



RESEARCH  
PROGRAM ON  
Roots, Tubers  
and Bananas



## Workshop report: RTB INCEPTION WORKSHOP

*Expanding Utilization of RTB and reducing their postharvest losses*

March 27-29, 2014



A broad alliance of  
research-for-development  
stakeholders & partners



IMPERIAL GOLF COURSE HOTEL, ENTEBBE-UGANDA

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[www.rtb.cgiar.org](http://www.rtb.cgiar.org)





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## List of Acronyms

|         |   |
|---------|---|
| AFRI    | Africa Innovations Research Institute                     |
| CGIAR   | Consultative Group on International Agricultural Research |
| CIAT    | International Center for Tropical Agriculture             |
| CIP     | International Potato Center                               |
| CIRAD   | Center for International Rural Agriculture Development    |
| CLAYUCA | Consortio Latinoamericano y del Caribe de Apoyo           |
| CRP     | Collaborative Research Program                            |
| DRC     | Democratic Republic of Congo                              |
| E U     | Expanding Utilization                                     |
| HQCF    | High Quality Cassava Flour                                |
| IFAD    | International Fund for Agricultural Development           |
| IFPRI   | International Food Policy Research Institute              |
| IIRR    | International Institute for Rural Reconstruction          |
| IITA    | International Institute for Tropical Agriculture          |
| ILRI    | International Livestock Research Institute                |
| LAC     | Latin America and the Caribbean                           |
| NARO    | National Agricultural Research Organization               |
| NRI     | Natural Resources Institute                               |
| PHH     | Postharvest Handling                                      |
| PHL     | Postharvest Losses  |
| PMCA    | Participatory Market Chain Approach                       |
| PS      | Private Sector  |
| R&D     | Research and Development                                  |
| RTB     | Roots Tubers and Bananas                                  |
| SASHA   | Sweet potato Action for Security and Health in Africa     |
| SSA     | Sub Saharan Africa  |
| VC      | Value Chain   |



## 1.0 WORKSHOP BACKGROUND

Roots, Tubers and Bananas (RTB) are consumed as a staple or supplementary food by the rural poor across much of the developing world. Their importance increases in the transition to more market-based food systems, especially through added-value products, both fresh and processed. In Sub-Saharan Africa (SSA), as a group they contribute over 20% of caloric requirements and constitute nearly two-thirds of per-capita food production. RTB are potentially important sources of minerals and vitamins as well. For example, there are varieties of sweet potato, cassava, and banana that can contribute significantly to reducing widespread vitamin A deficiency. Potato is a significant source of potassium and vitamin C. As part of robust value chains in SSA, RTB are also becoming a significant source of income, though their full potential has yet to be realized. The trade in sweet potato, cassava, yam, potato, and banana in SSA is characterized by short and direct marketing channels. But postharvest losses (PHL) are much higher with this group of crops than with grains, as inherent bulkiness and perishability have traditionally limited RTB use to on-farm and local markets. Moreover, specialized storage conditions or postharvest processing is required to extend their use beyond harvest periods and for more distant markets. In developing countries, PHL of RTB are higher than the global average and affect more severely already endangered livelihoods. The overall problem of PHL is often compounded by an unfavorable policy environment. There is considerable scope for repositioning RTB as added-value cash crops through expanding their use for processing and sales of preferred varieties to satisfy emerging markets in small and large cities.

Accordingly, the CGIAR's- Research Program (CRP) on Roots, Tubers and Bananas (RTB) partners i.e. Bioversity International, CIAT, IITA and CIP are implementing an EU funded three year project (2014-17) titled 'Expanding Utilization of RTB and reducing their post-harvest'. The overall goal of the project is to contribute to improved food security for RTB-producing communities, including both the producers and other stakeholders along the chain, in EAC. The objective of the program is improved food availability and income through postharvest and processing technologies, value chain development and capacity development. The project will be operational in Uganda for three years (2014-17), but with a wider scope and mandate to cover the ECA region.

The project which is embedded within -RTB's Theme 6: *Promoting postharvest technologies, value chains, and market opportunities*, which aims to overcome the challenges linked to bulky and perishable crops, as well as unfavorable policy environments, and realize the opportunities of RTB in postharvest systems. The project will also have strong linkages with CRP 2 on Policies, Institutions, and Markets to Strengthen Assets and Agricultural Incomes for the Poor. The implementing partners will draw on each center's familiarity with recent methods to link the proposed project to relevant components of Theme 6 with its three product lines (PLs):

1. Postharvest approaches to improve food security

- 
2. Improving linkages to markets for environmentally friendly income generation activities
  3. Marketing strategies and policies to add value and promote RTB consumption.

As part of the project initial activities, the RTB partners organized a three-day inception workshop to:

- Establish commodity groups to undertake research activities, building on the recommendations from the project planning meeting (2012), the 2013 RTB seminar in Kampala, and further inputs from partners and stakeholders.
- Develop preliminary scoping plans/business cases for selected research options.
- Discuss and agree on next steps to guide development of research proposals

The workshop was attended by 45 participants (29 men and 16 women), representing the implementing institutions and their partners drawn from National research institutions, academia, NGOs and private sector. (See full list of participants in Annex 2).

