

# Seed Systems and Crop Management Community of Practice: Are Learning Journeys Useful?

Peer-to-peer technical engagement has been increased through conducting eight learning journeys as part of the seed system community of practice meetings. The learning journeys provide opportunities for informal knowledge sharing, networking and cementing the bonds between members.



Fig 1. Seed Systems and Crop Management CoP participants at the 2016 face-to-face meeting in Arusha Tanzania (credit C. Bukania)

## What is the problem?

The purpose of the Sweetpotato Seed Systems and Crop Management Community of Practice (SSCM-CoP) is to facilitate networking, exchange of experiences and learning to generate new knowledge about how to tackle crucial constraints in sweetpotato seed systems and crop management across Sub-Saharan Africa. The challenge is to apply approaches that accommodate the diverse learning preferences and styles that exist in the group. As adults, we learn in different ways, so we have been trying out different approaches to encourage interactions and exchange of ideas and research for development practitioners. In particular, we have been utilizing the “learning journey” approach to promote experiential, practice-oriented learning among the CoP members.

## What do we want to achieve?

We aim to strengthen the technical, financial and institutional capacities of NARIs, and to ensure that they can run cost effective and successful sweetpotato seed enterprises. We want to encourage interaction and exchange of ideas so that we can strengthen our research and development interventions. Peer-to-peer learning is fundamental in identifying common constraints and working towards solutions. We also want to avoid new members having repeat mistakes made in the past.

## Where and with whom are we working?

We are working in 11 countries (Burkina Faso, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Nigeria, Rwanda, Tanzania, Uganda and Zambia), with the NARIs research and extension services, NGOs, and private tissue culture laboratories.

## How are we making it happen?

One approach which we have used is a “learning journey”. This is adapted from a “Learning Route” which is a planned journey with learning objectives that are designed based on (i) the knowledge needs of development practitioners that are faced with problems associated with rural poverty and, (ii) the identification of relevant experiences in which local stakeholders have tackled similar challenges in innovative ways, with successful results and accumulated knowledge which is potentially useful to others. The route allows for the experiential encounter between travelers and hosts, both having mutually useful experiences and knowledge. For more information on learning routes, visit [www.africa.procasur.org](http://www.africa.procasur.org).

This approach has been used during three face-to-face meetings of the CoP (Fig. 1), in Kigali (April 2015); Nairobi (December 2015) and Arusha (May 2016). The location of the meeting influences the type of learning journey, and vice versa – what we would like to learn influences the choice of meeting location. Before the site visits, participants are required to carry out the following preparations:

- Read the brief on the background of the sites they are to visit;
- Review each individual member’s questions and agree on the learning objectives and priority questions;
- Agree on protocol during the site visit e.g. program to follow (introductions, site visit, Q &



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### Partners:

- Kenya Plant Health Inspectorate Service, Plant Quarantine and Biosafety Station (KEPHIS-PQBS)
- National Crop Resources Research Institute (NaCRRI-Uganda)
- Rwanda Agricultural Bureau (RAB-Rwanda)
- Sugar Cane Research Institute (SRI-Kibaha) & Lake Zone Agricultural Research and Development Institute (LZARDI) Tanzania
- National Root Crops Research Institute (NRCRI), Nigeria
- Southern Agricultural Research Institute (SARI), Ethiopia
- Tigray Agricultural Research Institute (TARI), Ethiopia
- Crops Research Institute (CRI), Ghana
- Institut de l'Environnement et de Recherches Agricoles (INERA), Burkina Faso
- Instituto de Investigação Agrária de Moçambique (Agrarian Research Institute of Mozambique) IIAM, Mozambique
- Zambia Agricultural Research Institute (ZARI-Zambia)
- Department of Agricultural Research Services (DARS), Malawi
- BIOCROPS (U) Ltd Tissue Culture Laboratory, Uganda

