







### SWEETPOTATO STAKEHOLDER ENGAGEMENT WORKSHOP REPORT



Held on 12<sup>th</sup> December 2023, at the Soroti Hotel, in Soroti, Uganda Report by Sylvester Ojwang; <u>S.Ojwang@cgiar.org</u>

### 1. BACKGROUND

Uganda is one of the leading sweetpotato producers in Sub-Saharan Africa, notable for its extensive area harvested, production volume, and as a secondary diversity center for sweetpotato varieties. Sweetpotato ranks third in cultivated area after plantains and cassava in Uganda. Despite its prominence, the country struggles with low varietal turnover and slow adoption of improved sweetpotato varieties and stubbornly wide yield gap. The National Agricultural Research Organization (NARO) in collaboration with the International Potato Center (CIP) have made sweetpotato a research priority, focusing on developing and promoting improved varieties. The challenges of varietal adoption are linked to factors such as limited farmer awareness of new variety benefits, access to quality seeds, and lack of effective market incentives. The CGIAR Initiative on Market Intelligence addresses these issues under Work Package 3 - Behavioral Intelligence, by engaging stakeholders across the spectrum to identify barriers and opportunities for new variety adoption. This collaborative effort aims to align breeding priorities and marketing strategies with producer and consumer needs, enhancing agricultural productivity and food security.

The International Potato Center (CIP) in partnership with the National Agricultural Research Organization (NARO) working under the CGIAR Initiative on Market Intelligence (MI) with support from the PROSSIVA project, CGIAR initiative on Seed Equal, the CGIAR Gender Platform, facilitated a pivotal stakeholder engagement workshop aimed at tackling the challenges hindering access and promotion of improved sweetpotato varieties in the Teso subregion of Uganda.

The workshop's core objectives were to disseminate and validate baseline study findings and engage stakeholders in identifying challenges and co-creating strategies to enhance access to and promotion of improved sweetpotato varieties and products. It brought together 33 participants (13 women and 20 men), including researchers, agricultural officers, farmers, vine multipliers, processors, and NGO representatives from Amuria, Serere, Kamuli, Gulu, Iganga districts (see full list of participants in Appendix Through structured presentations, feedback 1). sessions, and breakout and plenary discussions, the workshop aimed to foster a robust multistakeholder dialogue to inform development of interventions that would effectively contribute towards increased adoption of improved sweetpotato varieties across the value chain. The full meeting program is available in Appendix 2. The workshop was co-facilitated by Dr. Sam Namanda (CIP), Sylvester Ojwang (CIP) and Dr. Irene Bayiyana (NARO).

## 2. OPENING SESSION

Ms Angella Akurut, the Chief Administrative Officer (CAO) of Amuria district, underscored several key points in her opening remarks at the workshop. She commended the stakeholder diversity and the research team's dedication to collecting extensive feedback. The CAO stressed the importance of understanding why farmers decide for or against adopting new varieties and the value of providing quality certified planting materials. She advocated for the practical application of research findings and encouraged stakeholders, especially agricultural extension officers, to exemplify the benefits of new technologies.

"In the community, farmers often want to see the practical success of what another person has done in their fields before embracing it themselves. So as stakeholders, particularly the agricultural extension officers, let's lead by example. Farmers are like children - they always want to emulate the adult's behavior, like using phones to stay updated - they want to do what you do and not just what you tell them. So, let's lead by example in promoting these new technologies."

She emphasized adopting a comprehensive business approach to farming, the significance of leveraging technology for efficiency, and the study's alignment with the Parish Development Model. The CAO highlighted innovative value-addition strategies, the benefits of commercialization through farmer groups, and the necessity of capacity building. She concluded by urging the implementation of workshop insights and the exploration of market-led solutions and new agribusiness models that have been tested locally.



Figure 1: CAO of Amuria, Ms. Angella Akurut, giving opening remarks during the workshop in Soroti

## 3. SESSION 1: What is the Current Practice?

### 3.1. Quantitative survey results presentation

The quantitative baseline survey results presentation was made by Sylvester Ojwang from CIP. First, he highlighted the significance of sweetpotato as a staple crop in Uganda. With an average annual consumption of 83kg per person, it's a critical part of the local diet, particularly in the Teso subregion. The crop's versatility was also highlighted, being used for boiled fresh consumption, dried chips (Amukeke), and flakes (Inginyo) turned into flour. Despite its importance, the region faces a yield challenge, with current averages at 4 tons/ha, which is significantly lower than the optimal 14 tons/ha under farmer conditions and up to 30 tons/ha in research settings. The continuous and inconsiderate recycling of vines, a common practice in the region, was identified as a major factor in pest and disease propagation, affecting both crop health and yield. Key pests and diseases, such as weevils, whiteflies, SPVD, and Alternaria blight, were pointed out as challenges due to these practices.

