

Strengthening the SPHI Community of Practice: “A sweetpotato family, tremendously rewarding”

Quote from a member of the Speedbreeders COP



Fig 1. Participants at a deep dive workshop on OFSP recipes as part of the 2018 sphi technical meeting (Credit J. Low)

- Successfully held annual meetings for four technical community of practice (CoP) working groups over five, years with almost 1,000 participants (31% women) in total
- Sweetpotato for Profit and Health Initiative (SPHI) Technical Meeting held annually with over 100 participants and over 40 organizations participating during last two years (Fig. 1)
- Annual production of the Status of Sweetpotato in sub-Saharan Africa (SSA) report, to which SPHI Steering Committee members share their beneficiary statistics. As of July 2019, 6.2 million households have been reached.
- Revamping of the Sweetpotato Knowledge Portal, including a new Dashboard that tracks the number of beneficiaries by country and organization, the location and contacts of quality vine multipliers, and information on key traits of released varieties.
- Development of various tools to improve data collection, monitoring, and analysis for social scientists, breeders, and laboratory work flows and training on their use.



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What was the problem?

For decades, sweetpotato was an orphan crop, with limited public and private sector investment. As a consequence, the level of knowledge concerning how to grow and utilize the crop and the nutritional value of the vitamin A rich orange-fleshed types was virtually unknown. The significant funding for the Sweetpotato Action for Security and Health in Africa (SASHA) project in 2009 provided an opportunity to exploit the potential of sweetpotato and raise its profile as a health food for all. To ensure that research outputs from SASHA reached next and endusers quickly, there was a concurrent launch of the Sweetpotato for Profit and Health Initiative (SPHI) which set the goal of reaching 10 million African households in 16 countries with improved varieties of sweetpotato by 2020 and diversified use. As of July 2019, 6.2 million households have benefitted.

Sharing of knowledge is essential for meaningful increase in productivity and utilization to happen. From the outset, we asked the question: What skills, partnerships and communication strategies are needed to successfully implement the initiative? During Phase 1 (2010-2014), each of the 3 SSA sub-regions held two meetings a year, covering a diverse set of topics with the expectation that strong sub-regional communities of practice (COPs) would emerge. However, as the topics tended to vary per meeting, with representatives from different organizations often changing, an evaluation of this approach revealed

a preference for more emphasis on technical skill building. Thus, for Phase 2, a regional, technically-focused Community of Practice approach was adopted. Four CoP groups were formulated and met annually: Speedbreeding and Genomics (Breeding); Seed Systems and Crop Management (Seed System); Marketing, Processing and Utilization (MPU); and Monitoring, Learning and Evaluation (MLE). The annual SPHI Technical meeting continued, which was envisioned as the forum bring all disciplines together, from both the scientific and delivery-focused communities.

What objectives did we set?

We strove in Phase 2 to:

- Continue building a gender-sensitive, sustainable CoP, with a growing number of organizations interested in promoting sweetpotato, through mutual learning at regional technical CoP meetings and virtually.
- Capacitate and backstop country level breeding, germplasm management and nutritional quality assessments through sub-regional Sweetpotato Support Platforms (SSPs) in Uganda, Mozambique and Ghana and the Food Analysis and Nutrition Evaluation Lab (refer to other relevant briefs for details)
- To monitor, evaluate, learn, and advocate from the research program experiences, achieving significant gains in managing partnerships and exchanging information within SASHA components and between diverse sweetpotato projects and programs under SPHI.

Where did we work?

The SASHA governance team is based in CIP's regional office in Nairobi, Kenya. SSPs have been established within each major sub-region of SSA. The East and Central African SSP is hosted at the National Crops Resources Research Institute (NaCRRI) in Uganda and the Kenyan Plant Health Inspection Service (KEPHIS). The Southern African SSP is based at the Agrarian Research Institute of Mozambique (IIAM) in Maputo. The West African SSP is located at the Crops Research Institute (CRI) in Kumasi, Ghana. CoPs principally serve the 17 SPHI target countries¹.

What did we achieve during SASHA Phase 2?

