



BASICS

BUILDING AN ECONOMICALLY
SUSTAINABLE, INTEGRATED
CASSAVA SEED SYSTEM

REPORT OF MEETING: VIRTUAL CONFERENCE

BASICS PHASE I – ACHIEVEMENTS AND LEARNINGS MEETING

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Photo: Team BASICS at an Annual Review and Planning Meeting, IITA-Ibadan, Nigeria

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Report of meeting: Virtual Conference

BASICS Phase I – Achievements and learnings meeting

The project management wanted to meet as a team, but COVID-19 travel restrictions made this impossible. So, this meeting was held virtually with 48 people logging in from the Bolivia, Canada, Nigeria, Peru, Tanzania, the UK and USA. The meeting consisted of ten sessions, most of which included question and answer sessions.

Meeting objectives

The Building an Economically Sustainable Integrated Cassava Seed System in Nigeria (BASICS) project began in 2016 and formally ends on 30 June 2020. The project has made progress in demonstrating that commercially viable production and sale of breeder, foundation and certified seed is possible. Furthermore, the project has established a strong basis for building a sustainable seed system by developing building blocks across the seed value chain. This meeting had the following objectives:

1. To identify the achievements and lessons learned in each of the project components;
2. To identify the shortcomings in each component (what would I do differently, knowing what I know now?), remaining challenges and ideas to overcome them;
3. To assess and discuss the challenges and progress made in integrating the components into an integrated seed system and identify ways integration can be improved;
4. To assess and discuss the commercial sustainability of the seed system and identify options to promote its sustainability and further scaling; and
5. To make plans for the publication of the findings and lessons learned during BASICS-1

Summary of the meeting

ACHIEVEMENTS OF BASICS HIGHLIGHTED

- BASICS created a functioning, formal seed system for cassava in Nigeria, the world's largest cassava producer.
- Commercial entities were set up for breeder and foundation seed (GoSeed & Umudike Seeds).
- The Rapid Multiplication Technique (RMT) was adapted for cassava, with Semi-Autotrophic Hydroponics (SAH) labs producing hundreds of thousands of plantlets and allowing for real-time inventory management.
- Village Seed Entrepreneurs (VSEs) are profitable, especially larger ones who also derive profits from roots.
- There is a functional network of commercial seed producers.
- There is demand for certified seed and interest in the 3-2-1 voice response system.
- Processors are willing to invest in cassava seed units.
- Created a functional seed certification system for cassava, in coordination with the National Agricultural Seeds Council (NASC).
- Piloting third-party certification for cassava, to be applied to other crops in Nigeria.

- Outgrowers are willing to pay for stems, and demand creation trials (DCTs) can help identify the most suitable varieties to scale out the model to other processors.
- The BMGF (Bill & Melinda Gates Foundation) has approved a second phase of BASICS.

WHAT WOULD WE HAVE DONE DIFFERENTLY?

- Breeder Seed Component (BSC)—improve access to tissue culture, mechanization, better market intelligence.
- Village Seed Entrepreneur (VSE) —select larger VSEs, and more women. Improve links to markets and to foundation seed. Expand virtual learning tools and let the VSEs provide other extension services.
- Processor Led Model (PLM) can deal better with the increased speed from lab to field; adapt return on investment to processor type.
- Quality Seed Component (QSC) - collect more data to help make seed regulatory recommendations that can balance high quality maintenance and market realities
- Project Management Unit (PMU) - Project design should ensure a clear ownership of activities, also linked to the budget.

RECOMMENDATIONS FOR PHASE 2 OF BASICS

- BSC should coordinate breeding and demand creation trials and involve stakeholders in variety naming. There is a need to expand use of ICT tools.
- Produce foundation seed closer to VSEs; explore virtual options to manage VSEs.
- Enhance involvement of processors in DCT. Ensure sustainable access to early generation seed (EGS), adapt PLM to be profitable for different types of processors.
- Use the seed flow map to plan annual seed production.
- Coordinate the SAH material into a seed system and seasonality.
- Prepare to mitigate cassava brown streak disease with training and diagnosis.

Lessons from BASICS can be applied to other crops, such as yam and sweetpotato by, for example, improving rapid multiplication, certification, and marketing. If a processor doesn't have a source of seed in-house, the Cassava Seed Tracker can help connect market players.