The presenter then noted that the study aimed to address these yield gaps by introducing improved sweetpotato varieties and encouraging the use of clean planting materials of the improved varieties in Amuria district.

To address these issues, the study introduced 4 new improved sweetpotato varieties and implemented a convenience enhancement intervention by establishing vine sales stations within each study village. Qualitycertified clean vines of the promoted varieties were supplied to the established sales stations every planting season since March 2022 and farmers were expected to be purchasing and planting these improved varieties. The study design was deliberately aligned with the Parish Development Model (PDM) - a framework for identifying and implementing economic development initiatives at parish levels implemented by the Ugandan local governments throughout the country. This approach emphasizes the importance of ensuring farmers purchase clean vines of improved varieties rather than receiving them as free tokens and is meant to inspire a change in mindset and promote sustainable development practices. gender The study also incorporated deliberate considerations in the promotion of these varieties and ensured a broad distribution of study villages, sampling from every parish and sub-county, for a comprehensive understanding of sweetpotato production in the Amuria district.

The baseline quantitative survey conducted in May 2023, covered 960 farmers from 120 villages (8 per village) in Amuria district. The results presented covered demographics, land ownership, cultivation patterns, crops, and sweetpotato varieties planted in 2022, common vine sources, and production challenges. Sweetpotato emerged as the top crop grown in Amuria district in 2022, cultivated by 96.5% of the households. This was followed by cassava (89%), groundnuts (66% of men and 76% of women), sorghum (40%), and maize (43% of men and 35% of women). Oboi, a local sweetpotato variety, was the most grown (51%), followed by one of the promoted varieties, Ejumula, (24%). The other promoted varieties, Ejumula,

Joweria/Naspot 13, and New Dimbuka/Narospot 1, had very low adoption, 8%, 4%, and 2% respectively. In addition, only 25% of the farmers considered selling their surplus roots.

The survey identified drought, pests, diseases, and access to vines as key challenges. Farmers mostly source their vines from fellow farmers, previous plots, and relatives, highlighting the prevalent practice of continuous recycling of vines. This practice was linked to the propagation of pests and diseases in sweetpotato plots, underscoring the need for clean planting materials (certified to have been cleaned from sweetpotato virus diseases).

The results revealed that despite the convenience of the sales stations in the villages, financial constraints were still a significant barrier to purchasing vines, especially among women. It also showed a discrepancy between farmers' awareness of vine sales at the sales stations established in the villages and actual purchase rates. In addition, farmers had mixed experiences with the promoted varieties, with some reporting successful vine establishment, healthier crops, and bigger roots, while others faced challenges.



Figure 2: Mr. Sylvester Ojwang presenting results from the baseline quantitative survey in the workshop

The presentation concluded by emphasizing the need for profound effort from all stakeholders across the value chain to realize a significant shift in farmers' behavior towards the adoption of improved sweetpotato varieties. The findings highlighted the complexities of changing farming practices and the importance of continued stakeholder engagement and support.

### 3.2. Qualitative survey results presentation

Presented by Dr. Irene, the qualitative study presentation highlighted using 8 FGDs, 8 SSIs, and 7 KIIs with a diverse stakeholder type entailing farmers, Agricultural Officers, NGOs, and vine multipliers to solicit their perspectives on sweetpotato production, processing, and consumption in Amuria district. The qualitative study results highlight the challenges faced in sweetpotato production, difficulty in accessing vines of improved sweetpotato varieties, and reason for or against the adoption of new improved varieties. The results revealed that men and women seem to have a varied ranking of key challenges they face in sweetpotato production. Men consider vine access as a major challenge while for women it is pests and diseases. The promoted improved varieties were noted as difficult to access. In some cases, stakeholders reported that they have no trace of improved varieties in their localities.

