2019 ANNUAL REVIEW
AND PLANNING MEETING
OF BASICS PROJECT

BASICS. CGIAR Research Program on Roots, Tubers and Bananas (RTB)

11TH – 13TH March, 2019
IITA, Ibadan
Photo: Participants at the 2019 Annual Review and Planning Meeting, IITA-Ibadan, Nigeria.

Correct citation:
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ACKNOWLEDGEMENTS

Thanks go out to BASICS and the entire team of workshop organizers for an inspiring and well-organized meeting. Thanks go out specifically to Graham Thiele, Michael Friedmann, Sue Canney Davison and Hemant Nitturkar for their extensive work put into the preparation of the workshop. David Obisesan and Adeniyi Obilade provided logistical support that was key in making this workshop a success. We would like to thank the Bill and Melinda Gates Foundation, and Lawrence Kent in particular, for their financial support and immense commitment to this project. We would also like to thank all component leaders and team members in partners of BASICS for their great work and their active participation during the Annual Meeting. Together, the participants have shown how much they have grown together over the course of the BASICS project, and their readiness to get the best out of the last year of the current BASICS project.

SUMMARY

The BASICS Annual Review and Planning Meeting (ARPM) 2019 was held in IITA Headquarters in Ibadan, Nigeria from 11-13 March 2019. The Meeting was attended by around 70 participants from Nigeria and several other countries. The participants included breeders, food and crop scientists, project managers, national policy experts, R&D managers, donor, social scientists and company representatives. Proceedings of the Annual Meeting will be published on the BASICS website (http://www.rtb.cgiar.org/basics/) The purpose of the current summary is to synthesize some of the discussions, conclusions and points for future action. There are links within this document to access the actual presentations made during the ARPM.

The main aim of the ARPM was to reiterate the project vision, share what has been done, what is to be done in 2019 and brainstorm on what needs to be done over a possible next phase of activities to achieve the goal of developing an economically sustainable seed system for cassava in Nigeria. Towards this, the ARPM over the three days was planned with the following objectives listed below. Click here to see the 2019 Agenda.

Objectives:
Day 1: Share component highlights from 2018 activities and agree on changes in component workplans for 2019 after team feedback
Day 2: World Café – Scaling readiness of seed system innovation packages
Day 3: Discuss and plan partner contributions for BASICS Phase II Concept Note development

ARPM heard about significant advances made by BASICS in the reporting period in terms of setting up of institutions and systems for ensuring reliable supply of breeder and foundation seed, strengthening the commercial seed producers’ network, strengthening the capacities at NASC in terms of seed diagnostics tests and inspection services and overall integration of the seed value chain actors. In review of the seed system dynamics now emerging under BASICS, those practitioners’ and their practices that are most evidently associated with success are being identified and promoted along with what is poor practice and that needs to change. Based on the preliminary results from the studies conducted to identify the value proposition of certified seeds for the farmers, it was recognized that the improved varieties and focus on varietal replacement may have higher chances of success in developing an economically sustainable seed system in Nigeria because selling certified clean seeds to replace farmer saved seeds of the same variety seemed to offer little economic advantage to the farmers. It was also agreed that the breeding needs to be more demand driven, focusing on product profiles for specific regions and users. Creating greater uptake of and access to
improved varieties also requires enhanced marketing efforts and the timely release of new cassava varieties. Using and adapting SAH technology is key in enhancing the release of new varieties, both in terms of breeding and bulking up. Giving improved varieties catchy names that can appeal to farmers over a wide area was agreed as a powerful way to enhance awareness and adoption. Cost effective and sustainable scaling of the Village Seed Entrepreneur, Processor Led Model, rapid multiplication technology, Semi-Autotrophic Hydroponics (SAH™), developed earlier in the project was discussed. Scaling readiness of individual components within BASICS and putting this all together in the form of a powerful Concept Note for a possible phase II of the project was also discussed and action points agreed to by the Team BASICS. The Project Advisory Committee commended the achievements of BASICS in the reporting period and provided some recommendations for the project to consider going forward and these are included in the PAC minutes document (See here).

INTRODUCTION

The BASICS ARPM 2019 in the fourth and the last year of the current phase of the project provided an opportunity to pause and assess the progress and outcomes of the project to plan the next steps.

The objective of BASICS is to develop an economically sustainable seed system for cassava Nigeria that is based on commercial sale of cassava planting material that is produced with high quality standards as certified by the National Agricultural Seed Council (NASC). BASICS is led by the CGIAR Roots, Tubers & Bananas (RTB) program. RTB is working globally to harness the untapped potential of these crops to improve food security, nutrition, climate change resilience, and the income of farmers. RTB crops have certain similarities that have implications for the seed system, such as their vegetative propagation and its perishable and bulky nature. At the same time, they offer great potential for the rural population producing these crops to fulfill the needs of a growing urban population. The joint model of partnership in the program adds value through cross cutting research on seed systems and by raising the profile of RTB crops. BASICS is mapped to the CGIAR Flagship 2 “Productive varieties and quality seed”, and the project benefits from the interlinkages between other flagships in RTB. Apart from the facilitation of linkages, the added value of RTB for BASICS lies in the focus on learning about what works in breeding, how to scale up interventions in the seed system, and what can be learned from other seed system projects across the world. See Day 1 - Presentations 1, 2, and 3.