By the end of Phase 2, the SPHI Steering Committee (SSC) includes five donor organizations and 13 other organizations committed to achieving the SPHI goal². An annual *Status of Sweetpotato in Africa* report citing progress in varietal release by country, dissemination statistics by country and organization, and an updating of status and location of vine multipliers by country has been produced. Starting in 2018, the updating process of multiplier status has been primarily conducted by phone interview.

The number of organizations participating in the Annual SPHI Technical meeting and the number of men and women attending during the past five years is shown in Fig. 2. In total, the CoP meetings had 999 participants. About one-third of the participants were women, a reflection of the staff composition in many agriculture organizations. Over 40 organizations participated during the last two years. (Fig. 5)

The evaluation of the four technical CoP working groups has been exceptionally positive. Minutes from all meetings, including evaluation findings are available at www.sweetpotatoknowledge.org. As shown in Fig. 3, the number of organizations participating in the different technical CoPs varied as did the leadership style of each group. The Breeding and Seed System groups strived to have a consistent core group of participants return every year, so as to steadily build their knowledge base. The MPU CoP conducted calls for abstracts on selected themes, so participant composition based on selected abstracts could vary significantly each year. However, it is clear from Fig. 3, that interest by different organizations in MPU activities has been steadily increasing since 2016. This is driven by growing interest in processing orange-fleshed sweetpotato into diversified products. The MLE CoP mostly consisted of CIP staff members engaged in monitoring and evaluation activities on different dissemination projects. Other development organizations had their own M&E systems, and hence there were only two other organizations that consistently attended. However, several organizations did adopt or adapt some of the standardized monitoring instruments developed specifically for sweetpotato by the MLE CoP.

Fig. 2 Numbers Attending Annual SPHI Technical Meeting

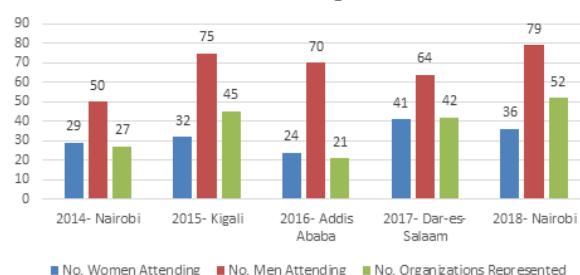
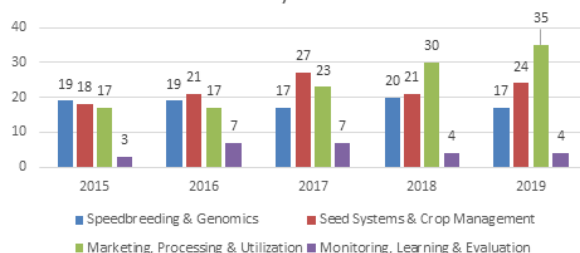


Fig. 3 Number of Organizations Participating in Different Community of Practice Working Groups By Year



One frequently mentioned benefit of CoP participation was the opportunity to network (see box). At times this would result in joint project development; in many cases, it was just knowing who to turn to for answers when a problem arose. Clearly, brochures and other training and communication materials developed under SASHA were distributed at CoP meetings. These include two to four-page briefs prepared annually for each sweetpotato project under the SPHI umbrella and each major SASHA research output.

This CoP has been an important annual professional meeting at which I have seen capacities of all grow, and at which I have formed lasting bonds with colleagues. Opportunities to share learning by going to different locations have also been valuable. Quote from CoP Participant.

During the course of Phase 2, specific training needs were identified that required more time than was available in a typical 2-4 day CoP meeting. Separate courses were conducted in managing and analysis survey data using CSpPro, STATA, and tablets with ODK software for the MLE CoP; Applied Statistics for the Breeding CoP; tissue culture technology and virus indexing for relevant members of the Seed System CoP; food safety training related to the MPU CoP; and for all interested parties, training on how to use the Sweetpotato Knowledge Portal and preparing

¹ Kenya, Uganda, Tanzania, Ethiopia, Rwanda, Burundi, DR Congo, Zambia, Malawi, Mozambique, Angola, Madagascar, South Africa, Nigeria, Ghana, Burkina Faso, and Benin.

