

**INCEPTION WORKSHOP AT KOLPING HOTEL,
BWAISE, KAMPALA UGANDA ON
11TH OF OCTOBER 2017**



CHAIN UG LTD and Partners Uganda Christian University (UCU), Ministry of Agriculture Animal Industry and Fisheries and Hanze University of applied Sciences received a grant from the NOW/ WOTRO of The Netherlands to support a project entitled '**Development of a gender responsive commercial seed system for indigenous vegetables in Uganda**'.

The project leader CHAIN LTD is a business that builds capacity of small holder women and youth farmer groups by deepening their participation in profitable seed value chains (www.chainuganda.org). CHAIN shall spearhead farmer participation in the entire project inception, multiplication, testing and seed production technologies for profitable end markets. CHAIN LTD shall also be responsible for overall administrative work on the project.

Uganda Christian University (UCU; www.ucu.ac.ug) is centre of excellence for AIV research and development. UCU has a robust community centred outreach and engagement program that integrates community food nutrition, experiential learning and localization of scientific knowledge. UCU engages farmer participatory process of identifying and characterising AIVs for seed production, additional information on the use of molecular tools for AIV improvement (<http://www.afri-sol.org>).

Hanze University of Applied Science (www.hanze.nl) is globally known for its cutting edge entrepreneurship program, boasting of business Laboratories in Europe. Hanze shall provide business knowledge on aspects of AIV project. Specifically, Linda shall provide leadership in the development of business models and value chain management that will oversee the whole business system.

The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) has the mandate of giving oversight on agriculture strategic sector development plans with elements that address input supply especially seeds. MAAIF is responsible for seed inspection and Seed Certification therefore MAAIF brings to the team a wealth of information on inspection, standards and policy dimension of seed sector development in Uganda.

The proposed project will help to develop a sustainable gender inclusive and market-oriented African indigenous Vegetables seed system driven by smallholder farmers, ensuring access to quality seed of improved and new indigenous Vegetables varieties. This will help fill the gap left by the absence of seed companies in commercial production of quality African indigenous Vegetables seed. The proposed opportunity presented in this project aims to establish a cost-effective indigenous Vegetables seed delivery system which will increase the quantities, quality, and timely access of affordable quality seed by smallholder farmers especially women and youth. It will thus help to develop a profitable, functional system for production of indigenous Vegetables seed of improved varieties.

Methods

- Through a farmer participatory method, establish a collection and characterize it for post-harvest deterioration. The collection will be used to develop on-farm varietal line purification systems to enhance farmers' germplasm.
- Investigate processes and technologies which slow down the deterioration of indigenous African vegetables after harvest.
- Conduct value chain analyses to identify potential actors and assess challenges, opportunities and intervention points
- Conduct awareness campaigns on the value of vegetables in improving nutrition and incomes.

The results expected from this project shall include the following:

Result 1: Enhanced capacity of 50 women and youth groups for production AIVs pre-basic and basic seed.

Result 2: Increased utilization of quality assurance services for AIV seed production.

Result 3: Developed business models for certified AIV seed production and marketing. Commercializing

Result 4: Optimized scales of production for the AIVs seed system.

Result 5: Increased economic women power and decision making at household and community level because of engaging in profitable sale AIV seeds.

Objectives

The major objective of this workshop was to launch the project and create awareness among the key stakeholders at various nodes of Indigenous vegetables in Uganda.

However, in terms of general objective of the project, this project seeks to establish a gender responsive functional AIV seed system in Uganda, which will enhance uptake and utilization of AIV seed and related innovations for sustainable production of indigenous Vegetables. The specific objectives are:

- 1) Enhanced capacity of 50 women and youth groups for production AIVs seeds,
- 2) Increased utilization of quality assurance services for AIV seed production,
- 3) Developed business models for certified AIV seed production and marketing,
- 4) Optimized scales of production for the AIVs seed system.
- 5) Increased economic women power and decision making at household and community level because of engaging in profitable sale AIV seed

The Workshop Proceedings

The Workshop was opened at 9:45a.m with a word of prayer led one participant, Mr Musoke Charles from HarvestPlus. This was followed by introduction of the participants.