Based on the achievements so far, the project will consolidate its work in the last project year, setting the stage for a strong and attractive proposal for a possible second phase. During the last year, the focus will be on strengthening the link between the actors in the value chain, on increasing the value proposition for farmers, improving the business cases for the processors and seed entrepreneurs, on enhanced provision of improved varieties through a sustainable EGS system, and on enabling the regulatory and business environment.
RAPID PROJECT ASSESSMENT

During the day, a brainstorm took place to identify what is going well in BASICS and what are issues for improvement. Participants were invited to reflect on these questions individually, write their suggestions down and pin them to the appropriate board in the room. The suggestions were grouped into main headings or issues. Many participants agreed that the Cassava Seed Tracker and its use for certification is a major achievement in the project. Also, the increased willingness to pay, the use of SAH for the production of breeder seed, and the increased communication through regular skype calls organized by the PMU are considered major project outcomes. Issues still needing improvement included farmers’ awareness, marketing, linkages between the stakeholders in the project, and cross component seed flows. Monitoring, evaluation and impact assessment were mentioned as issues that need increased attention during the last project year, as well as capacity building for VSEs and field staff.

COMPONENT UPDATES AND WORKPLAN 2019 DISCUSSIONS

Breeder seed component - by Peter Kulakow

The Breeder Seed Component aims to develop a system to create a sustainable pipeline of improved varieties, make available high-quality planting material for foundation and commercial seed entrepreneurs. It also tested and adapted the SAH technology for rapid multiplication of stems, complementing cassava breeder initiatives and feeding into the idea of commercialization leading to the setup of GoSeed and Umudike seed companies. The strategic role of SAH is in bulking up at release stages of a new variety to help the varietal pipeline reach the farmers’ fields early to enhance the adoption of improved varieties. Production and sales of certified breeder seeds were documented in the cassava seed tracker. Organization of the seed value chain from breeder seeds right up to farmers will help to ensure that varieties are true to type.

The project established trials comparing the performance of seed from different sources (breeder seed, SAH derived stems, SAH plantlets and uncertified stems). The trial shows no differences in the performance of the different sources of seed, except for SAH plantlets, that had relative difficulty establishing in the field. The production methods for SAH plantlets will be improved as the project gains more experience. A second trial comparing certified seeds from VSEs and uncertified farmers saved seeds on fresh root yield also showed no significant advantage of using certified clean seeds.

The Demand Creation trials (DCT) are used for decision making by processors and market identification of producers. The trials show that farmers are ready to pay, if varieties correspond to what farmers, processors and consumers want. A change in demand has been observed, and processors are more focused on gari than on flour. The varieties IBA961632, TMEB419 and CR36-5 were ranked the highest. A more segmented view of these varieties is needed, and the different market segments examined.
Village Seed Component – by Emmanuel Azaino and Godwin Asumugha

Catholic Relief Services (Click here)
VSEs have established profitable business models: a total of 97 (26 women, 71 men) VSEs are active having a total of 234ha planted for commercial seed multiplication. The certification passing rate has been 86%. The average gross profit for top 30% VSEs was observed to be $1,700/ha, and the average gross profit for top 50% VSEs was $1300/ha. There are several success stories of VSEs. A shift in behavior and attitude of farmers has been observed, and farmers seem more willing to buy and plant quality cassava seed. This has led to a total sale of over 20,000 bundles of certified stems to a total of 770 buyers reaching about 2700 farmers in total. Buyers buy on average 19 bundles. The marketing of stems has been done through 51 Market Day Promos (MDPs) in 17 Local Government Area (LGAs), 115 radio spots in 3 stations in Benue, and through the website. This strategy was key in dealing with the effects of a fluctuating national cassava market and has led to major off take by, amongst others, Taraba state government and Crest Agro in Kogi state.

A key adjustment CRS is planning to make in the last project year is to focus on more entrepreneurial VSEs currently growing 1 to 4ha to see if they could establish 10 ha of certified stems and evaluate their profitability and sustainability. CRS is also incorporating lessons learned from the most successful VSEs (both men and women) into the concept note for the next phase. The 30% most successful VSEs are people with multiple businesses, with extended networks, and who are influential in their communities. They are farmers who have their fields in certain strategic locations close to access roads.

National Root Crop Research Institute (Click here)
A total of 44 VSEs (15 women, 29 men) are currently active and managed by NRCRI. NRCRI facilitated the supply of 6,700 bundles of certified foundation seeds by Renascent agro-input to the seed entrepreneurs under the Market Development in Niger Delta (MADE) project.