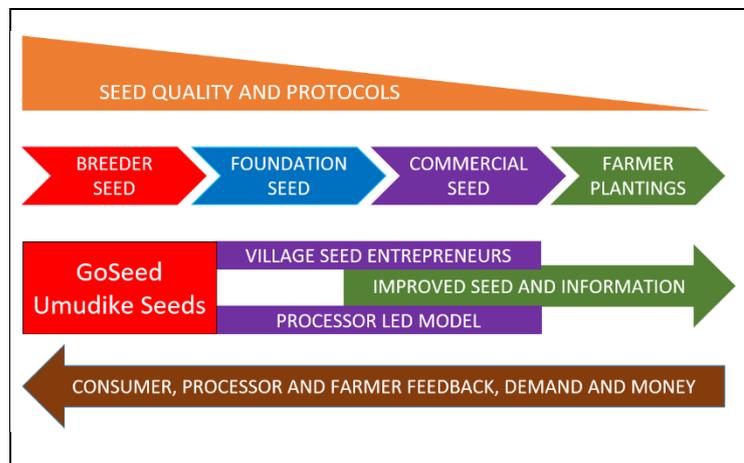
Session 1: Welcome and overview ([see presentation](#))

BASICS project management unit – CGIAR Research Program on Roots, Tubers and Bananas (RTB)

The original charitable purpose is still valid. Develop a **sustainable cassava seed value chain** with commercialized production and sale of cassava planting material.

The strategy includes linking breeders with two new companies that produce breeder and foundation seed (GoSeed and Umudike Seeds). BASICS created two new types of certified seed producers: village seed entrepreneurs (VSE) and the processor-led model (PLM). Breeder seed is planted to produce foundation seed, which is used to grow certified seed and sold to farmers. These links create a value chain: money flows back in the opposite direction, communicating demand for seed of particular varieties to breeders. This doesn't happen if you give the seed away for free.

Achievements. The PMU successfully coordinated the BASICS project. (See the following sessions by the respective components for details on their achievements.) The components worked well together, in an organized, coordinated fashion, to create a formal seed system for cassava in Nigeria, the world's largest producer of the crop.



Way forward. RTB played a key role developing the concept for Phase 2 of BASICS. Phase 2 is appropriately transitioning to direct leadership by the International Institute of Tropical Agriculture (IITA), but BASICS is still part of RTB in the broader sense. This workshop is a key moment in transition, drawing lessons from Phase 1 to make Phase 2 even better and to ensure its sustainability.

Session 2: Breeder seed component ([see presentation](#))

Key Achievement 1. SAH was successfully adapted from potato seed in Argentina. BASICS trained 42 technicians (including 17 women). Two SAH units produced over 600,000 plantlets and are now working on pencil stems. SAH is being rolled out in other countries too.

Key Achievement 2. Certified breeder and foundation seed are being produced in Nigeria for the first time, on 55 hectares, in coordination with NASC.



The SAH lab in the DR Congo is the largest in Africa

Key Achievement 3. Established demand creation trials (DCT) over three years with 20 varieties and eight processors. The four most preferred varieties are high in dry matter, which processors like.

Key Achievement 4. Established two EGS companies: GoSeed in the Southwest and Umudike Seeds in the Southeast are up and running, making money, with active SAH labs, established nurseries, and producing breeder and foundation seed.

Knowing what we know now, what would we do differently?

- Improve access to tissue culture for SAH and international germplasm exchange.
- Work across RTB crops to build business case.
- Increase mechanization to make labor more efficient and reduce production costs.
- Improve weed management of seed fields.
- Conduct more market research.

Recommendations. Coordinate advanced breeding trials, on-farm testing, and demand creation trials for improved awareness and end-user feedback ahead of the variety release. Involve stakeholders in variety naming. Increase use of digital tools to integrate the value chain, for example, Seed Tracker, Cassava Business Connector, e-Commerce sites.

Discussion

Breeders have some varieties in their inventory that have little demand. These varieties had to be aggressively marketed. When breeders have better information about market demands, they can make better forecasts on production amounts.

SAH helps to scale up clean seed. Once you have a box of SAH plantlets it can be cut six times or more and be continually propagated. You don't need to go back to the tissue culture plants unless you break the cycle. When you stabilize a new variety, you need to go back to start from tissue culture. It may be helpful to go back to tissue culture periodically.

