The DASHBOARD: Visual Monitoring of Progress Towards 10 Million Beneficiaries, Varieties Available, and Where to Get Vines

The Sweetpotato for Profit and Health Initiative (SPHI) has already reached over 4.5 million beneficiaries with improved sweetpotato varieties in 15 countries in Sub-Saharan Africa (SSA). The dashboard launched in 2018 presents an online and interactive status update, disaggregated by country. The dashboard also shows the progress made towards the release of improved varieties by major breeding traits per country, and a map of the Decentralised Vine Multipliers (DVMs) network in SSA. Different charts on the dashboard can be downloaded as images or PDF files for use in reports and presentations.

THE SWEETPOTATO FOR PROFIT AND HEALTH INITIATIVE

TARGET
10 MILLION households by 2020 in 17 target countries

PROGRESS
4,507,639 households reached by Dec 2017

ACTIVE
15 countries

LEARN MORE | VIEW PROGRESS

Progress Tracker | Variety Release | SP Vines Availability

SPHI Participating Countries
- Target Country
- Others
- Support Platform
- Research Training

Fig 1. Starting at the SPHI Infographic, reach the Dashboard options on www.sweeetpotatoknowledge.org by clicking on View Progress in the SPHI update box

What is the problem?

The Sweetpotato for Profit and Health Initiative (SPHI) is a multi-partner, multi-donor initiative that seeks to reduce child malnutrition and improve incomes in 10 million households by 2020 through the effective production and expanded use of sweetpotato. The initiative is currently active in 15 out of 17 target[1] countries. Every year, the SPHI reports the status of sweetpotato production in Sub-Saharan Africa (SSA) and progress towards set targets for dissemination of improved varieties. Summary figures on numbers of beneficiaries reached are presented on the Sweetpotato Knowledge Portal[2] in form of an infographic (Fig. 1). However, presenting additional information besides households reached was not easy due to space limitations. It was also difficult to build in interactivity with the data because an infographic is static by nature. The challenge, therefore, has been how to provide a quick, interactive, and interesting way of tracking progress in key SPHI indicators by the sweetpotato research and development community.

What do we want to achieve?

Dashboards provide a visual representation in a quick, interactive and easy way to follow progress in real-time. The dashboard seeks to summarize and present progress in key SPHI indicators to the wider sweetpotato community through the Sweetpotato Knowledge Portal, which is the major communication tool for the global sweetpotato community of practice (CoP).

How are we going to make it happen?

The Sweetpotato Action for Security and Health in Africa (SASHA) project has the support to help build the SPHI community of practice and disseminate research findings as one of its key responsibilities. The SPHI receives many requests as to numbers reached in different countries and how to access planting material of improved varieties. A visual dashboard can help sweetpotato CoP members access information and graphics quickly. Three key metrics were prioritized for the dashboard:

- Progress in reaching 10 million beneficiaries – which reports trends in the number of households reached with improved sweetpotato varieties. It specifically reports the number of beneficiaries receiving vines directly from a project (i.e. direct beneficiaries) and those receiving vines from farmer networks (indirect beneficiaries).

- Status of sweetpotato variety release in SSA – reports trends in variety release by 11 key traits, including flesh color, maturity period, dry matter content, etc. It also provides contact information for the head breeder in each country to facilitate follow-up by the portal user.

CIP INTERNATIONAL POTATO CENTER A CGIAR RESEARCH CENTER

SASHA Sweetpotato Action for Security and Health in Africa

CGIAR RESEARCH PROGRAM ON Roots, Tubers and Bananas

- Improvement in access to sweetpotato planting material – provides a navigable interactive map of decentralised vine multipliers (DVMs) in Sub-Saharan Africa (SSA) and key information including their multiplication status, location and contacts.

Who are we working with?

The dissemination information on the dashboard is provided by partners in the SPHI Steering Committee[3], using agreed upon definitions for direct and indirect beneficiaries. National and CIP breeders provide detailed information on released varieties. Geo-referenced DVM data is collected by a CIP monitoring specialist or specific M&E project officers.

What have we achieved and learned so far?

The first version of the dashboard was presented in October 2017 at the annual SPHI meeting, and all development and testing finalised by December the same year. Under **Progress Tracker**, users can now find information on the number of direct and indirect beneficiary households reached since the SPHI was launched in 2009 (Fig. 2). Furthermore, by clicking on a specific country in the map of Africa, country specific data are obtained and information on numbers reached by organization are also available.
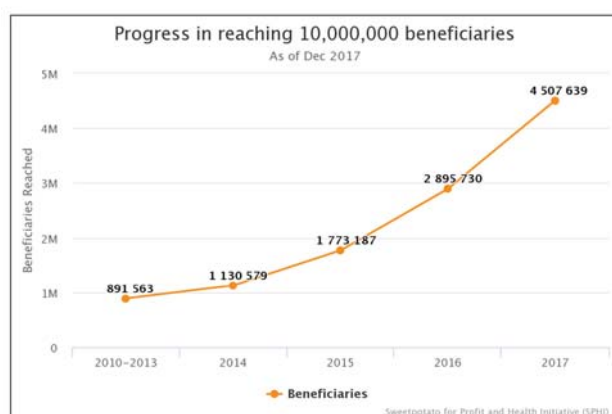
Fig 2. Overall progress trend

Under **Variety Release**, the number of varieties released since 2009 and having a specific trait listed on the dashboard is presented using a colourful circle whose size is proportional to the number of varieties with the trait (Fig. 3). By clicking on the box with the listed trait, the map highlights which countries in SSA have varieties with that specific trait (Fig. 4). The darker the blue, the more varieties with that trait have been released in a specific country.