NRCRI is planning to make two key adjustments in their VSE implementation – first, NRCRI wants to identify key VSEs in each state to champion the state network of VSEs and bring feedback to NRCRI. These VSEs will also be linked up with complementary partners like the Anchor borrowers’ schemes, NIRSAL and tractor hiring services to allow upscaling. A second important adjustment is increasing the synergy between VSEs and foundation seed suppliers and timely supply of stems.

Processor Led Model (PLM) Component – by Tele Akinlawon/Mark Nelson (Click here for presentation 7 and Click here for presentation 7.1)
The aim of the PLM is to demonstrate the business case for developing a network of producers through establishment of a high throughput seed multiplication unit. It takes time for processors to get a return on investment, it takes about 3 years to break even on the investment costs for SAH. The frequent release of improved varieties is key for this value proposition and requires partnerships between different actors in the supply chain. To build a sustainable seed system, it is imperative to also engage companies that are focused on seed production and not only on producing flour or starch. We need to look at how to make these models profitable and sustainable. Processors are profit oriented and therefore support research to increase their profitability. The PLM model is supporting them and experimenting with different planting practices to improve the transition from the lab, to the nursery to the field, because they all have their own challenges.
QUALITY SEED COMPONENT — BY PHILIP OJO (CLICK HERE)

Under BASICS production of certified material has increased three-fold, the total area inspected increased over 76%, and there is a modest increase in productivity as measured by stems/unit area. 55,639 bundles were certified in the year under review, and 184 fields passed, 33 failed. Another major success was the establishment of the Molecular diagnostic lab of NASC that conducted diagnostic test on 3 breeder seed fields of IITA. The aim of the molecular lab is to ensure CMD virus levels in breeder seed are below a threshold. The costs of the breeder seed certification will need to include the cost of the CMD virus testing and be borne between NASC and the private sector.

The NASC uses evidence-based recommendations for the setting of breeders’ standard. A proposed protocol submitted by Fera recommends routine sampling for CMD in seed material. NASC is now undertaking a consultation on these recommendations and the views of others in drafting the standard. SAH results in a product that needs to be defined. However, it is very difficult to put a certification or labeling scheme around something that is still in development. That is why the EGS component did not start labeling yet, because we are not yet sure about the final product. The review by Fera on the certification of a breeder seed standard substantially addresses this question.

NASC is working towards total use of Cassava Seed Tracker for certification. To achieve that, certification officers were trained and ICT units for CST set up at regional offices. Practices for third party certification have been discussed, but the pilot is waiting for the passing of the revised seed bill. This is a priority for year 4.

GENDER — BY TESSY MADU (CLICK HERE)

NRCRI conducted a study to investigate gender differentials in cassava production in Akwa Ibom, Imo, Cross River and Abia state. The findings show a difference between tasks carried out by men and women. Women are often in charge of site selection, land clearing, planting, weeding, herbicide application and moving the roots to the house and market. Men are increasingly involved in harvest, while it was assumed that this was mostly done by women. Women mostly have access and control over money from sales. Men only have control over access to credit as the land holding is generally in the name of the men. Overall, there is little difference in trait preferences mentioned between men and women. Root yield size is the most important driver for seed demand of both men and women. Women tend to concentrate more on the cooking qualities of a particular variety, such as the ability to make good gari, high starch and vitamin A content. Fellow farmers, relatives and friends are most important sources for seed. Few people (more men than women) source from research institutes. Women and men face similar challenges: high labor costs, invasion of cows and other animals, pests and diseases, access to land, soil fertility and insufficient credit facilities are problems to both men and women. Scarce labor is more of a problem for women.

PROJECT MANAGEMENT UNIT - BY DAVID OBISESAN AND OBI LADE ADENIYI (CLICK HERE)

The primary outcome of the PMU is accountable and effective grant management and resource allocation. The carryover from year 3 has been distributed between years 4 and 5, and the PMU is performing the activities as expected. A challenge is the delay in submission of financial reports, which also delays the disbursement to partners. That required training of partners on project and financial management and to align with work plans.
Apart from coordinating and enabling all components in the project, the PMU carried out two studies on the cassava seed system to learn about the current farmer seed buying behavior and their suppliers. Key findings of the study are that the informal cassava seed sector is a thriving sector. There are significant differences in sourcing of stems among the three communities sampled in Benue, Akwa Ibom and Imo and the distribution of improved varieties is still low. This is partly because some places like Imo are barely connected to ADP. Even though improved varieties such as TME419 do well, there are areas where local varieties perform better. Also, the local food preferences play a role in variety preference. Besides, it takes almost 30 years for people in distributed areas to become aware about a new variety and for it to traverse the current seed system.