Regarding the breakeven point, the SAH plantlets are expensive, about ten cents per plantlet. Further cost reductions are possible through innovations in the production practices.

Varieties should have names that are easy to remember, but such names must be acceptable across communities. The UMUCASS system of naming was proposed, but not adopted. IITA and the

National Root Crops Research Institute (NRCRI) will continue to work on this topic. Varietal naming is controlled by the varietal release committee.

Session 3: Village Seed Entrepreneur component ([see presentation](#))

Key Achievement 1. Cassava seed was profitably commercialized. 186 VSEs were engaged, trained, and mentored in six states. VSEs established 700 ha of fields over four seasons and 90% passed certification. Profit was \$1,000/ha for stems and roots in one season, and \$1,600/ha for ratooned fields over two seasons. Third-party certification field inspection was piloted by NASC.

Key Achievement 2. Commercial seed producers have been organized as a functional network. The apex union has an office manager, and office staff trained in field management, marketing and record keeping. The union has a constitution, bylaws and a gender-balanced set of leaders.

Key Achievement 3. Demand was increased for certified cassava varieties by using over 100 market day promotions, 3-2-1 messaging, 150 demo plots, a website (www.cassavastems.org) and advertisements such as radio spots, promotional bags, billboards, and flyers. Over 40,000 bundles of certified seeds of seven varieties were sold in three seasons, from over 2,000 ha of VSE fields. SAH plantlets were planted directly in the field to produce 120 bundles of stems.

Knowing what we know now, what would we do differently?

- Select VSEs in clusters for better management and peer learning/support and do not aim to spread them throughout the whole state for ensuring coverage.
- Only engage business-minded VSEs.
- Select over 40% female VSEs and more mid-size VSEs.
- Do more market day promotions and promote 3-2-1 messaging.
- Reduce transport distances by producing foundation seed with GoSeed & Umudike Seeds in project states.
- Innovate on virtual learning options for VSE capacity building, including Seed Tracker.
- Encourage VSEs to provide other extension services.

Recommendations. Introduce new varieties on a regular basis. Locate foundation seed production closer to VSEs. Scale up third-party certification. Create a wider network of seed producers for peer learning, support and competition.

Discussion

3-2-1 is an interactive voice response system run by the Viamo company. The user dials 321 from an Airtel phone network and is taken to various menus, including family planning. Under agriculture there is rice, cassava, cowpea, and other crops. Under cassava, if someone requests stems, the person who answers the call can send them to the nearest VSE. The first information will be ready in June.

At market promotion days, CRS distributes flyers about the varieties and directs customers to the VSEs. The flyer has the addresses of VSEs. Catholic Relief Services (CRS) are reducing marketing expenses from the project while innovating with the VSEs to lower costs. Some states have demo plots.

The profits listed in the presentation are from the top 50% of VSEs. Some are not business minded and they drop out. Most VSEs grow seed and roots and can produce 300 bundles per ha while maximizing revenue from both ends. In stem-only fields it is hard to increase the number of bundles produced. Less than 10% of seed purchases are from government; most are from farmers, farmer groups, or some agencies.

Last year GoSeed and Umudike Seeds made a presentation to VSEs in Benue, so they are becoming linked into a network. Transporting seed 600 km from GoSeed in Ibadan or 300 km from Umudike to Benue cannot be done in a sustainable way. It is too expensive to take the SAH plantlets directly to the field. If foundation seed can be produced closer to Benue, (e.g., in Kogi) it would reduce the travel distance.

Session 4: Processor-Led Model component ([see presentation](#))

Key Achievement 1. Model proven with three processors willing to invest in cassava seed units and SAH labs: Flour Mills of Nigeria (FMN), Psaltry and Eagleson.

Key Achievement 2. Demonstrated the replicability of commercial cassava seed units.

Cassava seed unit				
Partner	1 SAH Lab	2 Shade Area	3 Nursery	4 Commercial
FMN	Proficient	Proficient	Competent	Competent
Psaltry	Competent	Competent	Novice	Novice
Eagleson	Novice	Novice	Novice	Novice
Learnings	<ul style="list-style-type: none"> Commercial MR achievable Team can be trained up 	<ul style="list-style-type: none"> Staging planting > free up lab capacity Hardening supports survival rate 	<ul style="list-style-type: none"> Commercial germination rate achievable Advisory support needed 	<ul style="list-style-type: none"> Critical to PLM cost recovery

Key Achievement 3. Developed business analysis toolkit to guide processors on seed unit design.