Access to improved sweetpotato varieties is challenging due to several factors. Men have experienced issues with the varieties drying up under intense heat, while women mostly found the cost prohibitive, as they largely cannot afford to pay 2,000 UGX for 100 vines. Additionally, these varieties are rare in their communities, often only available through a few sellers who charge high prices. Non-selected farmers also face barriers to access. Some varieties struggle with weather tolerance. For instance, the Kakamega variety was noted to be prone to root rot and wilting in heavy rains, which leads to crop failure. These obstacles collectively impede the widespread adoption of these improved varieties.

In the context of adopting improved sweetpotato varieties, various factors influence decision-making. Men value these varieties for their higher yield potential and the novelty they bring, particularly when coupled with educational training. Women are similarly motivated by the high yield and the opportunity to pioneer new agricultural practices. The credibility of these varieties, affirmed by research, plays a vital role in their decision to adopt. For some farmers, the adage 'seeing is believing' holds so strongly. That is, witnessing successful harvests nearby further strengthens their belief in these varieties' effectiveness and that would nudge their adoption.

The stakeholders also noted the following challenges to the adoption process. Some observed that seed distribution often targets specific persons, limiting wider access. Sometimes, seeds are delivered during dry periods, leading to crop failure. Additionally, the scarcity of these varieties in some communities hinders their adoption. Addressing these issues is crucial for broader acceptance and use of improved sweetpotato varieties.



Figure 3: Dr. Irene Bayiyana (NARO) making her presentation of the results from a qualitative survey in the workshop

### 3.3. Study feedback & validation points from stakeholders

**Challenges with land size due to population pressure**: The stakeholders discussed the shrinking land sizes due to population pressure, emphasizing the need for more intensive farming methods to maximize yield from smaller plots. They suggested that continuous monitoring of yield trends should be done to gauge the effectiveness of these intensified methods over time.

Market accessibility and vine sales stations: The issue of long distances to markets where vines can be accessed (an average of 110 walking minutes away from farmers) was a significant concern, particularly burdensome for women with household responsibilities. This was highlighted as a significant contributor to low awareness and access to vines of improved sweetpotato varieties. The establishment of closer vine sales stations (an average of 19 walking minutes away) was seen as a positive step, making it easier for farmers to access quality vines.

**Teso region's unique advantage**: The stakeholders noted that there are distinct quality traits of sweetpotato roots from the Teso region, particularly the taste of the Osukut/Tanzania variety, which make them preferred over sweetpotato roots of similar varieties from other regions. They noted that this is also attributed to the generally sandy soil of the Teso sub-region. This highlights Teso's advantage in the sweetpotato market - an opportunity for the region to capitalize on its unique produce. However, the low commercialization rate shows that many farmers are not aware of and/or exploiting this opportunity.

**Soil type and varietal performance:** The sandy soil of Teso, contributing to better taste and size, contrasts with the heavy clay soils in other regions, impacting root characteristics. But it is too much of a generalization to say that the entire Teso region has this favorable sandy soil. There are diverse variations in soil characteristics across the districts and subcounty which may impact the performance of the improved varieties differently. There was an expressed interest in understanding how different soil types affect the performance of sweetpotato varieties. We acknowledged that the current study in Amuria has not considered this yet.

**Export market dynamics and farmer education**: Dr. Namanda shared insights from an export market exhibition, where specific varieties like Kabode were not selected due to shape, despite meeting other criteria (orange-fleshed and red skin), underscoring the nuances of market preferences. On the other hand, farmers tended to prefer Kabode due to its fast maturity trait (in about 3 months). This highlights the importance of educating farmers about the characteristics favored in different markets and how these might differ from local preferences.

Each of these points sheds light on the complex dynamics of sweetpotato farming in Amuria District and underscores the need for multifaceted approaches to address these challenges and leverage opportunities.

## 4. SESSION 2 & 3: Challenges and Solutions to Enhance Improved Sweetpotato Variety Promotion

### 4.1. Breakout Discussions

There were three breakout groups organized by pairs of closely related actor types. The groups discussed separately, made notes, and presented their points in plenary answering the following three questions:

- A. What challenges do [actor type i.e., NGOs, DVMs, Farmers, Extension agents, Processors] face when promoting improved sweetpotato varieties?
- *B.* What strategies could be more effective for [actor type] in promoting improved varieties?
- C. How can these strategies be more inclusive? i.e. how could they address the needs of various groups and increase their access to seed channels?

**Group 1** was composed of 5 **Farmers**, 4 **Vine Multipliers**, and one notetaker from CIP. The discussants included 3 women and 6 men. The presentation from the breakout discussion was made by Mr. Joseph Okalebo, an established sweetpotato vine multiplier from Serere, who presented the discussion points on behalf of the group members.