The midterm review meeting in 2018 conducted an internal health check where the project did a rapid appraisal of how the VSE component is doing. Based on a study of 70 VSEs in Makurdi and 20 in Abia, we identified VSEs are still very interested in the seed business, despite challenges such as their need for day to day mentoring and importance to work on their marketing strategy. In 2019 there are some shifting priorities to deal with these challenges. Jeff Bentley will help the project to identify midsize cassava producers (producing seeds on around 10 ha each) that can operate and scale up as seed producers with minimal project support to ensure sustainability. Other focus areas for 2019 are the development of indicators to monitor client (seed buying farmer) satisfaction and effectively track sales of new varieties across components and replacement strategy using the Cassava Seed Tracker to upload this key information.

**Progress in MADE project – by Chyka Okarter (Click here)**

MADE project got inspired by the BASICS VSE implementation and an MoU was signed between NRCRI and MADE for collaboration and co-creation of a suitable version of the community-based seed entrepreneur model to suit the MADE plans. The project discovered that the main problem in promoting pro-poor and inclusive economic growth for cassava farmers was their lack of timely, reliable and affordable access to seeds. This led to a pilot with NRCRI in 2017, where 60 VSEs from 9 states were trained. In 2018 the pilot was evaluated. The evaluation showed that the farmers had developed an interest in having improved seeds. But the project needed to find a more sustainable way of upscaling the VSE training. That is why in the second pilot, the concept of the master village seed entrepreneurs (MVSE) was introduced, a pool of trainers providing fee-based trainings and support to VSEs and link them to breeder seed companies. 40 VSEs are needed per training to make it economically interesting. The trainings on stem multiplication technologies and enterprise management are sold with an incentive package of stems for 0.3ha. All VSEs have a small amount of foundation seed, which they will scale up after their first harvest. People are willing to pay for these trainings and some trainings were attended by more than 100 VSEs.

Main challenges are the farmers’ apathy to paying for stems. Also, some farmers are not willing to pay for transport and costs for having their stems certified by NASC. Another challenge is access to foundation seeds, there is just one company providing foundation seeds (Renasant, Abia).

**Concluding words - by Lawrence Kent**

Improved varieties have not yet reached widely to the farmers across the cassava growing regions. Previous donor funded breeding programs relied on ad hoc seed distribution strategies. That raised the need to think about a new system in which farmers pay for planting material to recover multiplication costs so that a sustainable seed system gets established. A few years ago, we were told
that this model would never work, that farmers would never pay for planting material, but we showed that it is possible and that farmers are willing to pay for planting material.

A challenge was the gap in reliable availability of breeder and foundation seed. GoSeed and Umudike seed will fill that gap. We hope all actors can succeed at the different levels of breeder seed, foundation seed and VSEs to achieve greater scale and reach more smallholder farmers. That means we need to look at the demand side and what is driving it. The demand for seed is mostly driven by farmers looking for new varieties or for additional material to plant their fields. This means there needs to be adequate availability of supply at the right time. Based on the findings of IITA, the project needs to rely more on the value proposition of providing access to improved varieties rather than focusing predominantly on certified seeds. To nurture this demand for improved varieties, awareness needs to be raised, amongst others through the naming of new and existing improved varieties. This is a major pivot that needs to be linked to the next phase of BASICS.
DAY 2

GoSeed Cassava business plan update — by Ndidi Nwuneli

SAHEL is a subcontractor in BASICS and is assisting IITA GoSeed cassava in refining its business plan and implementing it. Key findings are that there is a wide variation in how much people want to pay for stems in different geographies. Farmers in the Southwest are spoilt due to IITA presence and long-term practice of free distribution of stems, while Southeast is willing to pay up to 2000N per bundle. Differences in planting season have implications for stem availability.

The mission of GoSeed is to offer high quality breeder and foundation seed at affordable prices, and GoSeed cassava is a profitable stand-alone business by the end of 2023. Going from a grant driven to a commercial mind set is a complete switch. That needs to be achieved with a core group of partners, such as IITA GoSeed, BASICS, NASC, IITA breeders and scientists. There is an aggressive scenario and conservative scenario: SAHEL thinks the aggressive scenario can be achieved where we break even in year three. Prerequisites for success are a strong and capable team with individuals with strong marketing skills; separation of GoSeed as independent company from IITA; push and pull sales strategies that require upfront payment; strong financial operational systems; packaging and branding of clean seed; understanding about the importance of seedlot replacement and lastly an enabling policy environment for the cassava sector.

Ideally GoSeed would like to release a new variety every year. But it should be demand driven and it depends on what breeders can realistically deliver. The business plan is based on release of new variety every three years. At the same time, it takes 20 years on average for a variety to spread through the country. So apart from release, we need to work on getting existing varieties to the grassroots. There are also new varieties in the pipeline ready to be promoted. Besides, sometimes 2 new varieties are released simultaneously, the marketing of these can be spread over 2 years.

