

Integrating Agriculture and Nutrition Programming

Approaches and Lessons Learned

INTRODUCTION

The international community is increasingly recognizing the importance of linking agriculture and nutrition programming for improved nutrition and health outcomes. Investors and program implementers hope that agriculture programs will be designed with an explicit focus on improving nutrition security. This brief highlights some of CRS' approaches to designing integrated agriculture and nutrition programming.

METHODOLOGY

CRS commissioned a quantitative and qualitative review of 17 programs integrating agriculture and nutrition to document the approaches being used. CRS and Tufts University created a logical framework based on Gillespie's 2012 agriculture-nutrition pathways framework and the guiding principles for nutrition-sensitive agriculture and rural development were used for the analysis (Herford et al. 2012). Tufts University used two dimensions for measuring the level of integration¹:

Program selection criteria:

- Included agriculture and nutrition/health components with
- Explicit mention of integration in project proposal or
- Statement that agriculture programming would improve nutrition or
- An agriculture intervention addressing a nutrition-related issue

- a. Breadth: the degree to which programs span different elements of the logical framework linking nutrition and agriculture
- b. Depth: the level at which nutrition and agriculture are linked in programs.

CRS' PROMISING PRACTICES

Some of CRS' ongoing approaches for integrating agriculture and nutrition are described below within the context of 4 of the 8 Herford's principles. Select examples from past or ongoing programs are used to illustrate the approaches.

Including nutritional objectives in agriculture projects

Several CRS programs considered nutritional issues in their agriculture interventions. For example, the CRS-led and USAID-funded Food for Peace (FFP) Seguridad Alimentaria Enfocada en los Primeros 1,000 Días (SEGAMIL) program in Guatemala uses a whole farm nutrition approach. The project's micro-watershed field teams coordinate agricultural activities that combine agro-enterprise, health, nutrition, and Savings and Internal Lending Communities (SILC) interventions with participating families.

In Zambia, CRS-led and USAID-funded Mawa project piloted the Diversity and Nutrition for Enhanced Resilience (DiNERS) vouchers and fairs initiative. Following the traditional seed and voucher fairs method, which targets chronically stressed areas with a concentration on staple crops, DiNERS link rural communities to suppliers to provide access to diverse, quality seeds and livestock¹ accompanied with nutrition knowledge that support behavior towards a more diversified and nutritious diet. Typically, a DiNERS voucher would enable a recipient to access fruit tree species, legumes and vegetables, improved varieties of cassava and nutrient dense forms of sweet potato, such as orange fleshed sweet potato, and small livestock, including poultry. Project beneficiaries who meet certain criteria receive vouchers to purchase inputs at the DiNERS, but as DiNERS are open to the whole community, other community members can purchase inputs with cash from the fairs; which provides information about local demand for nutritious crops.

CRS-led and the European Union-funded Sustaining Food Security and Livelihoods in West Darfur program in Sudan devised programming methods that layered SILC Groups, Farmer Groups, and Care Groups.

This layering was desired to enable households to have the food available and income needed to adopt the promoted nutrition behaviors. CRS-led and USAID-funded FFP Strengthening, Accessing and Leveraging Opportunities for Household Incomes (SALOHI) program in Madagascar promoted agroforestry, home gardening (increasing production of diverse and quality foods), small animal husbandry (chickens, ducks, goats, and pigs) and integrated rice-fish farming techniques in Farmer Field School (FFS) curricula. FFSs promoted essential nutrition actions, feeding practices and governance messages along with natural resource and watershed management strategies to enhance cross-sectorial learning and program impact.

Select Practices:

- Whole farm nutrition
- DiNERS
- Co-locating interventions through groups
- Integrated messaging in agriculture groups



DiNERS Voucher Fair in Zambia. Jessica Bateman/CRS.

¹ In the Mawa project, poultry and small livestock have not been included in the DiNERS

Targeting nutritionally vulnerable groups

Several CRS projects target specific nutritionally sensitive populations with tailored interventions. For example, the CRS-led and CAFOD-funded Support of Small-Scale Food Production for Poor Families in Lal wa Sarjangan program in Afghanistan targeted landless and female-headed households with keyhole gardens and promoted the cultivation of nutrient-dense vegetables.

The CRS-led and USAID-funded FFP Wellness and Agriculture for Life Advancement (WALA) program in Malawi tailored interventions to support HIV-positive pregnant and lactating women (PLW) with breast-feeding training and counseling sessions on appropriate infant and young child feeding practices. Agriculture extension workers were trained to promote homestead gardens suitable for people living with HIV and share prevention and voluntary counseling and testing messages. The CRS-led and USAID-funded Ibyiringiro Project in Rwanda taught HIV-positive PLW to make nutritious meals and maintain a balanced diet using locally produced food along with instructions on proper hygiene practices and building and maintaining home gardens to grow nutritious food year round. This effort was coupled with agriculture interventions that supported growing diverse and nutritious crops.

