



The Enhancing Child Nutrition through Animal Source Food Management (ENAM) Project Dissemination Meeting

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ENAM Project

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The Enhancing Child Nutrition through Animal Source Food Management (ENAM) project was developed to address the barriers to the availability, accessibility, and utilization of animal source foods (ASF) in the diets of young children in rural Ghana. The project combined microcredit loans for mothers of children between two and five years of age with nutrition education and training in business development to enhance both economic status and knowledge about the nutritional needs of their children. A final stakeholders' meeting was held August 13-14, 2008 in Accra, Ghana with the following objectives: present project results; give voice to community participants and rural bank staff; launch nutrition and entrepreneurial education materials that were developed for rural communities; advocate for the promotion young child nutrition; and plan activities related to scaling up and sustainability of project activities. The final stakeholder activity in the workshop was to address the question of how the ENAM project's approach could be extended to a wider number of people. The need for short courses for community-based staff was reinforced. A final, important recommendation was to constitute a national-level committee to provide the impetus for scale up of the project through policy directives for adoption of the project's methodology and interventions by relevant development institutions including rural banks. This would also enhance sustainability.

Background

Throughout the five years of development and implementation of the ENAM project (Enhancing Child Nutrition through Animal Source Food Management), there has been a strong commitment to involve key stakeholders from government, non-government organizations (NGO), private sector, and communities. Initial project activities included a stakeholders' workshop in 2003 to identify the availability, accessibility, and utilization barriers and to develop a problem model that would guide an intervention to improve child nutrition. Throughout the project, different stakeholders have played key roles, including participating in training, designing curricula, and data analysis of project outcomes.

A final stakeholders' meeting was held August 13-14, 2008 in Accra, Ghana with the following objectives: 1) present project results for all partners to discuss and provide confirmation of their interpretation; 2) give voice to community participants and rural bank staff so that their experience could be understood by other partners; 3) launch nutrition and entrepreneurial education materials that were developed for rural communities; 4) advocate for the promotion young child nutrition among health and non-health government ministries; and 5) plan activities related to scaling up and sustainability of project activities.

Participating Stakeholders. Over 80 stakeholders, representing research and higher education institutions, governmental ministries, international bilateral assistance agencies, international, national and local non-governmental organizations (NGO), rural banking institutions and community members attended the meeting. The attendees included experts in nutrition, dietetics, food science, agriculture, agricultural extension, animal science, veterinary research, economics, consumer sciences and nursing, coming from diverse regions of Ghana and North America. Various universities were present, including the University of Ghana and Noguchi Memorial Institute of Medical Research, Iowa State University, Columbia University, and McGill University. The Ghanaian government was represented by staff from the Ministry of Food and Agriculture (MOFA, including Women in Agriculture and Development), Ghana Health Service (GHS; Nutrition Division, Health Promotion Division, Rural Health Training School in Kintampo), Ministry of Women and Children's Affairs (MOWAC; Department of Children). In addition, representatives from the United States Agency for International Development (USAID) and Global Livestock Collaborative Research and Support Program (GL-CRSP) attended the meeting. NGO were represented through staff from Heifer-Ghana, Plan-Ghana, World Vision, Catholic Relief



Participants at the ENAM project dissemination meeting in Accra, Ghana, August 13-14, 2008. Photo by Susan Johnson.

Services, Lighthouse Chapel International, Freedom from Hunger, Rural Women's Association, Christian Rural Aid Network, and Abrono Organic Farming Project. Officers from Fiagya, Akyempim and Naara Rural Banks as well as community participants from ENAM Credit and Savings Associations (CSA) were present to participate.

Presentations: Achievements of the ENAM Project

The workshop showcased the methodology and achievements of ENAM and provided the opportunity to dialogue with stakeholders on the lessons learned from the processes used. The presentations relayed details of the project's inception and outlined the implementation of the micro-credit with nutrition education interventions that led to improvements in household food security, maternal nutrition knowledge and children's ASF intakes. The presentations are summarized below:

ENAM project overview. A history of the project, beginning with the award of a planning grant by the Global Livestock Collaborative Research and Support Program (GL-CRSP) to the Iowa State University/University of Ghana research team was presented. During the planning grant phase, participatory processes were used to obtain stakeholder consensus in developing a problem model that specified the constraints to ASF in children's diets and intervention priorities to address these constraints. This problem model and associated interventions provided the basis for ENAM project objectives and priorities for interventions. The research component was discussed with a focus on the research questions and data collection processes. The primary research questions focused on assessing the effect of the project interventions on household food security, caregivers' child nutrition/feeding knowledge and children's ASF intakes and nutritional status. Quantitative data were collected at baseline and four quarterly time points. The case study methodology was used to collect qualitative data at one time point.

Implementation of the ENAM project micro-credit scheme and performance of participants. To address income needs of caregivers, an important component of the intervention was the microcredit scheme implemented in four phases: Phase 1 - Participatory processes were used to guide caregivers in the study communities to identify income generation activities (IGA) that were i) practical [access to inputs and markets], ii) quick turnover to yield profits, and iii) likely to have an impact on child nutrition. Financial and training support packages were developed for each IGA; Phase 2 - Training was given to enhance the skills and knowledge base of caregivers for selected IGA; Phase 3 - Based on the group lending concept which was identified as a 'best practice' for micro-loans in Ghana, Credit and Savings Associations (CSA) were formed and bylaws developed by the members. Each Credit and Savings Association was comprised of four to six self-selected solidarity groups of four to five women who appraised and guaranteed each other's individual loans; Phase 4 - Initiation of loan disbursement and subsequent weekly repayment, savings and education cycles. Each loan cycle was 16 weeks.