## 2.0. Expected Workshop Outputs

Sarah Mayanja<sup>1</sup> presented a summarized set of expected outputs of the workshop that included the following:

- 1-2 preliminary business cases (per crop) with potential to be developed into firm research options developed by teams comprised of CG and non CG partners. The teams were expected to develop clear outlines of initial research activities that would aid completion of business cases for the research options.
- Revised and agreed upon list of criteria for selecting business cases for implementation
- Partners obtain a clear understanding of the stages of project implementation from scoping through to implementation
- Partners informed about project management and reporting requirements.
- Preliminary ideas about project communication and M&E plans shared and discussed with partners for their input.

## 3.0. Workshop Process and Road map

The workshop facilitator, Dan Kisauzi<sup>2</sup> presented the workshop process and road map to give an enlightened sense of direction and for effective use of time. He indicated there would be brief sessions for;

- Clarification: Brief Q and A sessions
- Buzz around the table to generate key messages from presentations. Every after a presentation, there would be group synthesis of the presentation in which participants would then point out key messages to share in a plenary.
- Group work; what, why, when, and how? The feeling from group work relates to working together, writing together, helping one another and sometimes having fun!

Once the road map was presented, the stage was set for the three day inception workshop with all hopes that by lunch-time on Saturday 29<sup>th</sup> March 2014, all teams are equipped with the knowledge and tools that they need to go back and deepen the scoping of a selected RTB research option.

Click on the icon below to view the presentation

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<sup>1</sup> Research Associate at International Potato Center (CIP), Uganda

<sup>2</sup> Director at Nkoola Institutional Development Associates (NIDA)



Workshop process  
map- Final.pptx

## Highlights of the three days

### Day One

#### 3.1 Presentation 1: 'Engaging partners and enhancing impact'

GrahamThiele<sup>3</sup>

Graham presented a brief background to the workshop pointing out the rationale for RTBs as major staples, cheap sources of energy and nutrients, household food security, lower risk of price fluctuations, and climate proof characteristics among others. He stressed the fact that the major challenges for RTBs relate to perishability, bulkiness and postharvest losses. He pointed out that the EU-RTB Project is aimed at repositioning RTBs as added value cash crops through expanding processing and sales of preferred varieties for emerging urban markets, addressing issues of storage, transportability, and gaining market share as well as increasing shelf life and reducing postharvest losses. In conclusion, he noted that the RTB Program needs to build capacity in postharvest and value chain area as critical driver. Uganda is a strategic country for RTB and the New EU project is a great opportunity for postharvest in RTB. Click on the icon below view the presentation.



RTB\_EC\_14\_03\_27.p  
ptx

#### 3.2. Presentation 2: Expanding utilization of RTB and reducing their postharvest losses: Options for East Africa.

Dufour Dominique<sup>4</sup>

Dominique reiterated the opportunities and constraints of RTBs in Sub-Saharan Africa as well as cross-cutting opportunities for RTB research in the region. He stressed the fact that the new project will capitalize on the ongoing projects and activities of CIP like the Sweet potato Action for Security and Health for Africa (SASHA) and potato, IITA on cassava and banana (breeding, seed system, and postharvest), Bioversity on all aspects of banana in Africa, and CIAT's and Consorcio Latinoamericano y del Caribe de Apoyo (CLAYUCA)'s experience and expertise on cassava flour processing in Latin America. He further noted that numerous national research institutions, nongovernmental organizations, and private

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<sup>3</sup> Director, CIP-Lima

<sup>4</sup> RTB Postharvest Team Leader, CIRAD/ CIAT

entrepreneurs in Uganda also have considerable expertise, experience, and interest in RTB. Click on the icon below to view the presentation.



Expanding utilization  
of RTB EC project fin:

### 3.3. Presentation 3: 'Expanding Utilization of RTB and reducing their postharvest losses: Overview of a new EU-Funded project.'

Gordon Prain<sup>5</sup>

Gordon presented the overview of the new EU-funded project for East Africa where he summarized challenges, objectives, key proposed research areas, methods and design, steps in implementation and possible research options. He further underscored the challenges for RTBs in East Africa as presented by earlier presenters. Other challenges included short, direct marketing channels with high losses, a lack of handling and storage technologies, physiological characteristics limiting shelf life and underdeveloped potential for value-addition are among the other common challenges. In addition, the strategy, approach and methods to be used in this project, pre and post workshop implementation steps to be followed were all highlighted in the presentation. The implementation process from the workshop would involve:

- Forming crop-based multi-agency teams
- Identifying crop-based postharvest research options (building on earlier work)
- Preparing preliminary business case for research options (2 to 3 per crop) considering assessment criteria.

Post workshop implementation steps will involve among others;

- Scoping phase (approximately 3 months from signing contracts) to construct business case
- Review of business cases by external evaluators
- Selection of 3 – 4 research options with strongest business case
- Full implementation of research for selected options (approximately 2 year period)
- Development and implementation of M&E system for review and improvement
- Development and implementation of a communications plan to support inter-agency implementation.

Click on the icon below for the presentation



Overview\_project\_fi  
nal.pptx

#### Discussion points and clarification from the three presentations:

- ✚ A concern was raised regarding whether there was an opportunity to include Kasese district especially because it is now a high cassava producing area.