Knowing what we know now, what would we do differently?

- The reason to believe in this model is less about clean seed, and more about farmers getting new varieties quickly. Processors know that yield degrades slowly.
- The business model is driven by differential starch revenue by variety.

Recommendations. Leverage the DCTs to enhance variety adoption by processors and farmers. Engage processors in varietal selection, DCT design and implementation. Ensure sustainable access to early generation seed by demand planning and coordination between GoSeed, Umudike Seeds and processors. Encourage PLM design innovation.

Discussion

You don't need a high-cost, expat manager for the seed unit. Local managers can be trained. For direct labor costs at the nursery level, FMN assumed \$800 per ha. But on a commercial side, it is half that amount. Those costs will be highly variable.

Each processor has a different system with outgrowers. The new seed has an added cost, but profitability is not driven by stem sales. Where the processors provide stems to outgrowers, the cost of the stems can be deducted from the price of the roots. The outgrower does not need to pay cash

for stems. The outgrowers may be willing to pay for stems if farmers have discussed it with the processor. The DCTs play a big role in selecting the right varieties.

Some outgrowers for FMN are willing to pay for stems, if new varieties are attractive to the market. Some processors want to buy some seed and can support varietal launches. They are interested in the level of starch and dry matter and are willing to pay for these traits.

The PLM can be attractive if processors have an irrigated nursery to produce planting material for the dry season to moderate the cost of roots. BASICS could engage processors better in the DCTs to scale the messaging. You can also produce pencil stems to get SAH to the field. This process is similar to what Flour Mills did with their nursery, but it is a more high-density way to produce.

A well-suited varietal focus helps in vertical integration for a processor. A well-planned DCT can help identify such a variety. The next step is to identify agronomic best practices with trials by IITA. Partnership between IITA and the private sector improves adoption.

Session 5: Quality seed component ([see presentation](#))

Key Achievement 1. Provided guidance on the new certification standard for vegetatively-propagated seed for Nigeria.

Key Achievement 2. Established the Cassava Seed Tracker (CST).

Key Achievement 3. Conducted Nigeria’s first pilot of the third-party seed certification.

Knowing what we know now, what would we do differently?

- We needed a better grip on the pipeline of production.
- We said “CST will do this at the touch of a button” but it was not up and running.
- More innovation to upscale SAH.
- Improve contracting basis for QSC delivery.

Recommendations. Further technical-financial-and-operational strengthening of NASC and TOSCI. There should be a private sector middleman between the certification agency and the seed producers. Maximize Seed Tracker advantages.

Discussion

BASICS 2 should implement the third-party seed certifiers (TPSC). The Seed Council wants to upscale it. Tanzania has third-party certification agents who come from the certification agency (TOSCI) and are contracted by the local government. They get training from TOSCI.

In Nigeria, inspectors had backgrounds in education, agriculture, and other fields. They must be willing to accept relatively modest fees. Nigeria has had two workshops, a learning lesson, and a walk-through a field being certified. The seed producers must pay the certification costs, as is done now in Tanzania.



The minister burning fake seed to symbolize the importance of certified cassava seed

Can CST be used for compliance and as a business connector? Sometimes entrepreneurs want to bend the rules a bit and there can be a conflict of interest. CST was developed as a modular platform, with different functionalities built into it (e.g., compliance and business). The business data is confidential. In BASICS, it is all in the same platform, but it is becoming independent. The certification part does not interact with the commercial part.

GoSeed is learning how to transplant pencil stems without substrate. Such a breakthrough would provide many stems. SAH does survive in the field, but the plants are tender. You need a shaded area for light protection. The cassava pencil brings something to the field that is stronger. A well-functioning SAH can transplant 5,000 plants in a day. The batches can be big enough to establish a field over a few days.

Session 6: Project Management Unit ([see presentation](#))

Key Achievement – 1. BASICS is seen as a successful project by various stakeholders: VSEs, farmers, and processors. BMGF has approved a second phase.

Key Achievement – 2. By being an honest broker and a nimble project leader, RTB has brought cohesion and shared vision among stakeholders, and expertise in sustainable seed systems.

