

Combining Health and Agriculture Formative Research to Improve Dietary Diversity



Phil Moses, SBCC Technical Advisor, SPRING; Victor Pinga, Agriculture Advisor, SPRING; Peggy Koniz-Booher, Senior SBCC Lead, SPRING; Kristina Granger, MPH, SBCC Manager, SPRING; Andrew Cunningham, Program Officer, SPRING; Hamid Turay, Nutrition Coordinator, Helen Keller International/Sierra Leone.

BACKGROUND/OBJECTIVE

Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) is USAID's multi-sectoral nutrition project. In Sierra Leone, we tested integrated social and behavior change (SBC) approaches that can improve nutrition-related household practices and influence agriculture value chains. The goal was to increase access to diverse, nutritious foods among 1,000-day households (those with pregnant or lactating women or children under two years of age).

METHODS

We conducted formative research to understand consumption of and access to fish and pumpkin. We chose these two nutrient-rich foods because they—

- contain nutrients that fill an identified nutrient gap in the local diet
- are known, produced, and/or marketed within the district
- provided us an opportunity for rapid learning over a short time.

We adapted and fielded four Barrier Analysis (BA)¹ surveys in 15 communities across 3 chiefdoms in Tonkolili District and a Trial of Improved Practices (TIPs) in the same district to identify behavioral determinants—factors that motivate or discourage the consumption of pumpkin and fish by pregnant women and children 6-23 months old. **We adjusted**

the BA and TIPs by going beyond household practices to include questions exploring the quality of available fish and pumpkin and households' access to it.

We conducted a Value Chain Analysis (VCA) using interviews with actors within the fish and pumpkin value chains. We adjusted the VCA by adapting tools from the USAID Microlinks Value Chain Development Wiki.² Going beyond identifying opportunities to make the value chains more competitive for producers and sellers, we **added questions to identify opportunities for making fish and pumpkin more available, affordable, and attractive to 1,000-day households. The analysis also considered time and energy constraints on women involved in production, as well as potential food safety, health, and environmental risks to mothers and children.**

RESULTS

Fish		Pumpkin	
Key BA/TIPS Results	Key VCA Results	Key BA/TIPS Results	Key VCA Results
<p>Mothers were hesitant to feed fish to their babies because they were afraid of—</p> <ul style="list-style-type: none"> • the child choking on the bones • poor hygiene of the fish in the market 	<ul style="list-style-type: none"> • Small pelagic fish are plentiful in rural markets • WorldFish finds that local mothers are willing to pound whole small fish into a paste to include in baby's porridge to remove choking hazards • Consuming entire fish is more nutritious than consuming only the filet • Quickest way to improve hygiene of fish is at the point of sale 	<ul style="list-style-type: none"> • Pumpkin is plentiful during the rainy season and less available during the dry season. Nevertheless, many mothers feed pumpkin to their children (or consumed pumpkin while pregnant) regularly during the dry season. • A third of mothers who reported consuming or feeding pumpkin year-round said that they grew their own pumpkin in their garden. None of the mothers who didn't consume pumpkin in the off season reported growing their own pumpkin. 	<ul style="list-style-type: none"> • Although widely consumed, only a small amount of pumpkin was regularly sold in weekly markets. Most pumpkin was grown, sold, and consumed within the same village. • The quickest ways to increase access to pumpkin were to promote the cultivation of pumpkin in home gardens, encourage people who grow for the market to grow pumpkin during the dry season, and improve storage methods to extend the period during the year when pumpkin is more accessible.

Materials to Promote Safe Purchase and Consumption of Fish

Materials to Promote Purchase and Consumption of Pumpkin

CONCLUSIONS

These household and market practices work together to increase dietary diversity. Using a hybrid approach to formative research that draws from both health and agriculture helped partners develop complementary SBCC approaches to improve nutrition by affecting change in both value chains and households.

- Promoting the sale of small fish for consumption by PLW and kids 6-23m
- Promoting key hygiene practices by fish sellers
- Growing pumpkin in off season by sellers

- Buying small fish to make healthy paste to feed babies
- Identifying hygienic fish in the market
- Growing pumpkin in home gardens



1. Methodology taken from Kittle, Bonnie. 2013. A Practical Guide to Conducting a Barrier Analysis. New York, NY: Helen Keller International. <http://www.fsnnetwork.org/practical-guide-conducting-barrier-analysis>; and from Davis Jr., Thomas P. 2004. Barrier Analysis Facilitator's Guide: A Tool for Improving Behavior Change Communication in Child Survival and Community Development Programs. Washington, DC: Food for the Hungry. <http://www.coregroup.org/resources/52-barrier-analysis>.

2. <https://www.marketlinks.org/good-practice-center/value-chain-wiki/specific-tools-and-resources>



This poster is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-11-00031 (SPRING), managed by JSI Research & Training Institute, Inc. (JSI) with partners Helen Keller International, the Manoff Group, Save the Children, and the International Food Policy Research Institute. The contents are the responsibility of JSI, and do not necessarily reflect the views of USAID or the United States Government.

www.spring-nutrition.org
USAID's multi-sectoral nutrition project