Dignitaries in attendance were:

Dr. Imelda N. Kashaija – Director of Research and Outreach in National Research Organisation (NARO)

Mr. Moses Edward Erongu – Representing the commissioner of Crop and Seed certification Services of Ministry of Agriculture Animal Industry and Fisheries (MAAIF).

Ms Milly - representing the Chief of Party of The Netherlands supported Integrated Seed System Development (ISSD) of Wageningen University Research (WUR) in Uganda.

Dr. Paul Nampala – Grants Officer, RUFORUM

Dr. Laban Turyagyenda – Ngetta ZARDI

Dr Frank Kagoda Buginyanya ZARDI

Dr Godfrey Seruwu Mukono ZARDI

Dr Charles Lwanga Kasozi NaCRRI- NARO

Dr Elizabeth Kizito UCU

Dr Rachel Namuli representing Dean Faculty of Science and Technology UCU

Welcome Remarks: Ms. Justine Yawe – Associate Executive Director CHAIN, Uganda

On behalf of CHAIN UGANDA, Ms Yawe welcomed the dignitaries and all the participants. She welcomed all participants for this inception meeting for this very important project entitled **Development a gender responsive commercial seed system for African indigenous vegetable in Uganda**. She informed the audience that CHAIN has built a lot expertise in seed systems development namely CHAIN has experience in commercializing cassava, beans, sweet potatoes and horticultural nurseries. She commented that this flagship project will go a long way in putting vegetables on the same priority list of vegetables in Uganda.

She thanked The Netherlands government through its research organization NOW/WOTRO for accepting to fund this historical and critical project for Uganda. Vegetables are treated as orphan crops and this funding will ensure it is no longer a neglected crop but a crop of kings and queens. She further commented that Uganda is home to hundreds of indigenous vegetable with high nutritive value, a potential that is hardly being used to contribute to the nutrition and food security of the region. We note that seed production of these vegetables are not yet inspected and this is a key project in the country

She used this opportunity to thank the partners who worked hard to win this grant. She pledged CHAIN Uganda commitment to ensure success of this project. These come from different institutions and companies both academic and development oriented. These include UCU, MAAIF, and Haze University of applied Sciences which are being funded by the The Netherlands Government through NWO/WOTRO.

Welcome remarks Director Research and Outreach NARO

The Director Dr Imelda Kashaija welcomed all guests, having observed all protocol; she thanked the partners of this project. These include CHAIN UGANDA, UCU, MAAIF and Hanze University of Applied Sciences. She took the opportunity to thank the organizers CHAIN Uganda for inviting her and inviting NARO to give the opening remarking in addition to launching the project.

In her speech she noted this project has characteristics of a great project as indicated by the four components/ pillars namely;

- (1) a commercial seed system
- (2) Operationalization of the seed system, without operationalization the seed system will not be important.
- (3) The project is Looking at indigenous African vegetables that are popular and famous in Uganda,
- (4) It also considers Gender, this does not mean women but vulnerable groups in terms of income.

Successful implementation of these project components will result in desirable impacts for households, communities and the country at large.

She remarked that Uganda is blessed with good climate that supports a lot of crops that can grow well, even temperate crops can grow in Uganda and yield twice a year. But more importantly Uganda has capacity to produce indigenous vegetables (Dodo, Nsuga , Nakati) throughout the year.



Director Research Dr Imelda Kashaija Launching the project open

She Emphasized importance of consumption of vegetables for our bodies where she mentioned that they are rich in minerals, protect us against un curable diseases. She commented on some lifestyle trends where people have been shying and shunning away from eating vegetable saying that it's for low income earners (poor people) . Our grandparents would eat them though they didn't know the science behind and there life expectancy was above 70 years .