Key Achievement – 3. Improved communication flow between stakeholders: seed flow maps, monthly partner meetings, and bringing farmers and VSEs to BASICS meetings.

Knowing what we know now, what would we do differently?

- During project design ensure a clear ownership of activity and links budgeting to activities.
- Should have gone with larger VSEs.
- Do market research on actual demand for seeds and varieties.
- Farmers don't buy for cleanliness, because cassava is hardy. Farmers buy seed to get a variety.

Recommendations. Work more with processors, including smaller ones who can help identify varieties they want. Populate the seed flow map at the beginning of seed system projects.

Discussion

Establish clear ownership of activities and budgeting for activities; some activities are done by different components. DCTs are done under PLM, but some parts were managed by BSC and this created some gaps. Variety combination had some gaps, like in the first year we had no control variety. The tables showed starch and productivity, but the data across seasons was confusing and inconclusive. There was an issue of VSE model for which NRCRI didn't have a budget.

With the seed map, people sit down and populate it; this helps the players and the integration. So, the VSE will not fall short of foundation seed, and it helps NASC to plan for their resources needed for certification. The seed map is a simple Excel tool. Filling it in as part of a planning session should not take too long, but this will be a worthwhile exercise that will prevent gaps in the seed chain.

There needs to be sustained advocacy to enhance the use of certified seed as a government regulatory push is required to move the stakeholders away from the informal markets of dubious quality seed while complementing it with a market pull through demonstration of value for money for purchasing certified seeds.

If you do not know in one year what amounts will be needed for varieties A, B and C, just plan it: 40%, 40% 20%. Even if demand drops, and if you commit 10,000 bundles and only sell 5,000, that is only a risk of \$5,000. If we had more seed, more would go to the farmers. Be bolder and take a risk.

There are physical seed markets in the planting season. If some surveyors go there to collect data on what was sold by whom and at what price, that would help us map the whole seed market size and demand trends.

Session 7A: A new NRCRI (including Umudike Seeds) ([see presentation](#))

What changed

- 1. We evolved from “clean seed” to insisting on NASC certification.** All seed must be certified, not just cassava. NRCRI is no longer giving seed away for free.
- 2. Creation of sustainability-oriented seed business outfit:** Umudike Seeds.
- 3. Building and empowering business orientated organized seed producers:** VSEs.
- 4. NRCRI is now well-placed to rapidly multiply clean seed of particular varieties.** The SAH laboratory facility is a game changer. The network of seed producers was expanded.

What NRCRI plans to do differently

- Continue to backstop Umudike Seeds.
- Enhance research for enabling technologies for sustainable seed systems.
- Streamline seed production of other RTB crops: yam, sweetpotato, cocoyam. Moving from tissue culture to SAH, following NASC guidelines.
- Cluster VSEs in areas with locational and agro-ecological advantages.
- Create innovation platforms of cassava stakeholders where VSEs will play key role.

Session 7B: A new NASC ([see presentation](#))

What changed

- 1. Digitalization of seed certification services and operations.** CST exposed NASC to digital advantages. NASC started digitalizing all operations, using CST for registration and certification.
- 2. Diagnostics certification.** In line with international best practices, the NASC upgraded its certification process and began certifying cassava breeder seed. The NASC molecular facility successfully tested cassava samples from breeder seed fields.
- 3. Third party certification.** NASC began using certification agents trained and licensed by NASC as authorized by the amended seed act of 2019. Eighteen professionals identified with CRS to pilot third-party certification of cassava, with scope to expand to other crops.

4. Enabling Early Generation Seed Production with GoSeed and Umudike Seeds.

5. New Seed Act 2019 provides for third-party certification, e-certification, breeder seed standards, and recognition of vegetative propagation for seed certification.

Things to do differently

- Digitalize fully all operations.
- Commercialize molecular diagnostics facility by introducing tests for different crops.
- Include all crops in third-party certification.
- Set up standards for other vegetatively-propagated crops.

Future priorities

- Prioritize seed systems of other orphan crops (e.g., yam, ginger).
- Transform the Nigerian seed sector into a leading seed industry in Africa.

Session 8: Communication

Teams discussed business, scientific publications and communications with a view to develop an integrated, sustainable seed system for cassava. All institutional representatives provided two-minute updates on what has been done and what is in progress.

