Highlight 3: Homestead Food Production Evaluation Identifies Paths to Improved Child Nutrition

Addressing multiple causes of undernutrition simultaneously through multisectoral programs increases the effectiveness of interventions for improving children’s nutritional status. This was one key finding identified by A4NH researchers at the International Food Policy Research Institute (IFPRI) in their final evaluation of Helen Keller International’s (HKI) Creating Homestead Agriculture for Nutrition and Gender Equity (CHANGE) program. CHANGE was the second generation of HKI’s Enhanced Homestead Food Production (EHFP) program in Burkina Faso. The evaluation marked the culmination of a 10-year partnership between IFPRI and HKI for evaluating and improving HKI’s Homestead Food Production program model, a model that has been implemented in Asia for 30 years and Africa for a decade.

At its core, the program includes interventions such as the provision of seeds, tools, and behavior change communication about good agricultural, health, hygiene, and nutrition practices. Over the last 30 years, the program has evolved based on available evidence and implementation experiences. Modifications include a greater focus on gender, addition of animal-source foods, shifts in targeting of child age groups (from under five years to under two years), and inclusion of other complementary interventions.

IFPRI’s rigorous impact evaluation of HKI’s EHFP program in Burkina Faso provided the first convincing evidence that well-designed and implemented nutrition-sensitive agriculture programs can not only improve diet quality but also maternal and child nutrition outcomes. Among mothers who participated in the program, results showed EHFP decreased the prevalence of thinness or underweight by 8.7 percent (Olney et al. 2016). Among children aged 3 to 6 months at the beginning of the program, anemia declined by 15 percent, while among children aged 3 to 12 months, wasting declined by 9 percent and diarrhea prevalence by 10 to 16 percent (Olney et al. 2015).

The IFPRI team used the evaluation results as the basis of several recommendations to HKI for maximizing the impacts of EHFP on children’s nutritional status, such as including a fortified complementary food for children aged 6 to 23 months and expanding the behavioral change communication strategy to include activities focused on preventing and treating malaria and diarrhea, such as a water, sanitation, and hygiene (WASH) intervention.

When HKI added a WASH component and distribution of a lipid-based nutrient supplement to children aged 6 to 23 months to complement the EHFP program’s core agriculture and nutrition interventions, there were synergistic benefits beyond what could be achieved by adding individual components. The greatest impacts on nutritional status outcomes (iron deficiency, anemia, and stunting) among children who received all the interventions, as compared with those who received the EHFP program alone (Olney et al. 2017). These modifications were also implemented in other HKI CHANGE programs in Côte d’Ivoire, Senegal, and Tanzania.

“We find that addressing multiple causes of undernutrition simultaneously, through multisectoral programs, increases program effectiveness for child nutritional status outcomes,” noted Deanna Olney, a senior research fellow at IFPRI, during her remarks at the concluding seminar in December. “We also believe that these kinds of program-research partnerships can improve program effectiveness, especially over a longer timeframe.”

Results from rigorous evaluations like this provide the evidence and experience that program implementers, investors, and policy makers need to design and scale out programs that deliver significant improvements for maternal and child health and nutrition.