# RESEARCH PROGRAM ON Roots, Tubers and Bananas

## Lessons from the

# Sweetpotato Seed System and Crop Management Community of Practice



Sweetpotato seed systems and crop management Community of Practice Meeting, Arusha, Tanzania. May 2016 • Credits, C. Bukania

This brief describes the establishment and evolution of a sweetpotato seed systems community of practice (CoP) and aims to identify potential lessons which could enhance the learning in other communities of practice, in particular the CGIAR Research Program on Roots, Tubers and Bananas (RTB) cross-cutting cluster on Access to Quality Seed and Improved Varieties (CC2.1).

#### **Identifying and using effective learning practices**

Effective learning and collaboration across organizations and disciplines is essential if agricultural research for development (AR4D) is to benefit the livelihoods of small holder farmers. However, identifying and using mechanisms to enhance learning depends on: the existence of a shared area of enquiry; characteristics of the stakeholders involved, and individual and organizational objectives.

An assessment of the sweetpotato seed system and crop management community of practice (SS-CoP) was commissioned by RTB to generate lessons that could inform other RTB crops and Centers¹. The study was carried out between August and November 2016. A literature review on communities of practice was conducted to inform the conceptual framework and methodology for the study. Data was gathered using semi-structured questionnaires targeting members of the SS-CoP and other stakeholders in CIP and members of the RTB cross-cutting cluster (CC2.2). This was followed by key informant interviews of a sample of the respondents.

#### What is a Community of Practice?

A CoP is a group of people organized around a specific domain in which they have a common interest and de-

<sup>1</sup> The full report is available here.

sire to share information, knowledge; and to learn from each other in order to improve performance.

## The Sweetpotato Seed System and Crop Management Community of Practice: establishment and evolution

The sweetpotato seed systems and crop management (SS-CoP), was established in 2013 to: facilitate networking, exchange of experiences and learning in order to generate new knowledge about how to tackle constraints in sweetpotato seed systems across Sub Saharan Africa (SSA). The establishment of the SS-CoP started off gradually with a series of conversations, to concretize the domain and the target members and to determine the appropriate mechanisms and tools. Establishment took advantage of existing relevant networks affiliated with the Sweetpotato for Profit and Health Initiative (SPHI), to form its initial membership.

#### **How the SS-Cop functions**

The SS-CoP functions through five components which it uses as mechanisms for different types of learning (see Box). It is co-led by three representatives from different National Agricultural Research Institutes (NARIs) coordinated by a project manager from CIP, and has part-time support from a communications specialist (25%) and data manager (10%). Support from senior management within CIP (e.g., the buy–in, and ownership of a shared vision; provision of funding) is vital to the success of the CoP. The five components were integrated incremen-

tally and combined various mechanisms to respond to emerging opportunities and needs. This combination is effective in meeting members' different needs and approaches to learning.

#### What are the results from the CoP?

The wider SS-CoP has around 120 members (70% male and 30% female) registered for the on-line D-Group Forum, 88% are from SSA and 11% from elsewhere. Of this total membership it is estimated that 46% are 'occasional', about third (34%) 'lurkers' and 20% 'active' participants in the on line D-Group.

### Members highlight the following benefits from the SS-CoP:

- being able to network with diverse experts across SSA and globally;
- finding solutions to some of the challenges they face in their work;
- gaining skills, new ideas and techniques either through organized training or informally through Learning Journeys or online discussions.

#### **Examples of behavior change include:**

- members have increased the frequency of their interactions and share information openly;
- members pick an idea, skill or technology and try it out in their own context. An example of this is the modification and re-designing the mobile net tunnel concept for different sizes, and using different construction materials.

## The five components of the Sweetpotato Seed and Crop Management CoP

#### Face to face (F2F) meetings

- A. One annual meeting with the broad community (50 participants)
  - **1. Participants come from NARIs**, non-government organizations implementing sweetpotato seed interventions, regulatory bodies and different CIP funded projects
  - 2. Disciplines include: breeding, seed systems, agronomy, agricultural economics, social sciences
- B. A second annual meeting with institutions with sub-grant agreements to develop sustainable models for pre-basic sweetpotato seed production (20-30 participants).
  - 1. Learning Journeys: these are field trips held as part of the annual face to face meetings.