CRS' target populations:

- Landless households
- Female-headed households
- HIV positive individuals
- Internally displaced persons

Investing in women

CRS is emphasizing the integration of gender across its agriculture and nutrition program activities to improve nutrition outcomes. The CRS-led and USAID-funded FFP Multi-Year Assistance Program (MYAP) in Burundi worked with a group model to sensitize communities on gender-balanced responsibilities and mutual decision-making regarding household asset management. An evaluation of this model showed that 76 percent and 40 percent of male beneficiaries interviewed stated they increased their contributions to the agriculture workload and childcare, respectively. Sixty-three percent of couples said that after this intervention they made more joint decisions around buying and selling food, particularly in regard to sales of crops and 35 percent of households said the most valued change in household dynamics was “increased assets as a result of joint-decision making.”ⁱⁱ

Selected practices:

- Group formation
- Income-generating activities
- Time-saving technologies

Supporting women to join SILC and marketing groups are basic interventions that increase women’s access to financial resources and can empower women with greater influence over decision-making about income. The WALA program sequenced the introduction of capacity building skills. The capacity building typically started with introducing women to SILC to learn how to save and manage their finances. With savings from SILC, they were introduced to the benefits of marketing

groups, starting with the production of food crops such as pigeon peas — a women’s crop — that was already being sold by other groups within the project. The project transitioned marketing groups into bird’s eye chilies when appropriate, a higher risk and higher return cash crop. Qualitative evidence revealed that this approach supported women’s household decision-making and control over the income earnedⁱⁱⁱ.

CRS-led and USAID-funded FFP Families Achieving Sustainable Outcomes (FASO) program in Burkina Faso and *Programme d’Appui à la Sécurité Alimentaire des Ménages-Tanadin Abincin Iyali* (PASAM-TAI) in Niger are both working with non-profit businesses, which are managed and technically supported by GRET (professionnels du developement solidaire). They produce local fortified flour² for infants. These non-profits work with women to set up small and medium enterprises to produce and sell the fortified flour, thereby, creating an income opportunity that supplies nutrient-rich ingredients.

When considering women’s time commitment and childcare responsibilities, FASO offset opportunity cost for participating in program activities by promoting technologies with a lower labor requirement.

Increasing year-round access to diverse, nutrient-dense food

CRS programs place strong emphasis on reducing the lean season and increasing year-round access to nutrient-dense foods. In Rwanda, Madagascar, Burundi, and other countries CRS combined training on nutrition, home gardening, food preservation, and water conservation practices to improve both availability and utilization of food.

In Malawi, the WALA program included twice-a-year trainings in food processing, preparation, and preservation during the harvest and lean season for caregiver groups. These meetings incorporated lessons in feeding young children and pregnant women with locally and seasonally available foods made with nutrient-rich recipes.

LESSONS LEARNED

Including nutrition-explicit objectives in agriculture

programming: The programs reviewed demonstrated the value of including nutrition objectives and/or outcomes in the overall project design as it influences the approach used. A strong nutrition-focus creates the opportunity for staff to consider how the program affects the nutritional behavior of the beneficiaries. A few specific considerations that teams should contemplate in program design include: households’ nutritional implications when selecting a product (crop/livestock) for increased production and sales; how the selected product could influence intrahousehold dynamics particularly decision making power and income

Select Practices:

- Home gardens
- Post-harvesting techniques

“Previously, I was the decision maker in all financial issues. Now I have started to share my expenditures with my wife.”

– Male participant

“We have started to openly discuss, plan and decide on important issues together.”

– Female respondent

² Flour is tested for aflatoxins

control, who controls the income from the sale of the selected product, and labor requirements of a promoted agriculture approach and how a technology may impact the workload of PLW.

Nutrition programming with proper agriculture

support: There is a strong focus on nutrition-sensitive agriculture programming; however, some nutrition interventions may be heavily reliant on agriculture support to be successful and sustainable. For example, nutrition programs may require that farmers have consistent access to diverse seeds of nutrient-dense crops for home gardens and have knowledge on and use basic gardening techniques affordable for vulnerable farmers.



A home garden in Tanzania. Valerie Rhoe/CRS.

Monitoring and Evaluation: Given that explicit agriculture and nutrition integration was not a standard at the time these programs were designed, the monitoring and evaluation did not measure integrated outcomes. However, some program indicators tried to capture agriculture’s indirect effect on nutrition outcomes such as the number of months that vegetables were available to families and households which grew backyard vegetables and included PLW. Future programs should take advantage of these findings by including indicators that capture the integrated outcomes that can measure links between agriculture and nutritional outcomes.

ⁱMasters, William A., et al. “Agriculture, nutrition, and health in global development: typology and metrics for integrated interventions and research.” *Annals of the New York Academy of Sciences* (2014), <http://onlinelibrary.wiley.com/doi/10.1111/nyas.12352/abstract>

ⁱⁱJones, C. Sarah. 2012. Burundi MYAP: Gender Equity Promotion in Kirundo, Muyinga and Kayanza Provinces. Baltimore: CRS. http://pdf.usaid.gov/pdf_docs/PA00J3TF.pdf

ⁱⁱⁱElizabeth Arlotti-Parish. 2013. Gender in Agribusiness: An Analysis of Gender Dynamics in Cash- and Food-crop Marketing Clubs in Southern Malawi. Baltimore: CRS.

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