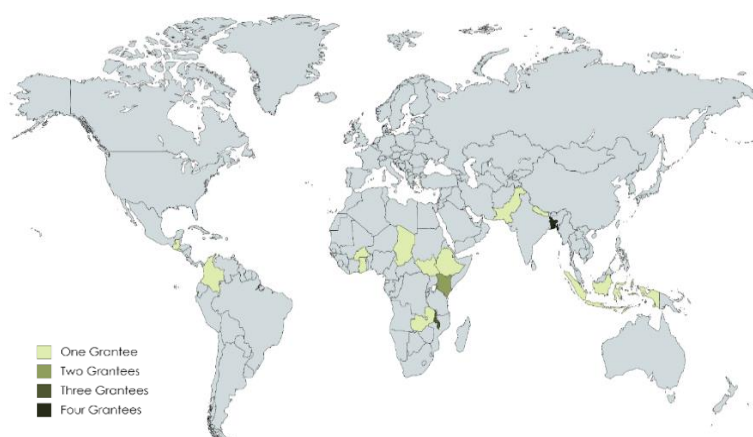


NEEP

Exploring connections through programme evaluations

The Nutrition Embedding Evaluation Programme (NEEP) was a four-year project (2013-2017) led by global non-profit PATH and funded by the UK Department for International Development. NEEP was designed to build the evidence base for what works in improving maternal and child nutrition by conducting credible, robust evaluations of innovative interventions implemented by civil society organisations (CSOs). PATH managed the grant funding, provided technical support on evaluation frameworks, data collection, data interpretation and analysis, and strengthened knowledge dissemination for 18 CSOs to evaluate their multi-sectoral nutrition efforts in 12 countries. Interventions fell under one or more areas: (1) agriculture; (2) cost-effectiveness analysis (CEA); (3) early childhood development (ECD); (4) infant and young child feeding (IYCF); (5) micronutrients; (6) water, sanitation and hygiene (WASH); (7) women's empowerment; and (8) e-learning.



AGRICULTURE

CONCERN WORLDWIDE, ZAMBIA



Concern Worldwide implemented the Realigning Agriculture to Improve Nutrition (RAIN) project in rural Zambia. The intervention sought to increase year-round availability and access to nutritious food through: 1) local women's groups and household visits by trained female model farmers providing agricultural support and supplies, and 2) health and nutrition promotion through community health workers (CHW). The evaluation looked at two study arms (agriculture and agriculture-nutrition) with a comparison arm. The results showed no discernible reduction in stunting, or improvements in IYCF or caregiver health and nutrition knowledge. While all arms increased their nutritious food consumption, the agriculture-nutrition arm also increased their dietary diversity. Women's empowerment in agricultural decision-making—on what crops are grown and what is done with crop sales—increased in the study arms; and these households also had greater increases in foods produced and agricultural activities. Significantly less wasting was observed in the study arms than the comparison group (4% and 3% differences vs. 7%).

FAARM, HELEN KELLER INTERNATIONAL, BANGLADESH



Helen Keller International's Homestead Food Production programme aims to improve the nutritional status of women and children in Bangladesh. Within that programme, the Food and Agricultural Approaches to Reducing Malnutrition (FAARM) study was conducted within Sylhet Division in the northeast of Bangladesh. In the intervention, women are organised into farmers' groups and equipped with the skills, equipment and supplemental funding to garden and sell their surpluses to earn an income. At the same time, women receive training on nutrition, hygiene and health topics. The evaluation included study and comparison arms. The intervention demonstrated a slight positive effect on: early initiation of breastfeeding, exclusive breastfeeding under six months and infant minimum dietary diversity. Breastfeeding prevalence among infants was 37%-66% among the study arm compared to 24%-54% for the comparison. There were also slight improvements seen in women's dietary diversity beginning around two years after the start of the intervention. Additional outcomes will be measured at the end of the intervention in 2019.

M²W², HELEN KELLER INTERNATIONAL, BANGLADESH



Helen Keller International's Making Markets Work for Women (M²W²) aimed to eliminate extreme poverty in remote communities of Bangladesh by improving food security, diets and women's empowerment. The programme engaged local markets to establish fair prices and improve access for intervention households. Women received training on new farming and livestock technologies, as well as seeds/saplings and grants to improve poultry and livestock care. Intervention households also received IYCF counselling and micronutrients for infants and adolescent girls, and participated in group meetings on health and nutrition. The evaluation included study and matched comparison villages. The results showed a greater percentage of intervention households were involved in agriculture and livestock and thus had a higher monthly per capita income. By the end, fewer intervention households were food insecure (33% vs. 44%), and intervention women had higher dietary diversity. Intervention children also had significantly more diverse diets (59%, 50%) than comparison children (43%, 36%) and a lower rate of stunting (32% vs. 36%).