Scaling: a hot topic — by Graham Thiele

A mobile phone is an example of an innovation package. It consists of different components that need to work in order for the innovation to work. Scaling is about making optimal use of available resources and time in projects to have better development impacts and reach more beneficiaries faster and more cost efficiently. BASICS is an innovation package, a new way of going from breeder seed to farmers’ fields, that needs to be scaled up from thousands of farmers to millions. To do so we need to establish a sustainable formal seed system with clear pathways, including rules and institutions. The project is setting up a framework for innovation to happen, through national government and private sector investments beyond the donor pay. The strategy and partners that can make scaling happen should be an integral part of project design.
Looking at the innovation package: which component is the weakest link? These are not just technological but also social, economic and political. After identification of the weakest link, the innovation packages should look at how to go around this bottleneck. Questions to be answered in the world café:

- Which component is the least ready for scaling?
- What needs to be done to make this more ready for scaling? (Relates to what needs to be done in the second phase to overcome bottlenecks to scaling!!)

**WORLD CAFÉ**

After the presentation by Graham, workshop participants split up in groups according to the 8 innovation packages within BASICS project. Each group had 30 minutes to present their innovation packages based on a poster and discuss the weakest link for scaling readiness based on the questions above.

**SAH component** ([click here for the feedback from World Café](#))

The weakest link in the SAH component is the link to other multipliers in the seed value chain. To scale up, the project needs to identify the primary offtakers as well as secondary offtakers, such as other SAH labs, breeder seed outgrowers, GoSeed, Umudike Seed, other rapid multiplication labs and processors. Another weak link is quality management: how to avoid contamination, labeling, logistics in moving materials between labs, field and record keeping. This relates to the capacity and size of the facility: the amount of materials that can be produced is dependent on the size. A stable energy supply needs to be ensured. The project is working on getting alternative substrates and boxes to avoid importing these. Through identification of best practices for field management such as fertility, irrigation and weed management, production costs can be cut per plantlet. Apart from demand creation trials, demand for new improved varieties should be driven through a soft launch: a small-scale launch to promote a new variety and create demand.

**GoSeed component feedback** ([Click here for the Poster](#)) and ([click here for the feedback from World Café](#))

Demand is the most limiting factor for GoSeed. BASICS-II will need to raise awareness about new varieties through demonstration farms, interaction with farmers, governments, and processors. Then a pull can be created through the introduction of new varieties and reduction of costs through SAH. Early contact with processors and uptakers is key to know their demand and ensure they make a down payment.

**Cassava seed tracker component** ([Click here for the Poster](#)) and ([click here for the feedback from World Café](#))

There are several main barriers for scaling up. First of all the inertia and mindset on ICT tools of farmers needs to be addressed through the awareness raising on benefits of CST. With the help of Google, the use of the CST will be simplified through the use of infographics and addition of offline text message to address the limited access to internet and smartphones by farmers. The use of the CST will also be enhanced by adequate training of quality control staff and producers and constant follow up of NASC officials to use CST for quality assurance. NASC mandates all seed producers to register on CST for easier quality assurance and marketing.
Umudike Seed component ([Click here for the Poster]) and ([click here for the feedback from World Café])

Umudike Seed is set up as part of NRCRI Consult, to separate between NRCRI and Umudike seed. There are many challenges and questions in the set-up of Umudike Seed. Umudike Seed needs support in establishing a commercial business and develop a business strategy. Financial assistance is needed to engage consultants. A critical challenge is to reduce the number of years required to scale new varieties to farmers from 5-7 years to 2-3 years. That includes working on the turn-over of varieties, the market demand for new varieties, the certification process, and identification of buying patterns. Social and economic scientists are required in this process.

Early generation seed component ([Click here for the Poster]) and ([click here for the feedback from World Café])

The weakest link is a lack of knowledge about the viability of pencils. We need to do research to how the production costs look like in a scaled system, and what the costs of biosecurity are. The use of greenhouses is important, because more stems go in a given area and it helps to prevent diseases. Also, there is a need for more knowledge about how certification looks like in the early generation system, and what the role of NASC is. The certification procedure for EGS needs to be codesigned. A key strategy for success is to fixate on achieving scale in 2/3 years. To achieve this, the system must be driven by commercial principles. That includes the identification of buying patterns and testing the ranges of opportunities. For that the engagement of more social and economically oriented scientists in the project is essential.

VSE component ([Click here for the Poster]) and ([click here for the feedback from World Café])

Several weak links were identified. There is a need for demand creation and seed marketing through the branding of improved varieties and by linking varieties to specific food preparations. The distribution of free planting materials needs to be minimalized through engagement with government and institutions, and by making them buyers of VSE planting materials. In terms of certification, the project can consider having accredited seed producers that need limited oversight by NASC to ensure cost efficiency.

PLM component ([Day 2 - Presentation 8]) ([Click here for the Poster]) and ([click here for the feedback from World Café])

The weakest link is the need for a feedback mechanism to inform what varieties the processors are going to make available to farmers. The characteristics that processors look for need to flow into our understanding of which varieties to make available. Another significant limitation is what happens once the processor gets the varieties into their catchment areas. To make this model successful new varieties need to be released continuously. The value of this system is only if it is sustained through innovations that keep processors interested. To do so, management practices that are more effective and cost efficient need to be developed.