IITA ([see presentation](#))

IITA has planned various scientific publications, including ideas on: 1) SAH; 2) certified seed; 3) DCT and CMD's impact on yield, according to symptomatic and asymptomatic plants; 4) for the first time, properly discuss the cassava seed cycle and the advantages of starting seed from tissue culture; 5) CST; and 6) user guides, EGS production, stem production, and a manual on CST application, and good agronomic practices.

Social media promotes through the IITA website and GoSeed. IITA Radio is now broadcasting and promoting technologies of interest farmers. There is a new YouTube channel on IITA youth in agribusiness and regular blogs posts. We are focusing on awareness workshops.

NRCRI ([see presentation](#))

Six peer-reviewed papers are being prepared. Three of them will be merged to produce a paper entitled, "Assessment of certified commercial cassava seed production in Southeast and South-South Nigeria: determinants of participation, challenges, supply and demand gaps."

Other manuscripts from the Breeding Component are being prepared, as well as training materials and social media materials.

CRS

The website www.cassavastems.com publishes CRS outputs. We also plan to have a virtual end of project meeting in June. A field book is being updated. Radio jingles continue to play on local

stations. A documentary on VSEs is available on CRS YouTube channel. We continue to disseminate outputs through the CRS agricultural community of practice, a global group in 90 countries.

NASC

There are some papers in the pipeline on the nuclear work. A Ph.D. student is working on a paper on certified seed, which will serve as his or her thesis.

Context

Context has submitted a business manual as its final document and hopes that IITA will be able to disseminate this information. Context will have a blog post to introduce its toolkit.

Fera

Fera is writing a scientific publication. Also, in NRCRI, there is a publication in the works on viruses. Fera will present it again in Zambia. Fera has other diagnostic kits on CMD that can be branded and used. There is another kit on brown streak that can also be branded.

Discussion

The acknowledgments of publications must include the OPP project number and acknowledge support from the BMGF. BMGF generously funds the open access publication of review articles, but you must register through Chronos system.

BASICS brought in Wageningen University to study the seed buying behavior by farmers. RTB is editing a book with Springer on innovations in RTB food systems and could feature BASICS in one of the chapters. It was suggested to have media communications frequently, perhaps every month, and to develop YouTube clips. Bringing in different stakeholders for communication efforts was deemed important, and physical communication, such as branding with T-shirts is important in a project aimed at changing behavior.

Session 9: What Next? ([see presentation](#))

By Alfred Dixon and Lateef Sanni - IITA

Capitalizing on the achievements of the BASICS project (2016-2020), the Bill & Melinda Gates Foundation (BMGF) graciously funded the commencement of Phase II under the overall leadership and responsibility of IITA.

Budget: \$14,325,899 Duration: 5 years (60 Months)

Project components and outcomes

Component	Primary Outcomes	Responsibility
1. Ensuring integration of breeding and seed system activities.	New cultivars from cassava breeding programs are integrated into seed systems in a manner that facilitates their marketing, production, sales, and uptake.	IITA, NRCRI & TARI
2. Development of EGS enterprises	Seed enterprises are established in Nigeria and Tanzania that produce EGS in a reliable and economically sustainable manner for sale to independent, private seed entrepreneurs who sell seed to farmers.	IITA, NRCRI, Sahel (NG) & MEDA (TZ)
3. Development of commercial seed entrepreneurs	Decentralized, commercially viable seed enterprises in Nigeria and Tanzania demonstrate sustained production and sales, and increase in average size and aggregation into associations to facilitate marketing, quality control, and other services to validate a commercial seed model that can be replicated.	CRS (NG) & MEDA (TZ)
4. Development of processor-associated seed system model	At least four processor-associated seed systems are successfully developed, demonstrating that processors can produce seeds for their farms and outgrowers in an economically sustainable and replicable manner.	Sahel (NG) & MEDA (TZ)
5. Quality control and disease management	Functional policies and regulatory capacities are established to promote quality in cassava seed systems and facilitate disease management without stifling the development of seed systems with unsustainable costs.	IITA & NASC (NG); IITA, MEDA & TOSCI (TZ)
6. Catalyzing scaling and replication through partners	Seed system model is scaled in Nigeria and Tanzania and replicated in at least 2 more countries through the engagement of additional development partners, including AGRA and the TAAT program taking advantage of TAAT's strong links with country programs on cassava in Africa.	IITA, AfDB-TAAT program, AGRA and development partners plus MEDA

Session 10: BASICS Phase 1 – Close of a chapter

Reflections by Graham Thiele - RTB

I want to go back to the charitable purpose. It seems to me this is still very relevant and the goal that Dixon put up – how to get varieties distributed, improve gari production – what are the gaps [in attaining those goals]? In 2015 only 40% of the cassava area in Nigeria was under improved varieties, although this percentage may have increased since. We have to move the needle. There is a long way to go. There is a big yield gain to be had from using improved varieties.

