

# **Development of high value sweetpotato products value chain in Rwanda**

**(Rwanda Value Chain PoCP)**

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**SSP meeting in Kampala**

# Overview & Goals



**The Opportunity:** processing of sweetpotato products offers the opportunity to increase demand for the crop, create value added, and thereby expand the incomes of smallholder producers

**The Challenge:** what is the best way to build a value chain for sweetpotato processed products that assures profitability for both farmers and processors *and* is gender equitable.

*Just one year old: Progress to date*

# Methodology



- Test 2 organizational models for processed product value chains:
  - **the first** is based on firm contracted farmers and
  - **the second** based on farmer groups organized by an NGO delivering to bakeries in urban centers
- **Both** scenarios offer opportunities to establish SP seed systems on a commercial basis under contrasting agro-ecologies zones and value chain models

# Objective 1: Multiply and deliver appropriate clean planting materials to farmers



In-vitro plantlets multiplication at Rubona lab



Hardening, transfer of plantlets to the field and field multiplication of clean vines



## Objective 2

Develop a sweet potato value chain based on farmer groups formation, delivering semi-processed products to various processors as a substitute for wheat flour in their bakery line



Kotemu cooperative with Regina Kapinga (BMGF)  
(Above photo)



Kindumurimo cooperative in their newly planted field  
(Lower photo)



## Objective 3

Develop a sweet potato (SP) value chain based on contracting farmers who supply semi-processed roots products for use at the SINA factory



SINA  
Contracted  
farmer sweet  
potato field  
(Above),  
Processing of  
sweet potato  
bread at SINA  
factory (Below)



# Methodology 1: Technology development /dissemination (white and orange fleshed sweet potato products)



**Making of sweet potato puree**



**Team having sensory test of products**



# Exposure from Chinese to Product Diversity



Sweet-potato biscuit



purple sweet potato noodle with wheat flour



sweet potato crisps



Purple sweet-potato complex rice  
by re-structured method



# Methodology 2: Evaluate consumer acceptance of products **(ISAR)** & Economic viability **(CIP)**



**Sensory testing of sweet potato based products at Rubona post harvest unit**

# Collaborators and their main roles



## 1. ISAR (Institut des Sciences Agronomiques du Rwanda)

- ❖ Support seed multiplication, dissemination and production technology dissemination
- ❖ Processing technology development and dissemination

## 2. URWIBUTSO (SINA) Enterprise and other bakers in major urban centers

- ❖ Identify and contract farmers, develop a value chain from roots production to processing
- ❖ Participate in recipes refinements, sensory testing of biscuits, bread, doughnuts, queen cakes, juice and other products with selected WFSP and OFSP varieties
- ❖ Launching of several sweet potato products to the market by different processors

## 3. CRS (Catholic Relief Services) partnering with Imbaraga and YWCA

- ❖ Develop a sweet potato value chain based on farmer group formation, roots production, semi-processing by farmer groups, and selling to high value markets facilitate market linkages

## 4. Others Partners are:

- Ministry of Agriculture, Rwanda Bureau of Standards,
- Rwanda Environment Management Authority,
- Kigali Institute of Science and Technology,
- Crop Research Institute of Sichuan Academy of Agricultural Sciences





# Thank you



Sweet-potato based snack food which we hope to produce