*Fig. 4*: Ongoing breakout discussion among farmers and vine multipliers

**Group 2** had 9 participants (5 women and 4 men) and included 3 **Processors,** 3 **NGO representatives,** 2 staffers from CIP and 1 notetaker from NARO. Mr. Julius Eeru, of the Soroti Rural Development Agency (SORUDA), presented the points from this breakout group in plenary.



Fig. 5: Ingoing breakout discussion among processors and NGO reps

**Group 3** had 10 **agricultural officers and supporting civil servants** of different cadres and 1 notetaker from CIP. The ten included 3 women and 7 men. Judy Nantongo of CIP made the presentation from this breakout discussion in the plenary.



*Fig. 6:* Ongoing breakout discussion involving agricultural officers from Amuria, Serere, and Iganga districts

Notes from each of the breakout groups highlighting the points raised in response to each of the three discussion questions are provided in Appendix 3.

### **4.2. Challenges Hindering Access and Promotion of Improved Sweetpotato Varieties**

From the group presentations and discussions in the plenary it emerged that each actor group encounters unique barriers that impede the widespread adoption and promotion of improved varieties.

**Farmers and Vine Multipliers** face a series of obstacles, namely the high cost and limited availability of earlygeneration seed, alongside the expensive equipment required for vine multiplication. The logistical and financial burdens of transporting basic materials from distant labs compound these challenges. Government policies on wetland use further complicate vine multiplication efforts, essential for reducing irrigation costs. Price instability across regions and the sparse network between DVMs and farmers hinder effective promotion and access to new varieties. These issues collectively constrain the supply of quality planting materials and farmers' capacity to access them, significantly affecting the adoption rates of improved sweetpotato varieties.

**Processors and NGO Representatives** grapple with the presence of counterfeit products, which erode consumer trust and market integrity. An information gap concerning new varieties and quality standards, coupled with the prohibitive costs of quality planting materials and processing equipment, deters both farmers and processors from embracing new sweetpotato innovations. Skepticism towards new varieties and inconsistent collaboration among value chain stakeholders further diminish the efforts to promote these agricultural advancements.



Fig. 7: Mr. Julius Eeru presenting the discussion points from breakout group two

Agricultural Extension Officers and other related public officers confront cultural and traditional preferences that challenge the introduction of valueadded sweetpotato products. Negative perceptions based on past experiences with other crop introductions, difficulties in sourcing seeds during off-seasons, unreliable markets, and the perceived high cost of vines deter the promotion and adoption of new varieties. Budget limitations and insufficient funding for demonstrations and capacity-building initiatives for extension agents exacerbate these challenges, limiting the effectiveness of agricultural interventions aimed at improving sweetpotato production and consumption.

While there are overarching themes such as financial constraints and knowledge gaps affecting multiple groups, the specific nature of the challenges varies significantly. For instance, DVMs and farmers grapple directly with production-related issues like seed accessibility and costs, whereas processors and NGOs face barriers related to market credibility and product promotion. Agricultural extension officers, bridging the gap between research and practice, confront cultural resistance and perception issues that directly impact their ability to encourage the adoption of new technologies.



*Fig. 8: Ms. Judy Natongo making a presentation of the points from the breakout discussion with agricultural officers during the workshop in Soroti* 

### 4.3. Strategies for overcoming the challenges

Below is a summary of the proposed solutions from the workshop aligned with the distinct needs and operational realities of the various actor groups within the sweetpotato value chain. This approach not only facilitates a targeted and actionable set of recommendations but also ensures that the strategies are grounded in the practical insights and examples shared during the workshop.

#### For farmers and vine multipliers:

*Enhance accessibility and affordability*: Establish many decentralized labs for early-generation seeds to increase access. Introduce credit facilities for purchasing vine multiplication equipment.

*Innovative distribution models:* Set up vine sales stations within study villages, with subsidies for different user groups to improve access.

*Capacity building and knowledge exchange:* Organize exchange visits and community of practice (CoP) events on improved sweetpotato varieties. Promote demonstration gardens with a social balance to encourage diverse participation.

The establishment of vine sales stations in study villages and offering vines at subsidized prices exemplify practical steps toward improving accessibility and affordability for farmers and vine multipliers.