PAC – by Alfred Dixon

The BASICS Project Advisory Committee (PAC) provides guidance to the BASICS project. After hearing all the component presentations and coming out of their annual PAC meeting, the Chairman of PAC, Dr. Dixon shared the following key observations.

The trials conducted to demonstrate all important value proposition for the farmers showed no significant differences in yield between farmer saved seed and the certified seeds of the same varieties. The results of this IITA study should be shared with NASC, on which basis the NASC needs to
reformulate certification process strategies. At farmers’ level there must be some form of flexibility in the certification process. We recommend the PMU to work with the NASC to see how the model can be adapted.

Secondly, BASICS project will support the Umudike Seed entity at NRCRI so that it becomes a fully operational and sustainable company. We also recommend making a business case for the VSEs. What are the conditions to operate profitably, and what is the economy of scale needed to make it interesting? The ultimate goal of the project is to help the smallholder farmers. We must avoid a scenario in PLM where the processors benefit but the small-scale farmers do not. To create demand, BASICS needs to focus on awareness creation in 2019. Lastly, Nigeria is a big country, and this is the first project on creating a commercial sustainable seed system. Therefore, as PAC, we recommend that there is a need for a second phase.

DAY 3 – SHAPING OF PHASE 2
BASICS-II – BY HEMANT NITTURKAR (CLICK HERE)

The last day of the BASICS ARPM 2019 focused on shaping of phase 2. Productivity can only increase if there is a good channel to get new varieties to farmers, and if farmers deploy good agricultural practices. To harness our efforts, the project needs to take on the following areas of learning:

- Shift in value proposition from certified clean seed to focus on improved variety and true to type offering. 60 to 70% of farmers still use local varieties.
- The VSE and PLM model need to look at ways of decreasing the seed entrepreneur and farmer acquisition costs while making the models self-perpetuating.
- Strong market promotion by product profiling for different customer segments and attractive naming of the improved varieties.
- Focus on new breeding metrics of genetic gain, varietal replacement and varietal age in farmers’ fields.

In that context, BASICS propose a shift from VSE to Seed Entrepreneur Accelerator (SEA): a model that will reduce the acquisition costs per customer and the ongoing backstopping costs. The project needs to ensure that operational costs come down (for example based on the MADE model to accelerate the number of VSEs). Also, maintenance costs of SEs need to be reduced through sharing of information, business cases and success stories. BASICS will also work on attracting larger SEs on the basis of a clear and presentable business case. That also includes the creation of marketing support and enabling environment for these entrepreneurs to work. Including a cash flow model in the supply chain can ensure down payments for confirmation. This will give the project indications of shifting interests. If we share the data regarding changes in varietal demand, all actors in the project can all adapt and will help in long term business planning.
**BASICS-II Project Framework – by Peter Kulakow** ([Click here](#))

The breeder seed component looked at what the components may look like in the next phase, trying to create more interaction between the different components of BASICS. BASICS need to help with the development of product profiles. Product profiles are also called product replacement strategies. Breeders need feedback from the field on which products to advance. In Nigeria there are 4 main product profiles: biofortification, cassava for food security, cassava for industry (starch, flour), and cassava for fresh market. We have product pipelines for all of these, and there are 4 new products in development. We are actively working on CBSD resistance. Towards variety release BASICS should be preparing the market through marketing. BASICS also play a role in getting feedback from the farmers and bring this back to the breeders; gathering marketing intelligence.

**Group Work** ([Click here](#))

The participants were asked to split up in groups around the three main components and put together a powerful Concept Note for a possible phase II based on the reflections of day 1 and 2.

**EGS – by Peter**

Certified product launch plans based on the 4P’s of marketing need to be developed, which includes branding and having common names for varieties. A key goal in marketing is to create key messages and simple selling propositions for products. These messages can be included in the naming process. At the same time, it needs to be taken into account that the naming of varieties is part of NASC’s mandate, and the naming process therefore needs further discussion.

The main role of BASICS in integrated stock management is: 1) facilitating the cooperation between companies, 2) marketing and marketing research, 3) cash flow management, 4) development of business plan for Umudike Seeds, and 5) product launch planning through product managers. At the moment, there are between 20-24 varieties that look promising. Also, there are many new varieties that never left the shelves that can be bulked up and marketed. Breeders are making breeding more efficient by getting new varieties in shorter time. Through market segmentation and through regional differences many varieties can be pushed out. To conclude, there are 7 points that EGS can work on: selling, strategy of new variety launch, existing variety push, readiness, product profiling/messaging, advocacy to think ahead from a policy angle.

**Seed entrepreneur acceleration (SEA) – by Emmanuel Azaino**

To address the high cost of each VSE added to a VSE network, a cost-effective ‘accelerator’ team comprised of CRS staff, will provide the technical support to the VSE network executive, who will then pass on the training to the network members.