With pleasure she applauded different companies and organizations that have tried to sensitize people about the need for use of vegetables and local herbs which help to stabilize the body. This has revolutionized eating habits and is increasing consumption of Solanaceas vegetables among middle income Earners.

Not to be left behind, research organizations have also woken up and started prioritizing working on vegetables and producing seeds. Seed is Key in all these ventures. This has been spearheaded by NGO (organizations and Farmers) who pioneered producing seeds of vegetables though these seeds have low of low quality in terms of viability and variety purity.

Seed production has proved to be a profitable venture as some farmers who have attempted production of vegetables are recording earnings as high as USD 1800 from an acre of vegetable in year.

Opportunities of the project

This project has come at the right time and will benefit from government initiatives that are aiming by 2040 to transform 68% of the peasant farmers to commercial farming and vegetable production will contribute to this vision. In addition, the government also wants to diversify the economy by bring many nontraditional sources of income into mainstream economy. Vegetables as cash crops present a big potential.

In spite of this good picture, vegetable production is hamstrung by a hot of challenges. Challenges worthy noting include; (a) pests and diseases, (b) lack of seed in sufficient quantities yet seed accounts for 30% of the yield(c) absence of pure and reliable indigenous vegetables varieties.

She noted with thanks the indigenous vegetable breeding efforts at UCU where the process of developing pure Lines of the vegetables is taking place. This will minimize the problem of not having pure vegetable lines; she encouraged them to work closely with the mother Ministry of MAAIF to ensure that these lines become released varieties, name it and registered for commercialization.

She was happy that this project is going to empower farmers in development of functional seed system which will be based on women and youth as women are known of being committed in what they do. The system will improve collaboration for a number of actors or key stakeholders that includes NARO, MAAIF, UCU and others. From this collaboration, she was sure that the following will be achieved by this project;

1. Pure lines of the seed developed to a level of released Varieties
2. Functional seed system from the vegetables coming up
3. Increased production of the Vegetables
4. Increased consumption of vegetables locally and foreign

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5. Another source of income to Farmers especially women and youth
6. Employment due to commercialization of the vegetable production
7. Increased intake of minerals which will reduce of effect of diseases and finally it will contribute towards achieving Uganda's goal in Vision of transforming from peasantry to commercial ion.

She also prayed for its success, The Director noted that there is an urgent global need to increase agricultural systems diversification in order to improve human nutrition through better balanced diets and to achieve more resilient, profitable and sustainable small-holder production and marketing systems.

In conclusion; As NARO– she dpledge commitment towards the progress and success of this project and:

- Teach – the importance of these indigenous vegetables across all available platforms.
- Research – to add to the wealth of knowledge
- Community outreach – not to focus on work in the rooms but we need to interface between reality in the communities out there and the aspect of our research.

We are glad to be part of this project. Let us take stock of where we are and where we will be. She Cut the ribbon and declared the Project Launched.



The Director of Research NARO- Dr Imelda Kashaija giving key remarks

Seed Inspection Experience from Ministry Of Agric. Animal Industry and Fisheries MAAIF Moses Erongu Inspector from MAAIF

After observing the protocols, Mr Moses he indicated to meet a number of people has met different from different organizations where some he has ever worked with them.

He narrated the history of seed certification in Uganda, by indicated that the seed system is not fully developed but in the process of development. Until now this system targets only commercial crops like Maize and beans.

For a long time, vegetative propagated crops such as cassava, sweetpotatoes and fruits were not considered for seed certification system. Consequently farmers found themselves at cross roads because could not find quality planting materials because of absence of a trusted seed sources and farmers not sure of the quality of the seed they use.

In terms of Cassava seed, MAAIF has done its best to see that farmers get the right varieties and quality of planting materials. NARO has been releasing cassava varieties, these materials entered into commercial phase without proper quality assurance in place. This has been a great challenge to maintain and supervise quality effectively.