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<sup>5</sup> Theme 7 Leader, CIP-Lima

- ✓ Kasese district coverage was a possibility and it was up to the research teams to justify cases for inclusion and exclusion during the workshop.
- ✚ Research options and whether the 2-3 research options were for all crops
- ✓ The 2-3 research options are for each of the four crops; Potato, Sweet potato, Cassava, and Bananas.
- ✚ Whether there was a baseline done for all crops to inform targeting for the research options
- ✓ There is already a lot of information available but for each scoping option, there will be need for some kind of baseline to be carried out
- ✚ Concern about the \$ 25,000 allocated to each crop
- ✓ The \$ 25,000 allocation was intended for seed for each crop.
- ✚ Whether the research team already knew about the EU project on food security in Uganda
- ✓ EU was invited to this workshop and unfortunately they are not here but we are not aware of such funding. We are happy to explore opportunities for collaboration.

There were two comments captured before the house split into 4 groups to BUZZ and generate key messages in smaller groups:

- ✓ The consumers do know what they want in terms of quality and this project provides an opportunity for consumers to look beyond the traditional uses of these crops
- ✓ There is also need to carefully design mitigation measures for unintended consequences, for instance Bushenyi district until recently was a leading producer of bananas but also leading in poor nutritional indicators!

### ***Key Take-Home messages from day 1 morning session presentations and discussions***

The following is an outline of notes that were generated from the first round of 'round table BUZZ'.

- ✓ It would have been a plus to have print out of presentations to share before hand for better internalization of subject matter;
- ✓ A lot of research has already been done in Uganda and Latin America and the Caribbean (LAC) and the project is set to go;
- ✓ Good research on markets and market access, opportunity for Ugandan smallholder farmers;
- ✓ Scalable research and collaboration with the private sector, way to go for expanding utilization;
- ✓ There is need to rigorously identify research options on business cases;
- ✓ There is urgent need to internalize tools and approaches for better results;
- ✓ Postharvest handling is central and key to this project but must be contextualized;
- ✓ The project needs to focus on food security as well and provide opportunities for entrepreneurship;
- ✓ The need to have gender on the project agenda cannot be overemphasized;
- ✓ What is the scope of these research options?
  - What about credit?
  - What about raw materials?

- What about other cross-cutting issues to explore given the complex systems under which we are operating
- ✓ There is a huge but unexploited market for RTBs
- ✓ There are numerous challenges and constraints that RTBs face

### 3.4. Presentation 4: The relevance of RTB's gender strategy for postharvest and value chain research.

Netsayi Mudege<sup>6</sup>

This presentation focused on the RTB Gender Strategy and how it relates to mainstreaming gender in Postharvest and Value Chains work in RTB. The Strategy was approved in 2013 and will guide gender mainstreaming in RTB research activities. The strategy was a result of a consultative effort with different stakeholders, RTB Scientists and External Gender Experts. It is now available on the [gender webpage](#) on the RTB website. The presentation outlined the overall objectives of the Gender Strategy which among others are to:

- Improve food security and reduce poverty while strengthening gender equity.
- Enabling all farmers, both men and women, to benefit from science and technology interventions by RTB and partners
- “Level the playing field” where possible by providing equal access to knowledge, capacity building, and market opportunities

The presentation also highlighted examples of successful RTB Gender and Value Chain projects from other parts of the world, highlighting data collected and issues addressed in the various projects.

To view presentation click on icon below



Netsayi  
presentation\_final.pp

### 3.5. Presentation 5: 'Outputs of the RTB gender in value chain workshop'

Netsayi Mudege, Silvia Barone, Anne Rietveld, Andre Devaux and Sarah Mayanja

This presentation focused on outputs from the RTB gender in value chains workshop, and key areas of utility for the EU-RTB project, The “workshop which preceded the RTB inception workshop aimed at sharing experiences in engendering VC approaches that have been used by RTB partners: the– PMCA & 5Capitals. The purpose was to integrate these 2 existing approaches to enable gender sensitive VC interventions and VC assessment, and to review tools and guideline for mainstreaming gender in VC amongst RTB partners.

From the outcomes of the workshop, the following were the salient issues that were deemed to be of value for the EU-RTB project:

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<sup>6</sup> RTB Gender Research Coordinator, CIP-Lima

- Availability of tools (new & existing) for mainstreaming gender in VC Engendered PMCA and 5Capital trainers and user guides will soon be available for value chain practitioners
- Gender in VC coaching trajectory to be launched soon for RTB partners
- Concept note to scale proven technologies using an engendered PMCA and 5Capitals for a potential project that would augment the EU-RTB project

To view this presentation, click on the icon below:



Reflections from the  
RTB GVC workshop\_R

### Questions, discussion points and take-home messages

- ❖ The two concepts of PMCA and 5 Capitals are not clear, seeking clarification on the concepts.
  - ❖ Is PMCA an assessment tool?
  - ❖ A lot of work has been done in integrating gender issues in value chains, would you share any success stories especially with respect to RTBs
  - ❖ It was also observed in 5 Capitals that some activities were biased towards women while others to men.
  - ❖ At what point in the VC do we consider gender?
- + The two concepts are designed to achieve smallholder integration in remunerable value chains. We need to agree though that the two concepts can be strengthened. We tried to do a blended methodology between livelihood and Value Chains where we brought elements together.
  - + PMCA is not an assessment tool but a value chain development approach. 5 Capitals is an assessment tool for poverty impacts.
  - + When we implemented a project on Orange Sweet potatoes, we used the agriculture innovations approach to upgrade VC in Kenya, Tanzania and Uganda and there are quite a number of success stories. Table banking/loans for women is one such success in Kenya.
  - + Men are often interested in large scale enterprises while women tend to go for micro enterprises because of resource constraints. It is important to understand the constraints and needs of women and men chain actors, and support identification of strategies to address them. . Division of roles (e.g. in labor) does not always imply gender inequality and should not be viewed as such, sometimes this leads to better opportunities for everyone
  - + We have to take into account the role of gender at each stage in the Value chain

This marked the end of the morning session and the afternoon was scheduled for group work on preliminary business cases, (2-3 options per crop) from which final options would be considered for development into full proposals for funding.

### Developing business cases for research options



In the afternoon of day one, participants divided into 4 groups (Cassava, Sweet potato, Irish potato and bananas) and commenced work on preliminary business cases. Each group was tasked to come up with business cases which among others would address the following:

- + The feasibility of reaching the technical innovation
- + Cost of new product or option compared to willingness to pay
- + Size of market size and total demand
- + The supply of raw material in terms of quantity and quality
- + Potential to scale up
- + Potential for impact on food security
- + Potential for gender equity (inclusiveness and benefit sharing)
- + Impacts on the environment

Participants were presented with the criteria for developing a business case for research options. The criteria were further discussed in a plenary session. At the end of the session, some elements of the original criteria were validated, others modified while some new criteria were generated (see Table 1 below).

Using the revised criteria, four groups set out to generate preliminary research options for Bananas, Cassava, Sweet potato and Potato. After two hours of quality and productive time, the groups were ready to present preliminary research options identified.



Table 1: Revised criteria for Business case for research option

| Feasibility of reaching the technical innovation              | Cost of new product or option compared to willingness to pay | Size of market size and total demand  | Addresses supply of raw material in terms of quantity and quality               | Potential to scale   | Potential for impact on food security               | Potential for gender equity (inclusiveness and benefit sharing)             | Considers positive and negative impacts on the environment |
|---|--|---------------------------------------|---|--|---|---|--|
| Availability of technologies and access to technical services | Consumer acceptability in different market segments          | Market demand and economic viability, | Show case technologies that address issues of seasonality, quality and quantity | Likelihood of adoption of the research option                        | Consideration of +ve & -ve effects on food security | Assesses costs and benefits to men and women                                | Environmental sustainability of processing                 |
| Availability app. & adapted PH technology                     | Consumer preference acceptance (gender)                      |                                       |   | Extent of investment required and likelihood to access finance       | Potential for postharvest loss reduction            | Gender sensitive  | Environmental performance                                  |
| Availability of appropriate varieties                         | Must be viable (costs-benefits)                              |                                       |   | Potential for impact & impact pathway                                | Potential to increase food security inc. nutrition  | Potential to increase benefit for women and youth                           |  |
|   | Cost-benefit and distribution of benefits across VC actors   |                                       |   | Sustainability – better options for including storage                |   | Gender equity along the VC eg participation, constraints, access to markets |  |
|   |  |                                       |   | Explores synergies with other business cases (creates opportunities) |   |   |  |
|   |  |                                       |   | Access to markets  |   |   |  |

## Day two

Day two commenced with feedback from the workshop steering working group on the progress on development of preliminary research options. The banana group had made sufficient progress (hence a green light), while potato and sweet potato were almost there (amber) and Cassava had significantly more work to do (red), as given in Chart 1 below:

|                             | Banana  | Sweet Potato  | Potato  | Cassava   |
|-----------------------------|---|---|---|---|
| What is the option          |  |  |  |  |
| Preliminary business case   |  |  |  |  |
| Plan for first three months |  |  |  |  |

### Comments and feedback after the presentation of the preliminary research options

- ✓ The link to gender is not as strong as would be desired, there is need to emphasize this in the next round of presentations;
- ✓ The link to the private sector and involvement has not come through explicitly. In the next round of presentations, stronger links with the private sector will be great value added;
- ✓ Markets in all presentations have not been given due importance. It is not sufficient to look at business cases without due consideration of markets;
- ✓ The use of sales by weight is crucial because this does not only benefit the consumer but also the producer;
- ✓ There is need to take into consideration the bi-products of RTBs.

Given this feedback, the groups continued to work on the preliminary plans with an aim of accomplishing the target goal agreed upon.

At the end of day, the groups shared their progress in a plenary session. The feedback given to improve the cases included:

- ✓ The sweet potato group was tasked to further clarify their priority options, and zero down on the best two.;
- ✓ The cassava group was advised to review successes and failures of cassava projects in East Africa and the region as a whole, and use this information to enrich their cases;
- ✓ Cassava team was also reminded that a National cassava platform had been established, while a cassava development strategy was being developed.
- ✓ The potato group was advised to focus on one option

The general feeling was that groups were getting close to the final product and progress could be seen from chart 2!

