Healthy sweetpotato-based bakery products for sub-Saharan Africa

Context
- Increased awareness of the benefits of healthy foods has driven demand for vitamin A-enhanced orange-fleshed sweetpotato products in Kenya, Malawi, Mozambique and Rwanda.
- Small-scale farmers supplied with vines for productive, nutritious sweetpotato grow the crop for household consumption and local markets, but food processors can increase the crop’s value and farmer adoption.
- Difficulties in storing sweetpotato—ensuring all year supply—hindered demand in areas with seasonal rainfall.
- Shelf-stable, vacuum-packed sweetpotato puree offers a cost-effective method of storage, stabilizing supplies off-season.
- Using sweetpotato as an ingredient in food processing has increased business opportunities and, thus, farmer demand.

Approach
- Dissemination of planting materials for nutritious sweetpotato by the International Potato Center (CIP) and partners to vine multipliers and model farmers.
- Development of puree with a stable shelf life of up to 4 months to increase product applications and availability in markets.
- Substitution of sweetpotato puree for more expensive wheat flour, reducing cost of baked products by 12-20%.
- Facilitation of value chain linkages between partners, assuring gender equity.
- Engagement with and support to local processors and national research and extension partners.

Outcomes
- Reductions in reliance on imported wheat flour and increased diet diversity.
- Commercialization driving job creation for women and young people.
  - Nearly 600 sweetpotato vine multipliers—mainly women—operational.
  - 10 nutritious sweetpotato-based processed products commercially traded.
  - >2,300 small-scale farmers regularly selling to bakeries, supermarkets, etc.
  - Nearly USD 1 million in annual sales of sweetpotatoes to processors.
  - Additional employment created at puree factories and bakeries.
- Adaptation of local traditional recipes to include nutritious puree as an ingredient.
- Food technology adopted by partners to supply national markets with sweetpotato puree and other products.
- Food Analysis and Nutrition Evaluation Laboratory in Nairobi assuring safe products and accurate labeling of nutritional content.
- Catalyzed introduction of national health and safety regulations for biofortified processed foods.

Future steps
- Scaling up use of sweetpotato puree for baked and fried products by formal and informal sectors in Ethiopia.

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