Apart from cost reduction, a strategy to increase the number of SEs needs to be in place. This can be done through an incentive structure to incentivize SEs to set up new networks in new locations. This needs to be backed up by a strong emphasis on low cost implementation strategy to increase economic viability of the VSEs, and greater emphasis on the introduction of mid-sized SEs. Another shift that needs to be made to allow for scaling up and cost reduction is from certification by NASC to accreditation of SEs with NASC oversight. Ensuring commitment is fundamental in every seed business. A company has to deal with changing demand. To build in flexibility and commitment at the same time, the company should offer different contracting methods.
Quality seed and market responsive certification – Julian Smith (Click here)

The cassava seed tracker can be used to go from inspection to a compliance-based audit overseen by NASC. This is especially feasible in breeder and foundation seed production, because these actors are already well organized, and will reduce travelling and costs. The costs of certification must be recognized and shared so that the seed value chain can commercially grow. Besides, in the context of scaling, the project needs to think about alternative community certification practices. The project is introducing a pilot this year where an agent located in the community is employed by NASC to do the certification, in order to fast track the certification process (see third-party certification below). The level of certification by the community certification officer would be similar to the current level of certification. The NASC needs to draw up the standards for a community certification scheme.

NASC has a critical role in ensuring traceability and reducing malpractice. Therefore, innovative ways for labelling and traceability need to be developed, also to avoid fraudulent use of the label. This needs an auditing system. Besides, NASC’s role is to monitor and have an early warning system in place to ensure vigilance and responsiveness to emerging pest threats.

Third-party certification: the level of certification by the community certification officer would be similar to the current level of certification. We need to consider the costs of putting in place certification officers, it might turn out to be equally expensive as current model. However, the core purpose of the third-party certification is not to reduce costs, but mainly to fast track the certification process. Delay in certification is already a major problem and will increase if we scale up. The NASC needs to draw up the standards for a community certification scheme.

Concluding words — by Lawrence Kent

We still have almost a year to hit milestones of the first phase. The progress in this year will set the stage for a potential second phase. We built a bridge connecting breeders to end-users through breeder seed, foundation seed and the commercial channel, certified by NASC and put together through the Cassava Seed Tracker. We are building this bridge to get the improved varieties to the farmers. We want this bridge to be reusable: we want to move away from the old linear breeding model. We want a sustainable bridge that can deliver after the end of the project. Breeder and foundation seed producers are going to make money which will incentivize them to continue. In BASICS, we have great partners that know how to make this a reality. This is exciting because many people thought it wasn’t possible, because farmers were used to getting free material. Through BASICS we have been able to show what is possible, and we need more time to consolidate this. I am very proud of this project and want to thank all partners. Together we make sure that great disease resistant improved varieties will benefit farmers in a sustainable way.
ANNEX 1. ARPM EVALUATION FORM

We would like to get your feedback on the workshop to help us further improve the running of future BASICS meetings. Please evaluate the APRM against the listed criteria using the rating scales shown.

Please rate the following attributes using the scale: 1- strongly agree, 2 - agree, 3 – Neither agree nor disagree, 4- disagree 5- strongly disagree

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>NO VALUE</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>The workshop met my expectations</td>
<td>21</td>
<td>14</td>
<td>4</td>
<td>3</td>
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<td>1</td>
</tr>
<tr>
<td>2</td>
<td>The workshop provided a meaningful update on the BASICS project so far and clarity on key activities up to March 2019</td>
<td>27</td>
<td>11</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>The Day 1 presentations on the four + PMU components were comprehensive, and they received good feedback on refining their workplans in the discussions</td>
<td>17</td>
<td>15</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>I came away with clarity on the overall activities needed to ensure the best outcomes in 2019/ 2020.</td>
<td>14</td>
<td>19</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>The most important issues concerning taking the project forward to phase 2 have been addressed.</td>
<td>16</td>
<td>14</td>
<td>10</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>On Day 2 The innovation packages were well explained and their potential readiness for scaling improved in the World Café</td>
<td>17</td>
<td>18</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Cross cutting issues, stronger coordination and more collaborative activities were addressed and endorsed.</td>
<td>10</td>
<td>20</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>The workshop contributed significantly towards achieving long term sustainability</td>
<td>19</td>
<td>16</td>
<td>4</td>
<td>4</td>
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</table>

Please rate the following sessions in terms of how useful they were in developing your understanding of the activities and how BASICS will achieve sustainability; using the scale 1- essential and very useful, 2- very useful, 3-useful, 4-not so useful 5-was not necessary