*Chart: Progress made after 2 days of hard work.*



|                             | Banana  | Sweet Potato  | Potato  | Cassava   |
|-----------------------------|---|---|---|---|
| What is the option          |  |  |  |  |
| Preliminary business case   |  |  |  |  |
| Plan for first three months |  |  |  |  |

### Day three

On day 3, the groups had a task to refine their cases using template 'B' (see Annex 3). This called for the teams to capture the demand and the proposed team composition highlighting roles and responsibilities; among others. Two main questions on demand were to be answered: the market demand for the proposed research option as well as the demand for products resulting from technology including evidence of this demand and potential size. The Results section was intended to capture several issues in the business case, including:

- What are the expected results and how do they address postharvest losses and expanded utilization?
- What will be the value generated from this research, if successfully adopted?
- Who are the expected users and beneficiaries and what is the scale of potential impacts?
- How many beneficiaries could be expected?
- What outcomes are expected in food security?
- What are the possible effects on gender equity?
- Are there any environmental effects, positive or negative?

### Comments and suggestions to improve the final business cases

- ✓ The Sweet potato team was advised to consider a member from the private sector to join the team
- ✓ The Sweet potato team was advised to re-think numbers of beneficiaries because the current number is too optimistic considering the project period of 3 years.
- ✓ Banana team to explore the possible negative effects of beer consumption
- ✓ In general, there are differences across presentations; some groups presented the expected output, others, outcome, while others presented impact! This complicates evaluation. The process team will streamline reporting.
- ✓ The process team to circulate final template that will be used for final proposals, no significant changes expected



It was desirable for the process team that by the close of the workshop, all teams have made great strides towards the final product in terms of strong business cases. The chart below shows the desired state.



|                             | Banana  | Sweet Potato  | Potato  | Cassava  |
|-----------------------------|---|---|---|--|
| What is the option          |  |  |  |  |
| Preliminary business case   |  |  |  |  |
| Plan for first three months |  |  |  |  |

And indeed, by the time the workshop came to an end, all teams were reportedly beaming with confidence and ready to take the proposed business cases to greater heights.



## 4.0. Working Group Outputs

The four groups presented progress on developing preliminary research options for each crop in several plenary sessions over the course of the three days... The groups received feedback from other participants, which they used to improve the cases. By the end of the workshop, all the groups had made substantial progress in refining the research options, in a process elaborated below.

DAY 1 Output

### 4.1. Banana Group

The Banana group came up with two research options, namely (i) Demand-driven approach to enhance banana juice and beer production and processing and (ii) Upgrading the Cooking-banana value chain. The first research option was motivated by low value of processed product and raw material, poor processing technology (labor intensive, poor hygiene), short shelf life and fluctuating supply (quality/availability) as well as market presentation and traceability issues. The second option - upgrading the cooking-banana value chain - was motivated by low returns to farmers, soil depletion and lack of transparent farm gate sale, among others. Other issues included, large PH losses (harvesting time, local transport, short time storage, large scale transport to urban market, loading and offloading and undifferentiated markets (not catering for different market segments) among others. The proposed approach for this option was integrated participatory approach working at various VC segments; where farmers would improve supply; traders reduce losses and retailers would create improved market outlets. Both options aimed at linking all VC actors through the introduction of the sales by weight/volume system and piloting this integrated approach.

Click on the icon to view the initial group outputs:



Banana options 1  
and 2.pptx

### 4.2. Cassava

The Cassava group considered the following possible options::

- i. Commercialisation of cassava flour,
- ii. Feed formulation,
- iii. Business model to integrate smallholder farmers,
- iv. Feasibility of cassava drying, and
- v. Adoption of disease resistant varieties.

The group then zeroed down on three options, namely:

- i. Investigating the feasibility of drying cassava for increased output and quality of flour,
- ii. Feed formulation and
- iii. Extending shelf life of fresh roots.



Photo: Cassava team brainstorming

### 4.3. Potato

The Potato group started off with two research options; ‘Appropriate postharvest practices for quality seed potato management in Eastern Uganda and Postharvest Innovations for better access to ware potato markets.’ For option 1, the goal was identified as improving access to quality seed potato in a timely manner to contribute to food security and income for women and men in Eastern Uganda. For the second research option, the goal of the research option is to enhance consistent supply of quality ware potatoes to diversified markets for food and income security for male and female producers.

Click on the icon below to view the initial outputs from the group:



potato option 1.pptx



potato option 2.pptx

### 4.4. Sweet Potato

The Sweet potato group started off with three research options:

- Improving utilization of sweet potato and other RTB crops and residues for pig feeding
- Improving utilization of sweet potato and other RTB crops and residues for dairy feeding
- Improving the shelf life of harvested sweet potato roots in the market and household level

Poor productivity of pigs as a result of inadequate nutrition, variation of feed availability as a result of seasons and high costs of commercial feeds motivated the first option. The second option was motivated by reduced grazing land, increased demand for milk and meat products, scarcity of feed and expensive concentrates. The last research option was motivated by the short shelf life and very high postharvest losses of the crop, which curtails its contribution to food security and income generation.

To view the initial group outputs, please click on the icon below:



Presentation for  
Sweetpotato team or



*Photo: Sweet potato team had productive time close to the cool gardens*

## 4.0. Next steps on drafting business cases

### 4.1. Sweet potato:

After all considerations were made, the sweet potato group dropped one of their initial research options and zeroed down to two: (i) improving the utilization of sweet potato and other RTB crops and residue for pig feeds; and (ii) improving the shelf-life of harvested sweet potato roots in the market and household level .