#### For processors and NGOs:

Market credibility and product knowledge enhancement initiatives: Create and engage in more multi-stakeholder engagement platforms and product awareness campaigns. Also organize to demonstrate the performance of new varieties through practical showcases in different fora, including exhibitions at individual places of work and in agricultural shows.

*Financial support and Linkages*: Facilitate access to funding for investment in new varieties and technologies. Also, introduce innovative marketing strategies, like processor-led vine-for-root-harvest-portion exchange programs, to generate interest.

The continued collaboration between CIP and NARO in sweetpotato research and development activities highlights the importance of joint efforts overcoming market and knowledge barriers, and stakeholders were encouraged to leverage such collaborations to help overcome their challenges.

# For agricultural extension officers and supporting public officers:

*Overcoming cultural resistance:* Conduct continuous sensitization on the benefits of new varieties. Develop strong market linkages and build capacity among seed multipliers and extension agents.

Seasonal availability and financial constraints: Implement school feeding programs that include improved varieties. Target specific populations for training and information sessions to ensure inclusivity.

Targeted training sessions for extension agents on inclusiveness and the implementation of school feeding programs that incorporate improved varieties demonstrate practical approaches to cultural and financial barriers.

### Some cross-cutting strategies proposed include:

*Ensure all strategies incorporate measures to address the needs of diverse groups*, including women, youth, and people with disabilities. This could involve affirmative action and tailoring information delivery to specific community segments that happen to be more disadvantaged.

Leveraging the growing technology and innovation penetration: Encourage the adoption of e-marketing skills among vine multipliers and explore digital platforms for enhancing the reach of promotional campaigns.

The workshop underscored the necessity for an integrated approach that addresses each stakeholder group's specific challenges. Proposed strategies for overcoming these barriers include the establishment of more demonstration gardens, continuous sensitization of stakeholders, the introduction of credit facilities for vine multipliers, and the deployment of innovative marketing strategies. Ensuring inclusivity in these interventions involves targeting specific populations such as women and youth, tailoring information delivery to meet diverse needs, and conducting comprehensive needs assessments at the village level to customize interventions effectively.

## 5. CLOSING

The workshop concluded with inspiring closing remarks from Ms. Caroline Asekenye, the District Agricultural Officer (DAO) of Serere. She urged the stakeholders to adopt innovative thinking and foster collaborative efforts to transcend conventional approaches. Madam Asekenye emphasized the importance of not only discussing strategies but also committing to their execution to effect tangible and lasting change in the sweetpotato value chain. Her message was clear: to realize the desired transformation, stakeholders must actively "walk the talk" by implementing the discussed strategies with dedication and teamwork.