² The organizations are CIP, FARA, the CGIAR Roots, Tubers and Banana Program (RTB), HarvestPlus, the Natural Resources Institute, PATH, Farm Concern International, Helen Keller International, and North Carolina State University (NCSU), Catholic Relief Services, Farm Africa, World Vision Australia, and Euro Ingredients Ltd. The five donors are: Bill & Melinda Gates Foundation, UKAid, USAID, Irish Aid, and the Alliance for a Green Revolution in Africa (AGRA).



Fig. 4 Winner of the 2018 Best Sweetpotato Science Paper, Derick Malavi (2nd from left), for his work on food safety concerning OFSP purée. Accompanied by SPHI Co-leader, Jan Low (on left), Hugo Campos, CIP's Director of Research (2nd from right), and Tawanda Muzhingi (on right), Food Scientist and supervisor of his study (Credit: F. Njung'e)

documents and datasets for Open Access. All SASHA survey datasets are available to the public in Dataverse.

Knowledge and best practice are shared through the Sweetpotato Knowledge Portal, which anyone can register and contribute to. All protocols, tools, and tool kits to enhance standardized data collection across projects and countries, training manuals in five languages, recipes, briefs on progress, a catalogue of sweetpotato varieties, advocacy materials, event announcement and stories can be accessed at www.sweetpotatoknowledge.org. Details on the Knowledge Portal are provided in a separate brief.

Taking the SPHI goal into account, developing materials to promote update of sweetpotato, especially orange-fleshed types, was also a major focus. One of the most popular outputs has been the OFSP Passport to Good Health. This is a passport sized booklet of 39 pages that contains all the essential facts and figures about sweetpotato and contact information for all SPHI partners. It is now in its 4th edition and available in English and Portuguese.

Starting in 2017, two annual awards of \$500 each were aligned with the SPHI Technical Meeting. One award is for the best sweetpotato scientific paper published during the proceeding calendar year (Fig. 4). The second is the Communication for Change award, that supports creative and successful approaches to getting new technologies or tools disseminated and used.

Where there any key challenges or lessons learned?

Leadership and willingness to experiment makes a difference. The scientists leading the different technical CoPs had different styles. The most dynamic CoP was the Seed Systems and Crop Management CoP that typically had an agenda that combined traditional presentations with panel discussions and working group sessions.

This group used the concept of Learning Journeys, in which teams prepared for their field trips and shared findings from their group effort upon return. In between meetings, virtual topics were launched for discussion by email, at least six per year.

The funding challenge. The old adage seeing is believing holds true when building a CoP. For many in the CoP, a new technology is internalized when seen in use or discussed with others, then when reading about on the internet. Participants whose organization belongs to the SPHI Steering Committee are expected to pay their own way to attend the SPHI annual meeting, as a sign of commitment. This requirement restricted the ability of public sector Ministries and even farmer organizations to join the SPHI. Moreover, the lack of additional funding to support more joint projects and collaborations across Steering Committee members no doubt hindered attaining the dissemination goal by 2020.

What's next?

For the last few years, the SPHI members have recorded an increase of around 1 million African families using improved varieties of sweetpotato annually. The SPHI Steering Committee will need to decide if the SPHI should be extended through 2023 to meet the 10 million household goal. Clearly, information exchange will continue via the Sweetpotato Knowledge Portal and other organization-based websites. However, the current structure has proved successfully in building a vibrant CoP of practice, that with support will continue to grow in breadth and depth. More emphasis needs to be placed on getting government and additional private sector commitment to investing in sweetpotato. A major question beyond 2023, is whether sweetpotato development and promotion would be more successful if incorporated into a broader platform tackling malnutrition and/or a broader set of crops, like all roots and tubers.



Fig 5. Participants at the 9th Annual SPHI Technical Meeting, held in Nairobi, Kenya (Credit: F. Njunge)

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Partners • International Potato Center (CIP) • Forum for Agricultural Research in Africa (FARA) • CGIAR Roots, Tubers and Banana Program (RTB) • HarvestPlus (HPlus) • Natural Resources • Institute (NRI) • PATH, a global health organization • Farm Concern International (FCI) • Helen Keller International (HKI) • North Carolina State University (NCSC) • Catholic Relief Services (CRS) • Farm Africa • World Vision Australia (WV) • Euro Ingredients Ltd (EIL)

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VISIT THE SWEETPOTATO KNOWLEDGE PORTAL

www.sweetpotatoknowledge.org



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