The feed option was considered to be competitive given the potential demand and the ability to create utility for over 350,000 smallholder pig farmer household who would benefit from this research option. This would be in terms of access to a nutritious and affordable feed, reduced environmental waste and pollution, and improved soil fertility. The group selected a team to finalize the business cases, which can be viewed by clicking on the icon below:



Sweetpotato Team  
1.pptx

### 4.2. Banana: Beverages option

The banana group settled for two options: (i) banana juice and beer production and marketing and (ii) upgrading the cooking-banana value chain. Both these options are expected to increase the value of the crop, its shelf life for home processors resulting into

incentives to increase production and improve quality. In Uganda, there is clear demand for beer (tonto) for cultural functions especially in central Uganda. The group agreed on a team that was responsible for drafting of the business cases and scoping plans, which can be viewed by clicking on the icon below:



Banana options  
1.pptx

### **4.3. Potato: Postharvest innovations for better access to ware potato markets.**

The potato group considered the second research option on postharvest Innovations for better access to ware potato markets. This was based on the drivers which include increased demand and consumption of fresh and processed potato locally and regionally, consumer lifestyles (urbanization), and the need for more consistent supply and occasional shortages in Uganda resulting in potato imports, among others. Expected results include but are not limited to:

- Farmers and national agencies are able to use evidence based recommendations for promoting upgraded ware potato storage practices (length of storage time vs quality maintenance) leading to increased utilization;
- Farmers with improved capacity to respond to differentiated market demand using upgraded ware potatoes PH management practices (500 direct beneficiaries – 50 commercial farmers and about 450 farmers receive training, 10 tonnes of potato in store, 6 stores for pilot);
- Farmers have improved nutrition and incomes due to better and more consistent supply of potatoes to the market.

To view the potato preliminary research option, please click on the icon below:



potato option 2.pptx



All smiles for Potato group

#### 4.4. Cassava: Chips and flour

The cassava group also settled for the first option; chips and flour. Under this option, it is expected there will be reduced cost of processing, improved quality, better marketing channels identified, and increased production of improved cassava chips, leading to increased incomes and food security, among others. These results are expected to lead to *expanded utilization*:

- By reducing the cost of processing and hence the price, making a low cost raw material for the industry;
- By improving the quality;
- By increasing the confidence of consumers ( especially industrial buyers) that the process can deliver the quantity, safety and quality that they need sustainably and consistently;
- Through ease of processing technology on labor especially women will increase output and utilization and
- Increase profitability is expected to lead to increased investments and increased output and further utilization.

The Cassava preliminary business cases, click on the icon below.



Cassava final template .docx

#### Closing remarks

Graham Thiele

In his closing remarks, the Director, RTB noted that while the project had only been operational for 3 months important strides had already been made. The groups have firm research options and comprise of very enthusiastic people to take this forward. He was optimistic that the proposed research options would be beneficial to the beneficiary



communities beyond the project life. He thanked all participants for active participation and in a special way the private sector representatives for taking time to attend the workshop and actively participating in all sessions. In a special way thanked the facilitator and the process team for the excellent work done.

## 5.0. Workshop Evaluation

Twenty one participants returned their evaluation forms to the secretariat and the following is a summary of the workshop evaluation by participants. Other comments have also been summarized.

At least 80 percent of participants who returned the evaluation forms were satisfied with the results of the workshop and had their expectations met. They agreed that workshop objectives were identified and met through a process that was aligned with workshop objectives. General consensus showed that presentations made were relevant and useful. Facilitation at the workshop was applauded but there were concerns from a few regarding the fact that the time for the workshop and in particular achieving the workshop objectives was not adequate. Logistically, pre-workshop communication, venue, accommodation and travel arrangements were all handled to high levels of satisfaction according to participants.

### *Comments from Evaluation forms*

- ✓ Refining and completion of business cases may require bringing together the commodity team because some people may not have active emails or access to internet. How will this be logistically addressed?
- ✓ Collaboration between institutions is key hopefully this will be emphasized and put into practice, not just mentioned.
- ✓ Good outcome for a large, diverse and new group.
- ✓ The outputs of the workshop need to be followed up. Commitments made especially sharing of presentations and other workshop materials to participants
- ✓ The after workshop requirements should be facilitated to encourage active participation
- ✓ Seed potato and ware potato are inter-related, these should have been addressed as one.
- ✓ Good opportunity to link among disciplines, commodity, CG Centers and partners
- ✓ Consistency will require keeping all group members together and only adding a few.
- ✓ Good foundation for moving forward.
- ✓ Keep up the coordination
- ✓ Very good facilitation skills exhibited by Dan Kisauzi, Keep it up
- ✚ I feel that there was need for at least one more day to get this work done or put to a more reasonable level. Our group, Banana, had time to conclusively deal with one option.