## Appendices

## Appendix 1: List of workshop participants

STAKEHOLDER ENGAGEMENT WORKSHOP - PARTICIPANTS						
#	Name	Designation	Email	Sex		
1	Sam Namanda	Agronomist -Associate Scientist	S.Namanda@cgiar.org	М		
2	Sylvester Ojwang	Agricultural Economist - Research Associate	S.Ojwang@cgiar.org	М		
3	Martha Ameru	Administrator	M.Ameru@cgiar.org	F		
Bre	Breakout Group 1: Farmers and DVMs					
1	Reuben Ssali	Breeder - Associate Scientist	R.Sali@cgiar.org	М		
2	Joseph Okalebo	Vine multiplier, SOSSPA, Serere district	josephamikirot@gmail.com	М		
3	Otai John Michael	Vine multiplier, SOSSPA, Serere district		М		
4	Charles Otuda	Vine Multiplier, KAKIBU Seed Producers and Marketers, Kumi District		М		
5	Peter Omondi	Vine Multiplier, Koro-Bobi Sweetpotato Seed Association, Gulu District		М		
6	Amao Anna Rose	Farmer, School-cell village, Akisim Parish, Amuria Town Council		F		
7	Otwao Emmanuel	Farner, Okepia Village, Arapai Parish, Kuju Subcounty		М		
8	Asio Christine	Farmer, Odoon Center Village, Apeduru Parish, Apeduru sub-county		F		
9	Onyait Wilbroad	Farmer & vine salesperson, Amuso Village, Ajokomot Parish, Amolo sub-county		М		
10	Amuso Florence	Farmer, Market Village, Orungo Town Board Parish, Orungo Subcounty		F		
Bre	akout Group 2: Proces	ssors and NGO reps				
1	Irene Bayiyana	Agricultural Economist - Collaborator from NARO	irene_bayi@yahoo.com	F		
2	Christine Akello	Vine multiplier, SOSSPA, Serere district		F		
3	Ann Grace Akitenyi	NGO, Coordinator Agricultural Activities, Iteso Welfare Association (IWA)		F		
4	Fr. Omaria Michael	SOCADIDO	omariamichael@gmail.com	М		
5	Mr. Oruka George	SOCADIDO	oruka.george@yahoo.com	М		
6	Julius Eeru	SORUDA - Soroti Rural Development Agency	juliuseeru@gmail.com	М		
7	Betty Muwuma	Secretary, Busoga Seed Cooperative (BUSECO), Kamuli District		F		
8	Harriet Ayoko	Research Assitant	harrietayoko@gmail.com	F		
9	Richard Kalwande	Project Management Unit Manager	R.Kalwande@cgiar.org	М		
Breakout Group 3: Agricultural Officers and Supporting Civil Servants						
1	Judy Nantongo	Breeder - CIP	J.Nantongo@cgiar.org	F		
2	Angella Akutut	CAO Amuria	akepudu@gmail.com	F		
3	Ejolu Nathan	SAO, Abarilela subcounty, Amuria	nejolu@yahoo.com	М		
4	Dennis Odeke	SAO, Kuju subcounty, Amuria	odekedennis2@gmail.com	М		
5	Justin Orena	SAO, Morungatuny & Olwa subcounties, Amuria	just.orena84@gmail.com	М		
6	Alfred Opok	Senior Entomologist Amuria	<u>alfopoka@gmail.com</u>	М		
7	Emmanuel Akelem	District Planner- Amuria	emmakelem@gmail.com	М		
8	Caroline Asekenye	DAO Serere	smccouncil@yahoo.com	F		
9	Sully Nantrya Bazalaki	Seed Inspector, DAO Iganga		М		
10	Bitali Judith	DLG Buyende		F		
11	Emma Kasulubedhe	Extension Worker, BUSEKO, Kamuli District		М		

### **Appendix 2: Workshop Program**

TIME	ACTIVITY	RESPONSIBLE
9.00-9.30	Registration	Martha Ameru
9.30-9.45	Introductions and brief CIP overview	Sam Namanda
9.45-10.00	Welcome remarks	Mr. Alfred Opok (standing in for DAO – Mr. Okim)
10.00-10.15	Opening of the workshop	CAO
10.15-10.45	Feedback-Quant study	Sylvester Ojwang
10.45-11.15	Feedback-Qual study	Irene Bayiyana
11.15-11.30	TEA BREAK	
11.30-12.30	Breakout sessions (Lead: Sam Namanda)	Notetakers
	Group 1: Farmers/DVMS	Reuben Ssali
	Group 2: NGOs/Processors	Irene Bayiyana
	Group 2: Extension/public officers	Judith Nantogo
12.30-1.15	Feedback from breakout sessions/Discussions/Q&A	ALL
1.15-1.30	Closing remarks	Caroline Asekenye
1.30-3.00	LUNCH AND DEPARTURE	

### **Appendix 3: Breakout Discussion Notes**

### **Group 1: Farmers and Decentralized Vine Multipliers (DVMs)**

# 1. Challenges faced by farmers and DVMs when accessing and/or promoting new sweetpotato varieties/products:

Accessibility of early generation sweetpotato seed/vines

- 1. Basic seeds are very expensive (40000 per bag)
- 2. Inadequate supply of early generation seed The seed multipliers are few and the early generation seeds are very difficult to access from the lab.
- 3. Equipment for seed multiplication (including screen house, net tunnels, generators and irrigation systems) is very expensive.
- 4. Takes long to multiply the vines and the activities are time and labor demanding
- 5. Transportation of basic materials from the lab to DVMs is expensive given the bulkiness of the commodity and the distant location of the source. We source the basic seeds all the way from Kampala and sometimes all the way from Nairobi.
- 6. Delays from NGOs and farmers to pick vines which lead to overstays of already harvested vines
- 7. Seed certification is very expensive. One needs to be a certified seed multiplier to do business with NGOs and other relevant development institutions.
- 8. Wetlands demarcations is hindering multiplication government policy on mapping wetlands and moving farmers away from the wetlands will negatively affect vine multiplication which has been dependent on the wetlands to reduce the need and cost of irrigation.
- 9. Fluctuation of vine prices across regions This affect farmers planning for vine acquisition and leads to an unstable demand for the vines
- 10. Limited interpersonal partnerships or networks between DVMs and farmers