HELEN KELLER INTERNATIONAL, INDONESIA



Hellen Keller International implemented an enhanced homestead food production programme in Indonesia. It combined home gardening of micronutrient-rich vegetables, poultry rearing and nutrition education with the aim of improving nutrition status and income generation among beneficiaries. The intervention consisted of a demonstration farm for each village where a lead farmer received inputs and training and then transferred that knowledge to other community members to create their own homestead garden. The programme also included collective marketing training for women to promote surplus crop sale for supplemental income. Control households increased their year-round production of vegetables from 33.7% to 46.6%, whereas intervention households decreased their production (47.8% to 45.2%). Sales to village markets increased for the control group by 6.9%, but decreased 1.5% among the intervention group. Households earning additional income from their gardens decreased in both intervention (from 22.3% to 13.3%) and control households (from 19.5% to 9.8%). Among the households that earned additional funds, the money spent on the consumption of foods increased from 47.7% to 67.2%.



COST-EFFECTIVENESS ANALYSIS

ACTION AGAINST HUNGER | ACF INTERNATIONAL, BURKINA FASO



Action Against Hunger's MAM'Out intervention in Tapoa, Burkina Faso consisted of seasonal multi-annual cash transfers aimed at ensuring protection of household resources—given the imbalance of revenue to expenses due to farming seasonality. Over two years, monthly cash transfers were given to mothers from poor households via mobile phones to supplement their household income during this “hunger gap”—July to November. The aim was the money would be used to increase nutritious food consumption, and access health services and good WASH conditions. The main areas of investment were food and health—with 40% dedicated to children. Cases of sharing goods or cash outside the household were reported—contributing to social cohesion. The positive intervention results were related to improvements in purchasing power and husband-wife relationships. However, no significant change occurred for acute malnutrition. The programme demonstrated to be as cost efficient as other safety net programmes.



Action Against Hunger, Prathama Raghavan

ACTION AGAINST HUNGER | ACF INTERNATIONAL, NEPAL



Action Against Hunger's Follow-Up of Severe Acute Malnutrition (FUSAM) project provided community-based management of acute malnutrition (CMAM) for children (6-24 months) in Saptari district, Nepal. Both the intervention and control groups received the standard nutrition treatment for uncomplicated SAM (medical consultation, ready-to-use therapeutic food [RUTF] and antibiotics), and the intervention group also received psychosocial support. The psychosocial component included counselling sessions with mothers, focused on easily integrated childcare practices. FUSAM did not show the level of effectiveness compared to the control arm as expected for a cost-effectiveness study. Therefore, it was not possible to conclude whether the psychosocial component led to significant improvement in nutrition or the trial was not able to assess it due to external constraints. For those reasons, the CEA was transformed into a modelling study, which can be a useful tool to assess “what might have been” outside challenging conditions, and how further implementation of this type of intervention could be optimised.



EARLY CHILDHOOD DEVELOPMENT

ZAMBIA CENTRE FOR APPLIED HEALTH RESEARCH AND DEVELOPMENT, ZAMBIA

The Zambia Centre for Applied Health Research and Development conducted a study to test the impact of a package of community-based ECD interventions in rural Zambia. CHWs regularly visited study households to screen and refer children to the health clinic for illness or acute malnutrition and provide routine care reminders. Caregivers also attend biweekly group meetings on cognitive stimulation and play practices, child nutrition, WASH, cooking practices and mental health self-care. The evaluation included six health zones for the study and six comparison health zones. Overall, the interventions had a strong positive impact on key parenting behaviours related to ECD and nutrition. The study package was associated with an increase in both weight- and height-for-age and reduced odds of stunting. Stunting in the study zones reduced from 40% to 25%. Children in the study households also exhibited higher rates of motor function and cognition than the comparison households.

BRAC, BANGLADESH



BRAC Bangladesh mainstreamed nutrition and ECD under its Maternal, Newborn and Child Health programme to improve nutritional status and ECD. Trained health volunteers and CHW conducted household visits and community gatherings to share nutrition and ECD knowledge on breastfeeding, IYCF, mother-child interaction, father engagement and developmental milestones. Trained ECD promoters delivered messages on parenting practices and child stimulation and provided parent counselling. During community gatherings, play centres provided age-appropriate child stimulation. The results showed positive impacts of the nutrition component on dietary diversity and food security, but not on breastfeeding, IYCF or ECD knowledge or practices. The evaluation demonstrated that mainstreaming nutrition contributed to a 7% reduction in stunting, but no reductions in wasting. These positive changes are assumed to be the result of an increase in mothers' bargaining power within households. The ECD trial did not show significant reductions in stunting or wasting, ECD or nutrition knowledge, parenting practices or child cognitive development. However, it did demonstrate positive impacts on dietary diversity, nutritional supplement intake and child vaccination.