A total of 182 women completed up to four cycles with 100% repayment. The mean cumulative savings at end of the last cycle was equivalent to 23-53% of the cumulative loans received (the target was at least 20%). The mean attendance rate at the education sessions was 72%. The perception of improved business earnings was higher among the intervention as compared to the control caregivers.

Research methods and outcomes. During the ENAM Project Key Findings session, ENAM team members gave oral presentations on key findings from preliminary analysis of the data. The results stimulated discussion among participants. Students who received ENAM project funding for their field research presented their results as posters. The key findings are briefly described below.

Intervention effects on household food security and child nutritional status. In the ENAM study, household food security was measured using an adapted version of the USDA food security module. After controlling for other important factors, participant households were less likely to be food insecure after intervention. Generally, as compared to children from control households, children of participants grew better over the course of the study.

Intervention effects on caregivers' nutrition and health knowledge. Caregivers' knowledge about food sources rich in iron, calcium, and vitamin A and potential health problems associated with inadequate feeding of these foods was assessed. Frequency of children's ASF intake and ASF diversity were also measured. Child health and nutrition knowledge score at the end of the project was higher for participant than control caregivers.

Effect of intervention on dietary intakes of children two to five years. The intervention resulted in higher protein, calcium and zinc intakes among participant children. By the end of the project, the frequency and diversity of ASF fed to children was higher for participant than for control caregivers. The intervention group had a higher proportion of children consuming meat, organ meat, shell fish, poultry, egg, and milk at least once a week.

Caregivers' perceptions of successful ENAM participation: Case studies. The case studies provided insight into caregivers' perceptions of successful and less successful participation in project interventions and participants' real life experiences with respect to the projects' effect on their businesses, children, and food habits. Twelve 'successful' and six 'less successful' ENAM participants were purposefully selected. Success was tied to having a supportive family, previous business experience, business commitment and vision, higher loan amount and being healthy. Strategies that were enabling for women included: Strategy 1 - Choose a business based on previous experience; Strategy 2 - Expand and diversify the business; Strategy 3 - Anticipate the ups and downs of the market; Strategy 4 - Invest in one business to finance another.

Presentations: Mechanisms for Sustainability

The second day of presentations was focused on the role of ENAM partners to move to a sustainable intervention. Freedom from Hunger-Ghana presented their collaborations through their "Credit with Education" program to make micro-credit loans and nutrition education permanently available to rural communities. The work with community-based peer educators was presented as another mechanism to make the educational activities sustainable.

The role of the rural banks. From the initial stages, the ENAM project recognized that the continuance of the



Stakeholders from different sectors discuss the sustainability and scaling up of the ENAM project.

financial service delivery to the community was necessary. Collaboration with Freedom from Hunger - Ghana's "Credit with Education" program allowed for the building of local institutional capacity to implement health and business education with credit to its clients. The ENAM project and Freedom from Hunger-Ghana partnered with three rural banks to continue with the "Credit with Education" program in the project communities and extend the program to women in other communities. The initial assessment revealed a high potential for profitable microfinance for the banks using the "Credit with Education" methodology. Thus both the banks and clients benefit.

The role of the CSA participants as peer educators.

The training of caregiver peer educators in nutrition and entrepreneurial topics was presented as a key component of the project's sustainability package. Community-based nutrition and entrepreneurial education manuals developed by ENAM project staff will be used for training the peer educators.

Hearing the women's words. Finally, a panel discussion was held with one CSA representative from each of the six ENAM intervention communities. The women had the opportunity to share with the other stakeholders their involvement with the ENAM project and how it has affected their lives.

Practical Implications for the Future

The final stakeholder activity in the workshop was to address the question of how the ENAM project's approach could be extended to a wider number of people. The need for short courses for community-based staff was reinforced. A final, important recommendation was to constitute a national-level committee to provide the impetus for scaling-up the project through policy directives for adoption of the project's methodology and interventions by relevant development institutions including rural banks. This would also enhance sustainability for the longer-term.

Further Reading

Colecraft, E., G.S. Marquis, R. Aryeetey, O. Sakyi-Dawson, A. Lartey, B. Ahunu, E. Canacoo, L.M. Butler, M.B. Reddy, H. Jensen, and E. Huff-Lonergan. 2006. "Constraints on the use of animal source foods for young children in Ghana: A participatory rapid appraisal approach." *Ecology of Food and Nutrition* 45: 351-377.

The World Bank Participation Sourcebook. *Participatory Rural Appraisal, Collaborative Decision-Making: Community-Based Methods*. <http://www.worldbank.org/wbi/sourcebook/sba104.htm>

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The GL-CRSP Enhancing Child Nutrition through Animal Source Food Management (ENAM) project was established in 2003 and, through research, training and outreach, monitors the multiple pathways that might increase availability, accessibility and utilization of animal source foods in the targeted communities of Ghana. The project is led by Dr. Grace Marquis, Iowa State University and McGill University. Email contact: grace.marquis@mcgill.ca



The Global Livestock CRSP is comprised of multidisciplinary, collaborative projects focused on human nutrition, economic growth, environment and policy related to animal agriculture and linked by a global theme of risk in a changing environment. The program is active in East and West Africa, Central Asia and Latin America.

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