Access of vines from DVM to farmer

- 1. Vines not affordable for the farmers(poverty)
- 2. The packaging is too small for the value what they call a bag you can even carry with a finger
- 1. (Specification and packaging)
- 2. Lack of capital or credit facility for farmers to buy seed
- 3. Prolonged drought
- 4. Stray animals-grazers in our multiplication
- 5. Farmers stealing vines

### Promotion

- 1. Perception that Orange Fleshed Sweetpotato (OFSP) varieties are GMOs Some people have a negative perception of GMO products and associate orange flesh color of the sweetpotatoes with GMOs
- 2. Some new sweetpotato varieties are not superior to local varieties in terms of specific attributes preferred by different farmers.
- 3. Some farmers lack information on the distinction between the landraces and new varieties
- 4. Frequent change of names and or existence of multiple names for particular varieties (e.g., Osukut/Tanzania, Joweria/Naspot13) have hindered variety uptake farmers refuse varieties when they get them being referred to by another name by the DVM. In essence they basically doubt that they are the same varieties but different names.

# 2. Strategies that could be more effective for Farmers and DVM in promoting new sweetpotato varieties and products

- 1. Establishment of numerous demonstration gardens
- 2. Continuous sensitization of farmers and DVMs
- 3. More labs for early generation seeds to increase access to the basic seeds
- 4. Credit facilities for DVMs so that they can access vine multiplication equipment and services irrigation systems, transport means e.t.c
- 5. Exchange visits or tours Having farmers visit the DVMs in other districts to enhance their awareness of the new varieties and products and nudge their appetite for new vines.
- 6. Refresher information sharing events community of practice.
- 7. Work closely with research and extension to keep up-to-date with the advancement of technology and practices
- 8. Training DVMs in e-marketing skills-Digitalize the Vine multipliers
- 9. Subsidize farm supplies
- 10. Adverts-gingles, signpost, radios, talks
- 11. Recognize best performing sweetpotato farmers and DVMs to motivate them and inspire others. This could be through public awards; feature on cover pages of booklets; tell their stories in booklets, newsletters and radio programs; and other fora

# 3. Inclusivity Measures – Proposed ways of ensuring the above strategies meet needs of various groups and increase their access to seed channels

- 1. Have a social balance in the hosting of demonstration gardens (youth/women/disability) to inspire people of various gender to visit the demo gardens and learn from peers.
- 2. Ensure specificity and diversity in packaging of promotional messages from extension and development programs to ensure effective promotion among different target groups. Some messages will be more appropriate to DVMs or farmers and not both.
- 3. Subsidized prices for different user groups (individual farmers, youth/women/disability
- 4. Field days-open to all in the community
- 5. Working closely with research-frequent releases of new varieties before people know
- 6. Unified promotional names I want Joweria but I have Naspot 13

7. Reach out to Moslems to include it for their functions

### **Breakout Group 2: Processors and NGO representatives**

# 1. Challenges faced by processors and NGOs when accessing and/or promoting new sweetpotato varieties/products:

- Counterfeit Products: The presence of substandard sweetpotato products undermines consumer confidence and market credibility. This discourages farmers from adopting new varieties, fearing their products might be perceived as inferior.
- Information Gap: Limited awareness about new varieties and quality standards hampers farmers' and processors' ability to adopt and promote these innovations. Without proper knowledge, stakeholders cannot effectively advocate for or utilize new sweetpotato varieties.
- Seed Knowledge: Inadequate knowledge regarding optimal seed replacement and cultivation practices leads to poor crop yields and quality. This results in skepticism and reluctance among farmers to invest in new varieties.
- Cost Issues: High costs for quality planting materials and processing equipment deter smallholder farmers and processors from adopting new varieties, as they may not have the financial means to invest in these improvements.
- Attitudinal Hurdles: Resistance to change and skepticism about the benefits of new planting materials prevent widespread adoption. Traditional practices and preferences often overshadow the potential advantages of new varieties.
- Partnership Gaps: Inconsistent collaboration among value chain stakeholders limits the exchange of information and resources, which is crucial for the successful promotion and adoption of new varieties.
- Market Competition: Competition with other agricultural products can overshadow the promotion of new sweetpotato varieties, especially if these other products are already wellestablished in the market.
- Certification Costs: The expense of obtaining certifications for new sweetpotato products can be prohibitive, especially for smaller stakeholders, limiting the introduction and promotion of these products in formal markets.