NARO, and other partners like CHAIN UG, AFRRRI and Bio crops, developed a commercial cassava seed system. Through this project and partnerships, MAAIF developed protocols and inspection for cassava seed certification system. These were developed together with farmers who provided land and labor for production of quality cassava seed. Trainings were conducted for farmers regarding protocols to be followed and the gardens where inspected at least 4 times during the crop growth cycle.

In the 1st year 100 acres of cassava were certified for production certified cassava seed and by the third year the acreage had more than tripled. This is because farmers where well conversant with the protocols.

Efforts focused on 6 cassava growing districts area in the first year but by the end of the project in 2017 we had covered the whole Uganda. Now farmers are investing in commercial seed production for cassava and which has attracted a big market including outside market such as Rwanda and DR Congo and southern Sudan. This came because these foreign governments had a big assurance about the quality of the seed produced in Uganda.

Lately some seed companies have got interested in the business and at the time of closing the project, 80, 000 bags of clean cassava planting materials had been produced. The Ministry has main streamed the certification process of the cassava planting material and now it is institutionalized.

He further mentioned that a new scheme of developing a commercial system for Sweetpotatoes farmers is also on going have difference in using farmers saved seed and certified seed.

He further mentioned that MAAIF has not been working with vegetables except simple germination tests to establish seed viability both for exotic and local vegetables. Until now there is no research and release programs for vegetables seeds as protocols for handling the vegetables are being handled.

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MAAIF is willing to partner in developing standards and protocols for vegetables in this project. The inspectors need to go to the field and look for purities right from the garden. The project needs to give MAAIF directions on what they want them to do. Some protocols will be produced like other seed the team which is working on the varieties should do their part and guide them on. He emphasized prioritizing the release of indigenous vegetable that can feed into the vegetable seed system as the first stage varieties since no work will progress without having a variety. He concluded by introducing the MAAIF staff that will be instrumental in implementing this project.



Mr Moses Erongu from MAAIF shares experience in seed inspection of non-traditional seed crops.

Project presentation; this was done by; Apolo Kasharu the project coordinator

Dr Kasharu gave a 20 minute power point presentation on this project ‘**Development of a gender responsive commercial seed system for African indigenous vegetables in Uganda.**

He started by welcoming and thanking participants who came from far and wide. He informed the participants that the project will last 3 years. He officially introduced the partners who are directly involved in implementing of the project; CHAIN, UCU, Hanze University of applied Science MAAIF, local government and Farmer groups. He indicated that was designed to work with farmer groups as well as individual seed entrepreneurs.

He started by describing briefly CHAIN Uganda as an organization, he mentioned the challenges associated with vegetable production and emphasized and through stakeholder situation analysis it was emphasized access to quality seed as the major challenge for the vegetable production which this project seeks to solve. He explained the challenges which will be solved by the project and the area where the project will pilot plus the level of the seed which will be produced.



Dr Apolo Kasharu Project Coordinator Presenting project to stakeholders

He elaborated the results expected from this project that include the following:

- Result 1:** Enhanced capacity of 50 women and youth groups for production AIVs seed.
- Result 2:** Increased utilization of quality assurance services for AIV seed production.

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Result 3: Developed business models for certified AIV seed production and marketing. Commercializing

Result 4: Optimized scales of production for the AIVs seed system.

Result 5: Increased economic women power and decision making at household and community level because of engaging in profitable sale AIV seeds.

Also the objective of the project, this project seeks to establish a gender responsive functional AIV seed system in Uganda, which will enhance uptake and utilization of AIV seed and related innovations for sustainable production of indigenous Vegetables was explained .specifically objectives were highlighted as:

- 1) Enhanced capacity of 50 women and youth groups for production AIVs seeds,
- 2) Increased utilization of quality assurance services for AIV seed production,
- 3) Developed business models for certified AIV seed production and marketing,
- 4) Optimized scales of production for the AIVs seed system.
- 5) Increased economic women power and decision making at household and community level because of engaging in profitable sale AIV seed

He indicated the roles of each partner on the project. Result 1 will be headed by UCU, result 2 by MAAIF, result 3, 4 and project coordination will be CHAIN while result 4 will be led by Hanze University of applied Science.