What should we do to make it better? We need to build a network of larger, commercially viable foundation seed providers. We need to lower the cost of the final mile delivery, through PLM, and other approaches. Often mix ups happen in the value chain. We need to pay more attention to marketing. Names are important. Long numbers do not provide opportunities for marketing. Understand what the real demand is. Get a better handle on adopting behavior. Who is adopting varieties locally? These are key things. Need to get up to 60 or 70% of cassava area planted in improved varieties.

Reflections by Lawrence Kent - BMGF

We appreciate the intellectual framework that RTB provided for what a viable commercial seed system would look like. Can we turn that vision into a reality? You all made tremendous progress. BASICS 2 needs some consolidation, some fine tuning. Cassava is a slow growing crop, so it takes some time to work out the wrinkles. During this meeting we focused on BASICS, and Nigeria, the world's largest producer of cassava. In Tanzania, we have made good progress, guided by Lauren Good, who started on that team before he joined the BMGF.

BASICS model... we need to get breeder, foundation and commercial seed all going. CRS in Nigeria did a good job of showing us that VSEs can work. The model is possible, and farmers will pay for cassava seeds. Where do VSEs get their material? We need to shore that up. Going up from foundation to breeder seed, we have seen IITA and NRCRI founding new companies. Experimenting with cassava pencils is a great way to produce breeder seed. There may be entrepreneurs out there ready to produce this seed. That would be great. It is good that GoSeed and Umudike are producing breeder seed.

We had the regulatory framework to ensure quality control and Fera helped with that. We know that brown streak will come. We must keep it out of the seed system. RTB, the International Potato Center (CIP), Graham, Michael, Hemant... you have been flexible and kept this ship floating. Each component lead has done a great job. We learned that quality of seed is not as important as variety, so we need to release new varieties.

Agenda

Monday, 18 May 2020

Time	Topic	Facilitator / Lead
14:00	Session 1: Welcome and overview Objective: Sharing the project journey <ul style="list-style-type: none"> Welcome and setting the scene (5 min) BASICS – Overview (10 min) 	<ul style="list-style-type: none"> H. Nitturkar, RTB G. Thiele, RTB
14:15	Session 2: Breeder Seed Component <ul style="list-style-type: none"> 20 minutes presentation as per template (Share key achievements, what will we do differently knowing what we know now and recommendations for future) 40 minutes Q&A (All the Q&A sessions will have time for 10 mins clarification questions followed by 30 min guided strategic questions that will be shared by the facilitator before the meeting) 	<ul style="list-style-type: none"> P. Kulakow, IITA C. Egesi, NRCRI Facilitator: M. Friedmann, RTB
15:15	Session 3: Village Seed Entrepreneur Component <ul style="list-style-type: none"> 20 minutes presentation as per template 40 minutes Q&A 	<ul style="list-style-type: none"> Oluwatosin Oni, CRS Godwin Asumugha, NRCRI Facilitator: Hemant Nitturkar, RTB
16:15 Health break		
16:30	Session 4: Processor Led Model Component <ul style="list-style-type: none"> 20 minutes presentation as per template 40 minutes Q&A 	<ul style="list-style-type: none"> Mark Nelson, CGD Facilitator: Graham Thiele, RTB
17:30	Wrap up remarks for the day and any other matters	Michael Friedmann, RTB
18:00 Close of the day		