# 2. Strategies that could be more effective for processors and NGOs in promoting new sweetpotato varieties and products

- Multistakeholder Platform Outreach Strategy: Bringing together various value chain actors facilitates a unified approach to promoting new varieties, leveraging diverse resources and perspectives.
- Awareness Campaigns: Educating stakeholders through media and social platforms enhances understanding and interest in new varieties, leading to increased adoption and promotion.
- > *Demonstration Sites:* Showcasing the performance of new varieties in real-world settings helps to dispel doubts and demonstrate their benefits, encouraging adoption.
- Product Formulation: Improving product quality makes new sweetpotato varieties more appealing to consumers, thereby enhancing market demand and adoption.
- Facilitating Financial Linkages: Access to funding support enables stakeholders to invest in new varieties and promotional activities, overcoming financial barriers to adoption.
- > *Enhancing Collaborations:* Strengthening partnerships ensures coordinated efforts in promoting new varieties, sharing risks, and maximizing impact.
- Regular Capacity Building Initiatives: Continuous education and training for stakeholders builds confidence and skills for promoting and adopting new varieties.
- ➢ Farmer Field Days: These events provide practical opportunities for farmers to learn about and witness the benefits of new varieties firsthand, fostering interest and adoption.

# 3. Inclusivity Measures – Proposed ways of ensuring the above strategies meet needs of various groups and increase their access to seed channels

- Broad Participation: Involving diverse groups in demonstrations ensures that the benefits of new varieties are communicated to all sections of the community, promoting widespread adoption.
- Organize Knowledge Exchange Visits: Facilitating learning visits among stakeholders fosters knowledge exchange and mutual understanding, encouraging the adoption of new practices and varieties.
- Community Engagement: Engaging local institutions in outreach helps to tailor promotional activities to specific community needs, enhancing the relevance and appeal of new varieties.
- Enterprise Development: Encouraging business approaches among stakeholders promotes a sustainable model for the adoption and promotion of new varieties.
- Innovative Promotion: Creative promotional strategies like processor-led vine-for-harvest-portion exchange program (where the processor issue free vines to farmers with the understanding that the farmer with deliver an agreed portion of the harvested roots of the given variety to the processor at a given price) can generate interest and engagement, leading to wider adoption of new varieties.

### **Group 3: Agricultural Extension Officers and other supporting Public Officers**

*Q1. What challenges do the agricultural officers face when promoting/ accessing new sweetpotato varieties/ products?* 

- 1. Culture and tradition: prefer eating boiled and value addition will be difficult for large scale storage. It is very hard to force/adopting the eating habit onto particular communities eg the Inginyo
- 2. Negative attitude/perception towards new varieties (introductions) based on experiences on other varieties such as oranges
- 3. No SP multiplication of varieties in off season so that they are accessed at the beginning of season
- 4. No reliable market, except in food crisis
- 5. Cost of vines (the 2000 UGX per 100 vines) is high, projects were subsidizing the seed
- 6. Vitamin A is not enough for marketing, tastes and preferences, inferior variety (need more information)
- 7. Funding and budget allocation for demonstrations etc

*Q2.* What strategies could be more effective for agricultural officers in promoting new sweetpotato varieties and products?

- 1. Continuous/over-emphasizing awareness and sensitization so that people ca demand for more; demonstrations; production, consumer tests, farm field days, exchange visits
- 2. Value addition
- 3. Strong market linkage. Identify different chain actors and their involvement
- 4. Building capacity of seed multipliers at village level to produce outside the season, reducing costs
- 5. Capacity building of extension agents/lead farmers/vine multipliers e.g. some people may not know the varieties including information on cooking ability, nutrition. The number of extension farmers are few
- 6. Capacity of extension agents; agronomy, nutrition and marketing
- 7. Extension agents to get weather data and early warning signs for the farmers

Q3. How can these strategies be more inclusive? (i.e. How could they address the needs of various groups and increase their access to seed channels?)

- 1. Affirmative action; deliberate target of particular populations of interest e.g. blind
- 2. Approaches of information delivery to target the specific groups
- 3. Training extension on inclusiveness
- 4. School feeding programmes to include the children
- 5. Empowering women, youth
- 6. Needs assessment for all stakeholders at the village level e.g. gender, tastes and preferences the Inginyo