He shared progress to date namely, pre inception meetings, partnerships meetings ans some field activities as well as constituting project staff.

He further appreciated and acknowledged the funders, the implementing partners, collaborators and farmers.

Reaction to presentations the DR. Kasharu and Moses Erongu, this was facilitated by DR. Lwanga Charles.

1. QN; How many farmers are supposed to be included in the project per region? **By LABAN ANSWER**, the project will work with 50 farmer groups that is between 10 groups per region But only 10 groups will be include first in the project and latter we add more groups.
2. QN. What is the project budget? **By Laban ANSWER**, the budget is small and has some co-funding
3. QN. Can the experience shared on development of seed system for Cassava be packaged and published because the information is very important and with the help from RUFORUM it can be taken for pre-review? **ANSWER**, sharing of the knowledge has already started with DR. Mukasa of Makerere but MAAIF is very ready to work with RUFORUM to publish the information to the beneficiaries.
4. QN; Kwoledge co- creation learning should be embedded during implementation of the project. **ANSWES**; The knowledge co-creation learning is already involved since Participatory approach will be used for this project. We are planning to identify groups
5. QN. According to Uganda's diversity, Did we consider the vegetables that are most liked by the regions that we have selected to include in the project? **ANSWERS**; According to the research that was done, Country wide, Solanaceas like Ntula, Nakati and dodo cut across in terms of taste and preference of the people and can grow in all regions apart from highlands.
6. QN; with vegetatively propagated crops if a farmer starts with the clean foundation seed how many times should that farmer recycle the seed before getting a new material? **ANSWER**; The Cassava project facilitated a student to carry out research on degeneration study of cassava, the study is awaiting for bark up in Makerere after backing up this study, the standards will be put but regeneration of cassava and s.potato seed is ongoing in the labs through tissue culture since this is the only way how we can get new clean planting materials without changing the genetic nature of the plant. For vegetables, degeneration study should be done.



Participants in the inception workshop

7. Comment by Silvia Simlaw Seed Company; Simlaw has been leading pioneer in adoption of AIVs but a lot has to be done towards production of vegetable seeds. This is because farmers have started to pick up the technology and the demand for seed for the AIVs is high.
8. She also mentioned that seed regulation is a very big problem when it comes to vegetables, more efforts need to be done so that farmers saved seed is difference certified seed.
9. Netherlands, they will share Business models form which can only be generated from farmers and will share the practical experience from Netherland farmers.
10. Milly ISSD, the ISSD has been in production of seeds for highbred vegetables, they will love to compare the performance of AIVs with the highbred produced by them.

Closing Remarks Dr. Paul Nampala, Grants Manager, RUFORUM

This was given by DR. Nampala RUFORUM; he gave a vote of thanks to CHAIN Uganda and congratulated the team for getting the project. He also gave his experience about the Netherlands if they are the one sponsoring, and said they are good people that any organization would wish to work with. Their response is always good and do things timely and communicate in time, he urged, partners to continue collaborating together and make effort to involve the Netherlands team in the implementation of the project. He requested for the academic room to comparing the hybrid seed with AIVs.

He advised CHAIN and partners to timely implement their activities and should not discourage the sponsor. Partners should ensure that the accountability issues are clear, immediate response should be done during implementation

RUFORUM is engaged in the process of building this consortium through a process outlined here under: Selection of Consortia at all levels, Building capacity , Teamwork and partnership, Proposal development , Multi-stakeholder development.

Even as you plan to work on indigenous vegetables – we need to broaden the issues but within budget. Expectations from the consortium include: Maintain partnerships, Engage in efforts to mobilize additional resources and Comply with project implementation guidelines i.e. give reports, recommendations, adequate documentations and demonstrated impact. Please provide the required reports on time. Please provide reports in time both scientific and narrative formats. We expect that you will be strong in the process of documentation.

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