

# Sweetpotato Action for Security and Health in Africa



Sweetpotato market chains that work for women and for the poor

## A proof-of concept action research project in Rwanda

### What is the problem?

Per capita sweetpotato production in Rwanda is among the highest in SSA—over 90 kgs per capita. Grown mainly by women, sweetpotato is an increasingly important food security crop in light of serious disease problems currently affecting cassava and banana. Major growing areas have two annual periods of rainfall and year-round consumption of the crop. Market chains are poorly developed. Roots are bulky and costly to transport long distances. Farmers often complain of lack of markets, and prices plummet during periods of abundance. Processing of sweetpotato into products offers the opportunity to increase demand for the crop and create value added, thereby expanding the incomes of smallholder producers.

The population of already densely-populated Rwanda is expected to double during the next decade. The rate of urbanization will increase to 30% by 2020. Urban consumers demand more processed, faster cooking foods than their rural counterparts. There is an expanding

demand for wheat-based products in urban areas, but wheat flour is relatively expensive. Research done by the Institut des Sciences Agronomiques du Rwanda (ISAR) has shown the potential for sweetpotato flour to substitute for imported wheat flour at 20% for bread and 40% for other bakery products.

What is lacking is the appropriate public-private sector partnership to get pilot efforts tested on a commercial scale. This project will embark on such a partnership. The private company will require a reliable supply chain. While the need for sustainable value chains to enhance incomes from crop production for smallholder farmers is widely recognized, solid evidence regarding which organizational structure actually benefits poorer smallholder farmers and in particular women farmers is minimal. There is legitimate concern that as sweetpotato is increasingly commercialized, men will dominate the control of proceeds from sales.



The Sweetpotato Action for Security and Health in Africa (SASHA) is a five-year initiative designed to improve the food security and livelihoods of poor families in Sub-Saharan Africa by exploiting the untapped potential of sweetpotato. It will develop the essential capacities, products, and methods to reposition sweetpotato in food economies of Sub-Saharan African countries to alleviate poverty and under-nutrition.

⦿ **What do we want to achieve in the first five years?**

We want to provide solid evidence that high value sweetpotato processed products are profitable and acceptable to urban African consumers. We also will document farmer welfare outcomes, particularly for women farmers and poorer farmers, from two different models for producing sweetpotato flour. Expected impacts include the identification of efficient and/or gender-equitable organizational model(s) for sweetpotato processing. We also expect to see enhanced revenues from sweetpotato for 500 households participating in sweetpotato value chains developed over a 3-year implementation period.

Key lessons will be learned regarding how to re-position white and orange-fleshed sweetpotatoes and their products in the urban consumer market. The project will test the following hypotheses:

1. The development of value chain for processed products with a private sector actor leads to improved returns on sweetpotato cultivation for growers.
2. Farmer-based value-added pre-processing prior to delivery to factory results in greater participation of, and revenues for, women farmers compared with contract-growing schemes managed by the private sector processor, in which all value addition occurs at the factory.
3. Sweetpotato will become a high value crop among urban and up-country consumers in target areas through effective marketing of an economically viable sweetpotato processed product.

⦿ **Where are we going to work?**

The project will be in three districts in Rwanda: Rulindo, Muhanga, and Kamonyi. These are major

sweetpotato production areas with average landholding sizes of 0.7ha.

⦿ **How are we going to make it happen?**

SINA Enterprises, a juice manufacturing and bakery goods company in Rulindo, will collaborate with the Rwanda Agricultural Board (RAB) and Catholic Relief Services (CRS) to develop processed products (most likely biscuits and bread) value chains that utilize sweetpotato flour or boiled and mashed sweetpotato.

Two organizational models will be tested. Model one (contract farming) builds on SINA Enterprise's existing practice, in which they contract farmers to produce a desired crop, purchase the production, and undertake all the processing at their factory. In model two (farmer group value addition), CRS organizes farmers into groups that prepare dried chips of sweetpotato that are then sold to SINA Enterprises for further processing into flour. In the second model, farmers are capturing some additional value from the sweetpotato. CRS will emphasize the inclusion of women farmers in the processing groups.

⦿ **Who are we going to work with?**

Implementation partners are the Rwanda Agricultural Board (RAB) (formally ISAR), Catholic Relief Services (CRS), and SINA Enterprises. CIP and RAB social scientists are responsible for impact and partnership assessment.

⦿ **What's next?**

Results will be shared with stakeholders at district and higher levels, sub-regional Sweetpotato Support Platforms, and scientific forums in SSA. We expect spillover effects for the findings and generated technologies to other starchy staple value chains.



⦿ **RAB food scientists displaying sweetpotato processed products**



⦿ **Bakers at work in SINA Enterprises**

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