- ✚ Workshop preparation and facilitation could have been stronger but it did not compromise final outcome. Thank you for excellent logistical and other support.
- ✚ The workshop conveners were not exactly clear on what was expected until after the first day!
- ✚ Some key participants were either not invited or did not show up for the workshop!
- ✚ It is important that ground rules are agreed on and respected. Some participants were seen reading and responding to emails during the plenary, which is not exactly respectful.
- ✚ It would have been a plus asking participants in advance whether they are willing to be accommodated and cater for those who opt to commute due to personal reasons

## Next steps

- Interim leadership of research options
- Volunteer members of the Business Case Design Teams
- Ensure delivery of latest ROs/BCs from today to Sarah
- Timeframe for next steps

| What   | Who | When                                   |
|--|-----|--|
| Delivery of preliminary Business Case (PBC)              |     | 17/04/14                               |
| Evaluation/Approval of PBCs (Process group + consultant) |     | 16/05/14                               |
| Scoping studies to develop final BCs                     |     | 3 month period after signing contracts |
| External evaluation/decisions on final BCs               |     | Approximately Sept.-Oct.               |
| Launch of Implementation Phase                           |     | Approximately November 2014            |

Click on icon below for detailed post workshop guidance.



Post workshop guidance on next steps

## ANNEXES

### ANNEX 1. WORKSHOP PROGRAM

#### Expanding Utilization of RTB Inception Workshop to be held on 27<sup>th</sup> – 29<sup>th</sup> March, 2014

| <b>Day 1</b>             |   |   |
|--------------------------|---|---|
| Time                     | Activity  | Responsible person                                      |
| 8.15- 8.30 a.m.          | Registration  | Martha Ameru  |
| <b>8.30-8.50 a.m.</b>    | Introductions   | Dan Kisauzi   |
| 8.50- 9.00a.m.           | Expected workshop outputs   | Sarah Mayanja   |
| 9.00 – 9.10 a.m.         | Update on RTB program   | Graham Thiele   |
| 9.10 – 9.15 am           | RTB post-harvest research: Options for East Africa                                    | Dominique Dufour  |
| 9.15-9.30 am             | Clarification and discussions   | Facilitator   |
| 9.30 -9.45 a.m.          | Project approach and objectives   | Gordon Prain  |
| <b>9.45 – 10.00 a.m.</b> | Clarifications and discussions  | Facilitator   |
| 10.00-10.20 a.m.         | Tea break   | Hotel   |
| 10.20 -10.35 a.m.        | RTB gender strategy & implementation: implications for the EU-RTB project             | Netsayi Mudege  |
| 10.35 -10.45 a.m.        | Outputs from the RTB – GVC workshop and implications for the EU-RTB project           | Sarah Mayanja   |
| 10.45-11.00 a.m.         | Clarifications and discussions  | Dan Kisauzi   |
| 11.00 – 12.00 p.m.       | Discussion: Criteria and process for prioritization of research options               | Working groups and plenary feedback                     |
| 12.00-1.00 a.m.          | Working groups – consolidate thinking on initial research options                     | Group conveners   |
| 12.45- 14.00             | Lunch   | Hotel   |
| 14.00 15.45              | Working groups continue with group work and prepare presentations                     | Group conveners   |
| 15.45-16.00              | Tea break   | Hotel   |
| 16.00- 17.30 p.m.        | Presentations and discussions in plenary  | Group conveners   |
| 17.30-18.00              | Review of day's progress and planning for Day 2                                       | Facilitator and process group                           |
| <b>Day 2</b>             |   |   |
| Time                     | Activity  | Responsible person                                      |
| 8.30- 9.00 a.m.          | Recap of Day 1<br>Traffic lights - process progress<br>Review of the scoping template | Dan and Simon   |
| 9.00-10.30 a.m.          | Working Groups: Refine research options; develop preliminary business case            | Group conveners<br>(Resource persons to support)        |
| 10.30-11.00 a.m.         | Tea break   |   |
| 11.00 -1.00 p.m.         | Working Groups: continue with development of preliminary business cases               | Group conveners<br>(Resource persons to support)        |
| 12.30 – 1.00 p.m.        | Take stock of group progress  | Group rapporteurs feed back to the plenary (5 min each) |

|                    |                                   |                                      |
|--------------------|-----------------------------------|--------------------------------------|
| 13.00-14.00        | Lunch                             | Process group meets over lunch       |
| 14.00 – 14.30 p.m. | Feedback from the process group   | Dan                                  |
| 14.30 – 4.00 p.m.  | Group work                        |                                      |
| 4.00 – 4.30 p.m.   | Tea break                         |                                      |
| 4.30 – 5.30 p.m.   | Feedback presentations to plenary | Group rapporteurs (10 min per group) |
| 7.00 p.m.          | Dinner                            | Martha                               |

### Day 3

| Time              | Activity   | Responsible person                                      |
|-------------------|--|---|
| 9.00-9.30 a.m.    | <ul style="list-style-type: none"> <li>Traffic lights - process progress</li> <li>Group work on templates</li> <li>Next steps</li> </ul>                         | Dan<br>Simon<br>Gordon                                  |
| 9.30-11.30 a.m.   | <ul style="list-style-type: none"> <li>Continued Working Groups on templates</li> <li>Working Groups on next steps</li> </ul> <p><i>Tea break at leisure</i></p> | Group conveners<br>(Resource persons to support)        |
| 11.30 -12.30 p.m. | Plenary feedback & discussion  | Group rapporteurs (15 min each)                         |
| 12.30 – 1.00 p.m. | <ul style="list-style-type: none"> <li>Wrap up</li> <li>Workshop evaluation</li> <li>Closure</li> </ul>  | Workshop conveners<br>Participants<br>Workshop convener |
| 13.00-14.00       | Lunch  | Process group meets over lunch                          |
| 14.00             | Departure  |   |