Learning Journey Theme	The Learning Objective
<b>Kigali: April 2015</b>	
<b>Route 1: Net tunnels:</b> what have we learned and where to next for low cost protection of basic planting material?	To identify lessons and explore possibilities for continued low cost protection of basic planting material.
<b>Route 2: Inspection of sweetpotato Quality Declared Seed:</b> what is it and how do we institutionalize it?	To carry out inspection of sweetpotato QDS and explore ways of institutionalizing it.
<b>Route 3: Rubona Research Station: tissue culture micro-propagation and hardening:</b> what are we learning to improve multiplication rates, and reduce costs?	To learn how we can improve multiplication rates for pre-basic and basic seed and reduce cost of sweetpotato planting material.
<b>Nairobi: December 2015</b>	
<b>Route 1: Identifying good practice for tissue culture micro-propagation and screen house production of pre-basic seed</b>	To understand KEPHIS' role as regional center of excellence for sweetpotato germplasm management and exchange; and share experiences on pre-basic seed production practices.
<b>Arusha: May 2016</b>	
<b>Route 1: Good agronomic practices for commercial root production</b>	To find out any new practices being implemented to satisfy the export market i.e. to ensure proper root size and shape. To find out the strategies being used in order to meet the demand.
<b>Route 2: Business case for root production</b>	To understand the business model for quality root production: source of vines for growers; acreage pricing; field establishment and management; minimum yields for profit; root marketing; quality management during shipping; profit sharing.
<b>Route 3: Sweetpotato seed marketing strategies</b>	To understand how the entrepreneur determines the price of seed, identifies clients, conducts product and market mix at different stages of production.
<b>Route 4: Good practices to increase tissue culture multiplication rates and to reduce costs</b>	To understand private sector laboratory TC practices: media type; subculture intervals and cycle; production capacity; mechanisms to reduce production costs: hardening and survival rate; multiplication rate; screen house ratooning practices.

A and open discussions); agree on specific tasks of the participants (leader, time-keeper, note-taker);

- After the visit, carry out a reflection session to collate and document (Fig. 2): (a) highlights, key learning points and new perspectives; (b) individual action points arising from the visit; (c) new or more in-depth research questions that could be pursued in light of the visit – either by the host of the visit or in participants’ own institutions; and present to the CoP members in plenary;
- Nominate a topic and lead person for continued online (Google Group) discussion.

## What have we achieved and learned so far?

To date, over three meetings, eight learning journeys have been conducted (Table 1). We want the team for each learning journey to identify findings, learning and follow-up actions.

For example, during the Kigali meeting in 2015, the Route 1 net tunnel learning journey visited Kotemu farmers’ group in Rulindo District (Fig. 3). The key learning points included: information about construction of net tunnels; management practices; pricing planting material from net tunnels; and root production. Participants noted that there was a challenge in management of weeds in the tunnels and that over time; the DVMs had noted vine length

becomes shorter. Security was difficult, because people poke holes in the net tunnels out of curiosity, but they managed this by explaining to their neighbors what the technology is all about. The multipliers are willing to pay the total costs (Rwf 30,000 = USD 42) of establishing new net tunnels, as this cost can be recovered after only one harvest. However, all materials for constructing the structure are available locally but the insect proof net has to be imported. As a follow-up, the team nominated Jude Njoku (NRCRI, Nigeria) as lead person to take forward the online discussion: - *How can the netting material be brought near to farmers and not depend on project support in the long-run?*

## What are the next steps?

We have anecdotal feedback that CoP members enjoy the learning journeys and take back ideas to try in their own countries. However, we would like to carry out a more systematic assessment of whether the learning journeys stimulate new research topics and affect change in seed systems technologies and practices. The CGIAR Research Program on Roots, Tubers and Bananas (RTB) cross-cutting seed systems cluster has commissioned a study to document how the different components of our community of practice function, so that colleagues from other RTB crop seed systems might establish their own CoP.



Fig 2. Participants reflect, collate and document their findings and action points after a learning journey (credit C. Bukania)



Fig 3. CoP members hold discussions with members of the Kotemu farmers’ group in Rulindo District, Rwanda

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