



Scaling supply of precooked beans for food and nutrition security

To promote the utilization of precooked bean products to improve food and nutrition security, support the generation of income for smallholder farmers, and support environmental conservation practices, researchers will leverage public-private partnerships in Kenya and Uganda. The first phase of the *Precooked beans for food, nutrition, and income in Kenya and Uganda* project developed products that reduced bean cooking times and women's drudgery, improved environmental outcomes, transformed spot and ad hoc dry bean markets into structured industrial-driven markets, and contributed to dietary diversity among consumers. In this second phase, researchers will assess enabling and disabling actors and factors in the performance of the public-private partnership models. In addition, the team will analyze impacts of social, gender and economic trade-offs of market-driven production and supply models on household consumption patterns, food security, nutrition, and social and economic welfare among households.

The challenge

Unprocessed dry beans, a traditional subsistence crop in Eastern and Central Africa, are a popular, nutritious, but slow-cooking food. Beans are also a key source of protein among low income households. Between 1994 and 2008, bean consumption increased at a rate of 1.67% per capita per year in sub-Saharan Africa, reflecting the importance of these unprocessed dry beans to the region.

In recent years, the rapid expansion of urban populations, rising incomes, and high costs of energy have fuelled the demand for fast-cooking, processed foods. Canned or frozen beans are sometimes available but are only affordable to a minority of wealthy consumers. Benefits can be achieved for all consumers if beans with precooking qualities are scaled-out, and if the impacts on gender empowerment, household income, employment, fuel use, household consumption patterns and nutrition are documented, as scaling requires data to inform the process.

The research

Since the release of the phase 1 precooked bean products into the market in 2016, the products have not been fully exploited or commercialized. This is due to the limited supply of the beans for processing, which affected the volumes and availability of the final product.

In this second phase, researchers will scale-up the supply of raw beans by boosting production among farmers, especially women. This will be achieved by improving the existing public-private partnership that will, in turn, hasten supply of the precooked bean products to meet consumer demand. The project will improve the income, nutrition and health of households along the bean value chain, through increased bean production and consumption.



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Expected outcomes

- Precooked bean products will reach 1.2 million consumers;
- Enhanced income for 8,700 small-scale farmers (60% women);
- Improved bean production, and supply and business models for precooked beans, including financial inclusion of women, men and youth;
- Increased decision making among women and youth in the production and marketing of beans;
- Production of public-private partnership case study management models;
- Enhanced gender equity and household bean consumption patterns.

Implementing partners:

- National Agricultural Research Organization: Dr. Michael Ugen (michaelugen@gmail.com)
- Kenya Agricultural and Livestock Research Organization: David Karanja (karanjadra@yahoo.com)
- International Center for Tropical Agriculture: Dr. Eliud Birachi (e.birachi@cgiar.org)
- Community Enterprises Development Organization, Lasting Solutions Limited, CARITAS

Countries: Kenya and Uganda

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