an outlet for their surplus production.

3

MONITORING AREA EXPANSION AND THE CHANGING ROLE OF SWEETPOTATO

One of the reasons for underinvestment in sweetpotato is the lack of quality statistics for crops harvested piecemeal in Africa, such as cassava and sweetpotato. The result is difficulty providing hard evidence to policy makers. CIP's remote sensing team has shown that it is possible to distinguish sweetpotato from other crops, and hence obtain vastly improved estimates of the amount of land under sweetpotato production. Expanded use of this work tied to research on the impact of climate change on food security, would reveal and help monitor sweetpotato's increasing role in African food systems.

4

CAPACITY STRENGTHENING

Technical support platforms based in leading national programs in Uganda, Mozambique, and Ghana can most effectively serve as resource and training centers for both research and development stakeholders if additional funding is received to support course development and execution, student research costs, and the development of training and promotional materials. The ultimate goal is to establish a vibrant sweetpotato community of practice.

5

ADVOCACY, DEMAND CREATION, AND EFFECTIVE PARTNERSHIPS

The vision is to alter the dominant image of sweetpotato on the continent as being a poor person's crop to that of a healthy crop for all. Policy makers at all levels need to be reached as well as those in the agriculture, health, and education sectors. Experience in Mozambique and Uganda has demonstrated the importance of demand creation campaigns to create awareness of the health benefits of orange-fleshed sweetpotato. As all work is done in partnership, we need to assess the effectiveness of different types of partnerships in which we engage to enable lessons learned to be drawn and improvements to be made.

6

LARGER-SCALE DISSEMINATION

Before we can engage in larger-scale dissemination, we must have the right varieties in place and the appropriate delivery system in place given the socio-economic and agro-ecological conditions of the country. At different points in time during the first five year phase, we expect 9 countries to have the appropriate varieties for moving forward on a larger-scale, and at least an additional 6 in the second phase. All of these programs will closely monitor distribution and assess uptake. Those focused on orange-fleshed sweetpotato need to include a nutrition component.