SAVE THE CHILDREN, MALAWI



Save the Children implemented an integrated package of nutrition and agriculture interventions through community-based childcare centres (CBCC) in rural Malawi. The package included IYCF promotion during parenting groups, community engagement in preparing meals for CBCC children as well as CBCC community gardens—maintained through village savings and loans. The evaluation included a study and comparison group. The results demonstrated increased study caregiver knowledge on IYCF practices, different food groups and their role in a balanced diet, as well as improved child dietary intake and dietary diversity. Study CBCCs provided nutritious meals one more day over a 5-day period than comparison CBCCs. The results for agriculture showed an improvement of household production in the range and output of multiple nutritious foods. There was no impact on child growth for pre-schoolers, though improvements were found for their younger siblings. The CEA indicated intervention costs were USD\$131 per household.



Save the Children



INFANT AND YOUNG CHILD FEEDING

ORGANIC HEALTH RESPONSE, KENYA

Organic Health Response piloted a novel nutrition intervention utilising an existing network of microclinics—community groups led by trained CHW to address community health challenges—on Mfangano Island in Lake Victoria, Kenya. Through these microclinics, CHWs facilitated six nutrition sessions over 12 weeks to empower social networks to consume healthier foods, improve IYCF, identify malnutrition cases and establish support for these practices. The evaluation looked at study households and comparison households. The intervention reached 26 CHWs who led 38 groups with 557 community members. The results showed study children were significantly more likely to have minimum acceptable diets and higher dietary diversity than comparison children. It also increased overall nutrition knowledge, notably for breastfeeding among community members (14.9 intervention score vs. 13.6 control score) and CHWs (16.3 vs. 14.3). As well, the study highlighted enhanced social support for nutrition from husbands, family members and the whole community.

CAMEROON BAPTIST CONVENTION HEALTH SERVICES, CAMEROON



Cameroon Baptist Convention Health Services (CBCHS)'s Nutrition Improvement Program (NIP) aims to improve the nutritional status of mothers and infants, especially those who are HIV-positive or HIV-exposed. The programme trained health providers in IYCF and incorporated IYCF counselling into its health services. Nutrition counsellors are also trained on maternal nutrition, exclusive breastfeeding and complementary feeding. After training and a hospital internship, counsellors are posted at CBCHS facilities. The evaluation included both a study group and a comparison group. The results demonstrated a positive impact of NIP on caregivers who received nutrition counselling at a CBCHS facility. NIP infants (0–5 months) were almost 7 times more likely to be exclusively breastfed compared to comparison infants. NIP infants also had lower stunting rates (21.3% for 0–5 months; 12.6% for 6–8 months) compared to non-NIP sites (34.7%; 48.2%). However, infants (0–5 months) were significantly more likely to be wasted (8.2% vs. 0%). Overall, caregivers had respect for the nutrition counsellors and trusted their advice on IYCF.



MICRONUTRIENTS

NUTRITION INTERNATIONAL, ETHIOPIA



Micronutrient Initiative—now Nutrition International—embedded the provision of low-dose iron multiple micronutrient powders (MNP) within a UNICEF-led programme in Ethiopia over 18 months where households with children under age two were offered locally-produced complementary food. The MNP sachets included 15 micronutrients with instructions on how to add them to this food, and health extension workers enhanced their provision with IYCF counselling, growth monitoring and health promotion. The accompanying study investigated the impact of these MNPs on IYCF, child growth and iron status between a study and comparison group. The results showed an increase in haemoglobin levels (+0.25 g/dL vs. -0.08g/dL) as well as a decrease in anaemia among study infants (37.1% to 24% vs. 26.4% to 29.7%). However, stunting increased for both groups, but at a lower rate for study infants. Overall, the MNPs were positively accepted by study mothers.



WATER, SANITATION AND HYGIENE

ACTED, PAKISTAN

ACTED implemented a multisectoral project in Sindh province, Pakistan to meet emergency nutrition needs in the aftermath of extensive flooding. Within this larger project, ACTED included two smaller interventions: 1) flood-resistant shelter provision and 2) WASH and food security and livelihood (FSL) support, including hygiene promotion and water supply, as well as cash for work grants and community risk management. Their study compared two study groups (shelter+WASH; shelter+WASH+FSL) with a comparison group. Overall, including WASH and FSL demonstrated more positive nutrition and health outcomes than the comparison group. Study recipients had better knowledge on making health decisions, including when to give children oral rehydration therapy for diarrhoea, when pregnant women should seek health services and the health and growth benefits of breastfeeding. WASH recipients were also more likely to get water from protected sources. These WASH and FSL interventions contributed to reduced child malnutrition—37% compared to 47%.