RESEARCH  
PROGRAM ON

Roots, Tubers  
and Bananas

ANNEX 2 LIST OF PARTICIPANTS



RTB-INCEPTION WORKSHOP: IMPERIAL GOLF VIEW HOTEL, ENTEBBE 27 - 29 MARCH, 2014

|    | First Name      | Last Name  | Title                             | Institution                           |
|----|-----------------|------------|-----------------------------------|---------------------------------------|
| 1  | Nadezda         | Amaya      | Regional Gender Specialist        | CIP-Lima                              |
| 2  | Enoch           | Kikulwe    | Agricultural-Economist            | Bioversity International              |
| 3  | Graham          | Thiele     | Director                          | CIP-Lima                              |
| 4  | André           | Devaux     | Director                          | CIP-Ecuador                           |
| 5  | Silvia          | Barone     | LAC Research Associate            | CIP-Ecuador                           |
| 6  | Miriam Kisamba  | Bwengye    | Research Assistant                | NARO                                  |
| 7  | Hedwig          | Natabirwa  | Research Officer                  | NARO                                  |
| 8  | Anne Margaretha | Rietveld   |                                   | Bioversity International              |
| 9  | Geneviève       | Fliedel    | FoodScientist                     | CIRAD                                 |
| 10 | Dominique       | Dufour     | RTB Postharvest Team Leader       | CIRAD/CIAT                            |
| 11 | Justus          | Mugisha    | Managing Director                 | KAIKA INVESTCO                        |
| 12 | Agnes           | Nabubuya   | Lecturer                          | Makerere University                   |
| 13 | Stephen         | Kiirya     | Regional Projects Manager         | CIP                                   |
| 14 | Monica          | Parker     | Potato Scientist                  | CIP                                   |
| 15 | Claudio         | Velasco    | Coordinator                       | CIP-Bolivia                           |
| 16 | Netsayi Noris   | Mudege     | RTB Gender Research Coordinator   | CIP-Lima                              |
| 17 | Sarah           | Mayanja    | Research Assistant                | CIP-Uganda                            |
| 18 | Gordon          | Prain      | Theme 7 Leader                    | CIP-Lima                              |
| 19 | Alex            | Tatwangire | Lecturer                          | Makerere University                   |
| 20 | George          | Shiondo    | Chairman                          | Wanale Seed Potato Producers' Ass     |
| 21 | Arthur          | Wasukira   | Research Officer                  | NARO-Buginyanya ZARDI                 |
| 22 | Grace           | Babirye    | Program Coordinator               | VEDCO                                 |
| 23 | Joseph          | Kansiime   | Coordinator                       | Mbarara District Farmers' Association |
| 24 | Gerald          | Kyalo      | Field Crops Agronomist            | CIP                                   |
| 25 | Fiona           | Lukwago    | Assistant Director, PHVAMA        | Kilimo Trust                          |
| 26 | Simon           | Heck       | Deputy Program Leader             | CIP                                   |
| 27 | Sam             | Namanda    | Researcher                        | CIP                                   |
| 28 | Nicholas        | Mlingi     | Cassava Value Addition Consultant | IITA-Tanzania                         |
| 29 | Dietmar         | Stoian     | Programme Leader                  | Bioversity International              |
| 30 | Diego           | Naziri     | Senior Research Fellow            | NRI                                   |
| 31 | Patrick         | Lubega K   | Research Assistant                | IFPRI                                 |
| 32 | Michel          | Dione      | Animal Health Scientist           | ILRI                                  |
| 33 | Julius          | Barigye    | Coordinator, AED                  | Trias Uganda                          |
| 34 | Dan             | Kisauzi    | Director                          | NIDA                                  |

A broad alliance of research-for-development stakeholders & partners





|    |            |            |                                 |   |
|----|------------|------------|---------------------------------|---|
| 35 | Gloria     | Okello     | Business Development Specialist | Africa Innovations Initiative                   |
| 36 | Anna-Marie | Ball       | Country Manager                 | HarvestPlus                                     |
| 37 | Kelly      | Wanda      | Consultant                      | IITA  |
| 38 | Yusuf      | Byaruhanga | Senior Lecturer                 | Makerere University                             |
| 39 | Gideon     | Nadiope    | Project Coordinator             | VEDCO/SRL                                       |
| 40 | Pamela     | Nyamutoka  | Country Director                | International Institute of Rural Reconstruction |
| 41 | Dan        | Jakana     | CEO                             | Jakana Foods Ltd                                |
| 42 | Michael    | Batte      | Research Associate              | IITA  |
| 43 | Wilson     | Chemusto   | Chairman, Board of Directors    | UNADA   |
| 44 | Godfrey    | Taulya     | Research Fellow                 | IITA  |
| 45 | Andrew     | Atuhaire   | Research Officer                | NARO-NaLIRRI                                    |



## Annex 3: Scoping template

For reference to the scoping template that was used in the process of developing preliminary scoping plans/business cases for selected research options, please click on icon below:



Preliminary Business  
Case and Scoping Pla



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