Tuesday, 19 May 2020

Time	Topic	Facilitator / Lead
14:00	Quick recap of day 1 and set the scene for the day 2	Michael Friedmann, RTB
14:10	Session 5: Quality Seed Component <ul style="list-style-type: none"> • 20 minutes presentation as per template • 40 minutes Q&A 	<ul style="list-style-type: none"> • Olusegun Ojo, NASC • Julian Smith, Fera Facilitator: Peter Kulakow, IITA
15:10	Session 6: Project Management Unit <ul style="list-style-type: none"> • 20 minutes presentation as per template • 40 minutes Q&A 	<ul style="list-style-type: none"> • Hemant Nitturkar, RTB • David Obisesan, RTB Facilitator: Chiedozie Egesi, NRCRI
16:10 Health break		
16:30	Session 7A: A new NRCRI <ul style="list-style-type: none"> • 10 minutes presentation on: <ul style="list-style-type: none"> ○ What changed at NRCRI due to BASICS ○ What NRCRI plans to do differently in future owing to the learnings in this project • 5 minutes Q&A 	<ul style="list-style-type: none"> • Chiedozie Egesi / Joseph Onyeka, NRCRI Facilitator: Michael Friedmann, RTB
16:45	Session 7B: A new NASC <ul style="list-style-type: none"> • 10 minutes presentation on: <ul style="list-style-type: none"> ○ What changed at NASC due to BASICS ○ What NASC plans to do differently in future owing to the learnings in this project • 5 minutes Q&A 	<ul style="list-style-type: none"> • Olusegun Ojo / Ishiak Khalid, NASC Facilitator: Michael Friedmann, RTB
17:00	Session 8: Communication Total 30 minutes Team to discuss business and scientific publications and communication in various components towards developing an integrated, sustainable seed system for cassava <ul style="list-style-type: none"> • 2-minute verbal updates by all institutional representatives on what has been done and what is in progress IITA – Lava Kumar NASC – Osho / Khalid NRCRI – Godwin Asumugha Context – Tele Akinlawon CRS – Oluwatosin Oni Fera – Julian Smith PMU – Hemant Nitturkar	Facilitator: Michael Friedmann, RTB
17:30	Session 9 BASICS – what next? Next steps by Alfred Dixon on Phase II (15 minutes)	<ul style="list-style-type: none"> • Alfred Dixon, IITA
17:45	Session 10: BASICS Phase 1 - Close of a chapter Reflections (10 minutes) Reflections (10 minutes)	<ul style="list-style-type: none"> • Graham Thiele, RTB • Lawrence Kent, BMGF
18:00	Vote of thanks and Close	Hemant Nitturkar, RTB

List of participants

Name	Institution
Lawrence Kent	BMGF
Lauren Good	BMGF
Folusho Olaniyan	PAC
Alfred Dixon	PAC
Paul Ilona	PAC
Graham Thiele	RTB
Michael Friedmann	RTB
Hemant Nitturkar	RTB
Obilade Adeniyi	RTB
David Obisesan	RTB
Julian Smith	Fera
Oluwatosin Oni	CRS
Dane Fredenburg	CRS
Joseph Onyeka	NRCRI
Chiedozie Egesi	NRCRI
Godwin Asumugha	NRCRI
Mark Tokula	NRCRI
Olusegun Ojo	NASC
Khalid Ishiak	NASC
Bankole Osho-Lagunju	NASC
Mark Nelson	CGD
Tele Akinlawon	CGD
Jason Nickerson	CGD

Name	Institution
Ndidi Nwuneli	Sahel
Temitope Adeborrowe	Sahel
Peter Kulakow	IITA
Mercy Diebiru-Ojo	IITA
Richard Ofei	IITA
Sanni Lateef	IITA
Lava Kumar	IITA
Godwin Atser	IITA
Regina Kapinga	IITA
Ezinne Ibe	IITA
Adebayo Abass	IITA
Frederick Schreurs	IITA
Robert Asiedu	IITA
Kenton Dashiell	IITA
David Eagle	MEDA, TZ
Stephen Magige	MEDA, TZ
Ashlea Webber	MEDA, TZ
Nadira Saleh	MEDA, TZ
Dorothy Nyambi	MEDA, TZ
Rachel Hess	MEDA, TZ



BASICS
BUILDING AN ECONOMICALLY
SUSTAINABLE, INTEGRATED
CASSAVA SEED SYSTEM

The purpose of the BASICS project is to develop a sustainable cassava seed value chain in Nigeria, characterized by the commercial production and dissemination of cassava planting material. The project envisages benefits to farmers and the industry through higher returns from the use of clean planting material of superior stem quality that are made accessible to farmers at the right time and at an appropriate price.