ACTION AGAINST HUNGER | ACF INTERNATIONAL, CHAD



Action Against Hunger embedded a WASH component into a routine nutrition programme for outpatient SAM management. Both a study and comparison group received routine outpatient services, including RUTF and basic hygiene education. The study group also received a household WASH package, including a WASH kit at admission and sensitisation at weekly health centre visits. The results demonstrated that the study group's overall WASH knowledge and practices improved significantly, except for chlorine use and correct water storage. For health outcomes, time to recovery was 4.4 days shorter and the recovery rate was 10.5% higher in the study group compared to the comparison group. However, there was no statistical difference between the relapse rates between the two groups, both at two and six months after recovery. As well, there was a shorter duration of diarrhoea and vomiting, although the reduction in diarrhoea was not statistically different between the groups.

EVIDENCE ACTION, KENYA



Evidence Action implemented a nutrition component to its Dispensers for Safe Water (DSW) programme in Kenya. In DSW, volunteer promoters chlorinate community water dispensers and relay information to households on the dangers of contaminated water. For the nutrition component, the promoters received training and then provided targeted nutrition messaging to beneficiary households on topics like protein-rich food, preparing and cooking food and hygiene practices. The evaluation included two study groups (just mothers and mothers+fathers) and a comparison group. By evaluation end, it became clear there was crossover to the comparison group—46% of comparison households stated receiving nutrition messaging compared to 55% of study households. This contamination was controlled as much as possible in the data analysis. Accounting for the contamination, there was no significant changes on nutrition knowledge. However, the results demonstrated small positive changes in food consumption for protein-rich foods, vitamin A-rich foods and fruits, and a mild positive impact on stunting in the study groups.



WOMEN'S EMPOWERMENT

EMINENCE ASSOCIATES FOR SOCIAL DEVELOPMENT, BANGLADESH



Eminence implemented a workplace programme in Bangladeshi garment factories to ensure an enabling environment for working women to provide adequate IYCF. The intervention included advocacy and training with factory management and health providers in “mother-friendly” working conditions. The programme also trained mothers on IYCF, provided a lactation kit and breastfeeding handbook, placed IYCF posters throughout factories and set up private spaces for breastfeeding or breastmilk expression. The results showed study women had greater increases in knowledge for handwashing, breastfeeding and complementary feeding. At endline, the median duration for exclusive breastfeeding was 3 months for study mothers and 1.5 months for comparison mothers—compared to one month at baseline. As well, over half of study mothers were practicing breastmilk expression. As a result, underweight and wasting decreased in study infants, and they became sick less often than the comparison infants. Study mothers also experienced less absenteeism and dropout.

POPULATION COUNCIL, ZAMBIA



The Population Council's Adolescent Girls Empowerment Programme aimed to change the traditional trajectories of adolescent girls in Zambia by addressing early marriage and pregnancy, educational attainment, nutrition and risk of sexually transmitted infection. The programme included three components: weekly girls' group meetings led by trained mentors covering nutrition, IYCF and ECD topics; provision of a health voucher to access health services; and an adolescent friendly bank account. The evaluation had three study arms (girls' groups, girls' groups+voucher and girls' groups+voucher+savings account) and a comparison arm. The results indicated that nutritional knowledge among adolescent girls was incomplete across all arms on topics like dietary diversity, anaemia and exclusive breastfeeding. Both adolescents (22%) and their children (50%) had high rates of anaemia, and stunting was highly prevalent among children under five (42%). The study demonstrated that looking beyond female empowerment and nutrition in an intervention may be necessary for maximum impact.



PATH/Evelyn Hockstein



E-LEARNING

UNIVERSITY OF SOUTHAMPTON, UNITED KINGDOM

The University of Southampton developed an interactive Malnutrition eLearning course to build the capacity of the health sector workforce to accurately diagnose and treat severe acute malnutrition globally. Under NEEP, the course was implemented in targeted countries—Ghana, Guatemala, El Salvador and Colombia—over two years to determine its effectiveness. Overall, the results demonstrated that the course was effective in training individuals on the management of severe acute malnutrition. It increased performance by almost 40% immediately after taking the course, with a 16% increase in knowledge retention after six months. After six months, half of the participants also stated that they were still applying the knowledge acquired through the course—thereby improving the early diagnosis, correct assessment and treatment of severe acute malnutrition within the health facilities where they worked.