<table>
<thead>
<tr>
<th>Session</th>
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<tr>
<td>1</td>
<td>Overviews from BASICS and RTB Hemant and Graham</td>
<td>20</td>
<td>12</td>
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<td>1</td>
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<tr>
<td>2</td>
<td>Breeder seed component and SAH</td>
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<tr>
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<td>Villages Seed Entrepreneurs</td>
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<td>15</td>
<td>8</td>
<td>3</td>
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<tr>
<td>4</td>
<td>Processor Led Model – Mark and Tele</td>
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<td>22</td>
<td>5</td>
<td>3</td>
<td>0</td>
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<tr>
<td>5</td>
<td>Quality seed component – Ojo and Julian</td>
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<td>19</td>
<td>4</td>
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<td>0</td>
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<tr>
<td>6</td>
<td>MADE</td>
<td>10</td>
<td>14</td>
<td>10</td>
<td>6</td>
<td>1</td>
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<tr>
<td>7</td>
<td>PMU update</td>
<td>15</td>
<td>18</td>
<td>5</td>
<td>4</td>
<td>0</td>
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</tbody>
</table>

PLEASE TURN OVER THE PAGE
1 - Very Satisfied, 2 – Satisfied, 3 - Somewhat satisfied, 4- Dissatisfied, 5- Very dissatisfied

C: Facilities and events

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
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<th>3</th>
<th>4</th>
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<td>Overall facilitation</td>
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<td>10</td>
<td>2</td>
<td>4</td>
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<tr>
<td>Accommodation and food</td>
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<td>4</td>
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<tr>
<td>Logistics and travel arrangements</td>
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<td>17</td>
<td>2</td>
<td>2</td>
<td>3</td>
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</table>

What was most useful for you?

**PRESENTATION, DISCUSSIONS & FEEDBACKS**

- Feed back discussions day 1
- Raising important issues for all component
- Interactive sessions gave more insights to the in-depth knowledge of BASICS achievements and the need for phase II
- Feedback from PAC was very useful
- Understanding of the project, where they are and future plans
- Powerful presentations and reviews
- PAC meeting discussions
- Sunday pre meeting, to discuss pivots
- Sense of direction about possible focal areas for next phase
- Agreement of PAC for need to do a 2nd phase
- Networking opportunity
- Learning more about the project

**PROJECT COMPONENT**

- Well expanded SAH lab
- Outscaling the VSE components
- Seed tracker
- Innovation package & scaling up
- Seed innovation package for scaling
- Innovation package & scaling up
- Up scaling IITA/GoSeed cassava component

**WORKSHOP FACILITATION**

- World café/poster presentation by various groups
- Café interaction with posters prepared upfront teams
- Clarity
- Proper time keeping
- The exposition on how the project can be made better
- Poster session
- Poster, world café created a healthy exchange of ideas
- Facilitation
PROJECT MANAGEMENT

• Achievements so far
• Focus
• Logistics, and travel arrangements
• Success stories so far that this project has achieve
• Involvement of different partner in the project
• Update on basics activities over the year

What can future meetings/ workshops do better?

PROGRAM PLANNING AND LOGISTICS

• More advance training for special topics such as scaling strategy
• Early engagements and follow up on conference materials
• Good to invite VSEs in future meetings
• Bigger hall
• Increase the number of days to reduce fatigue on participants
• Keep doing it right
• Need to maintain the standards
• Less population
• More days for ARPM (5 days recommended)
• Work on adequate materials for all participants
• Improved venue location

FACILITATION

• Café/workshop interaction
• Fun activities should be introduced to break the ice
• More innovative ways of brainstorming
• Time management

PROGRAM AGENDA

• Short field visit to SAH lab should be planned for in the program
• Better platform for synergy among the components
• Definition of role on the cassava seed system with respect to seed production i.e who does what and at what scale
• Update on seed tracker
• More days and time for component presentation and discussions
• More attention on facilitated discussions on cross component issues & tensions
• We have philosophical differences that are not being addressed. This continues to be a distraction

What does the BASICS PMU most need to focus on going forward?
PROJECT COMPONENT

- Seed commercialization via sustainable set ups
- New variety release structure. Pull instead of push of new varieties
- Larger commercial seed producers/dealers
- A well articulated program
- All components should work together going forward
- Reduce the difficulties in seed certification

EXIT STRATEGY

- Planning towards sustainability at the end of the project
- Fine tune idea notes for effective concept note
- GoSeed & Umudike seed
- Decentralize and commercialize the VSE training

PROJECT MANAGEMENT

- M&E of impact of project
- Release of necessary funds to implement basics be considered
- Timely release of funds to components
- Partnership coordination
- Meeting target objectives based on deliverables
- Timely release of partners fund/subventions
- Ensuring that project delivers its promise
- Meeting timelines in respect to reports submission
- Timely funds release to components or partners
- Contracts
- Work to ensure that phase 2 comes alive with all partners functional
- Project coordination
- Clear description and allocation of responsibilities
- PMU must seek to understand the project more, especially the components
- Component funding and not institution funding
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, consumers and industry through higher returns from improved varieties of superior stem quality that are made accessible to farmers at the right time and at an appropriate price.