Finally, under **SP Vines Availability**, viewers can locate where vine multipliers are in SPHI countries, by zooming in sequentially until a specific multiplier is located (the blue marker in Fig. 5). Contact information is provided. In addition, summary information on the gender and age breakdown of DVMs is provided.

A major feature is that all visualisations can be individually exported to different formats such as PNG[4] or PDF[5] for inclusion in external reports or presentation. Since its launch, the dashboard has received over 300 unique views.

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[3] This includes dissemination efforts led by the International Potato Center (CIP), HarvestPlus, Farm Concern International, Catholic Relief Services, Helen Keller International, Farm Africa, national programs with dissemination grants and PATH.
[4] Portable Network Graphics is a graphics file format
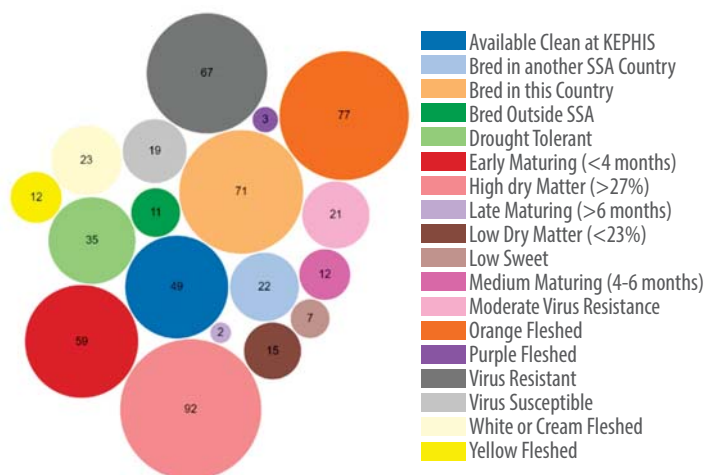[5] Portable Document Format

Legend:
- Available Clean at KEPHIS
- Bred in another SSA Country
- Bred in this Country
- Bred Outside SSA
- Drought Tolerant
- Early Maturing (<4 months)
- High dry Matter (>27%)
- Late Maturing (>6 months)
- Low Dry Matter (<23%)
- Low Sweet
- Medium Maturing (4-6 months)
- Moderate Virus Resistance
- Orange Fleshed
- Purple Fleshed
- Virus Resistant
- Virus Susceptible
- White or Cream Fleshed
- Yellow Fleshed

Fig 3. Variety release by key traits
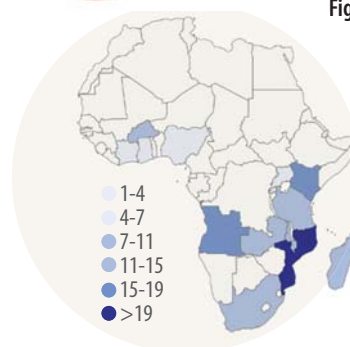
1-4
4-7
7-11
11-15
15-19
>19

Fig 4. Map showing countries that have released sweetpotato varieties that are orange-fleshed

What's next?

In 2018, we began updating the beneficiary data twice a year, in February/March as well as in August. The updating of the information on varieties is coordinated during the annual breeding CoP meeting, usually held in June. The most time-consuming effort is to update the DVM status, recording new multipliers and verifying that multipliers from the previous year are still producing planting materials. In 2018, to lower costs, we will be trying to see if existing multiplier status can be captured by phone instead of costly field visits. The monitoring, learning and evaluation CoP continues to encourage development and use of standardized protocols in collecting and reporting data across projects and organizations.
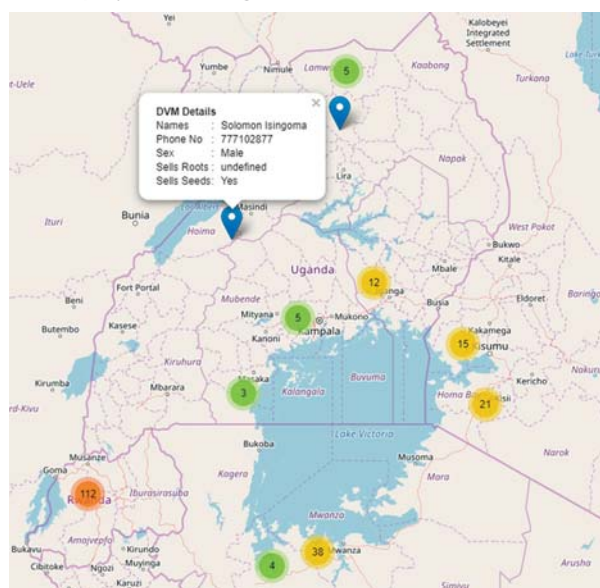
Fig. 5 Section of map on SP Vines Availability dashboard. Each circle contains the number of DVMS within a given area. Specific contact information is provided at each blue pin for a given multiplier.