    Learning Journeys are designed to support systematic learning and reflection on key topics.
  - **2. On-line Discussion Group (D-Group) forum** (sweetpotato-seed-system-aficionados-commu nity-of-practice@googlegroups.com). A topic is led by different members every two months. A synthesis of the topic is then uploaded onto the web based portal. (http://www.sweetpotato knowledge.org/topics/seed-systems-and-crop-management-cop/).
  - **3. Web based repository and portal:** www.sweetpotatoknowledge.org. The sweetpotatoknowledge portal (SPKP) is open to anyone with an interest in sweetpotato.
  - **4. Funded portfolio of activities** in support of sustainable production of pre-basic sweetpotato seed, in eleven countries. These are implemented through sub-grant agreements (SGAs) with 12 national agricultural Research Institutes (NARIs) and one private sector company.

## The following lessons have been identified from the assessment of the SS-CoP

- 1) Balance diversity and depth in membership: Membership implies commitment to the sphere of interest and a collective competency to learn from each other. Seed systems is multi-disciplinary, and contributes to research outputs and development outcomes. A diverse membership enriches the community and contributes to a dynamic CoP. However, a broad focus, may preclude more in-depth exploration of issues.
- 2) Identify well-articulated and shared needs which will drive the CoP: The identification and definition of the domain, expressed as a shared need for learning should be among the initial activities in the establishment of a CoP. The domain should reflect potential synergies and learning opportunities for the membership.
- 3) Identify knowledge sharing approaches and mechanisms appropriate and relevant to the membership of the CoP: The types and mix of mechanisms should be informed by the characteristics of potential members and the purpose of the CoP. The SS-CoP found the combination of mechanisms effective in meeting the diverse learning needs and capacities of its members. The mechanisms were complementary, e.g. the F2F meetings were used to follow-up issues discussed in online discussions and for identifying future topics for the D-Group.

There are also different attitudes and ways of learning depending on type of organization, discipline, age and gender. If social media is an option then consider how access and use may be influenced by age, and gender characteristics. A CoP can benefit from both open and private discussion spaces. The online D-Group forum and the SPKP were examples of the open spaces the SS-CoP developed for its members, while the funded portfolio of collaborative activities was open only to the SGA Principle Investigators and was hence considered as a private space. The inclusion of a funded portfolio of collaborative activities enriched the knowledge sharing and learning processes by providing opportunities for testing and generating knowledge.





Getting the details about "Vaporguard" – a product which extends the shelf life of sweetpotato cuttings. Crop Bioscience TC Laboratory, Arusha, Tanzania • Credits, C. Bukania

- 4) Select appropriate ICT tools suitable for online discussion and for repository: The choice of tools should be guided by the characteristics of the community and their learning objectives. In SSA, electricity outages and limited internet access may limit access to members not based in major towns. Some CGIAR collaborative platforms are not appropriate as they cannot be accessed by the wider community.
- 5) Ensure the presence of a dedicated leader and resources to support and coordinate the CoP for success: CoP coordination requires skills and experience in facilitation, dealing with diverse stakeholders (organizations, disciplines and gender), and being conversant with knowledge management approaches. Commitment, and passion to see the CoP succeed is critical. Communication skills and IT support are also essential to the smooth functioning of the CoP. The financial resources to run the CoP include staff time, hosting the face to face meetings, and setting up and running the webbased portal.
- 6) Allow for different and fluctuating levels of participation in the CoP: Since participation in CoPs is both voluntary and rarely a person's main activity or job, different levels of participation are normal. The CoP should consider the degree of relevance of the domain to a participant's core activity in the allocation of responsibilities. So, nurture a core group, but also engage the wider community.
- 7) Plan and anticipate for both outputs and outcomes: CoPs can generate tangible outputs such as the number and diversity of members, and records of successfully implemented events. They can also generate outcomes expressed in terms of behavior change where participants pick up and implement the skills and practices from the different CoP knowledge sharing activities.
- 8) Diversify funding mechanisms: The SS-CoP like others identified in the literature, is resourced through project funding. Therefore, an ability to demonstrate value added, particularly through documenting the potential and actual outcomes could help justify a contin-



Group reflection after the Learning Journey • Credits, C. Bukania

ued existence or need for a CoP practice. This can build a case for funding.

In conclusion, the SS-CoP can only remain dynamic if it remains relevant and useful to the members. Members have used their experience in participating and leading discussions in the CoPs to take the lead in other networks and alliances, e.g. the regional groups of the African Potato Association.

#### **Acknowledgements**

Dr Lydia Kimenye conducted the participatory assessment of the sweetpotato seed systems and crop management CoP. The four sweetpotato CoPs are funded through the Sweetpotato Action for Security and Health in Africa (SASHA) project implemented by CIP. This assessment was commissioned by the CGIAR Research Program on Roots, Tubers and Bananas (RTB).









