

LINKAGES/Ethiopia



Final Report 2003–2006



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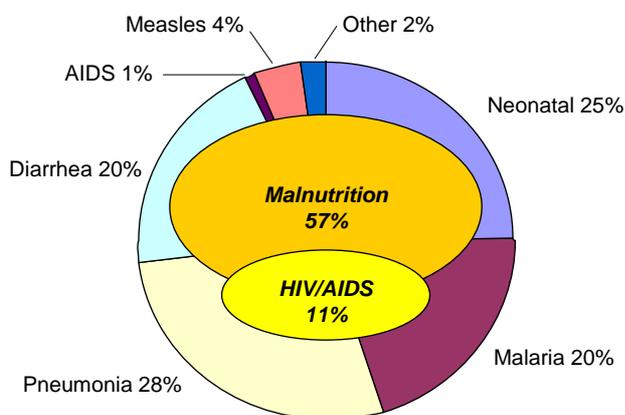
Abbreviations and Acronyms

AED	Academy for Educational Development
AFASS	Acceptable, Feasible, Affordable, Sustainable, Safe
AIDS	Acquired Immunodeficiency Disease Syndrome
BCC	Behavior Change Communication
BFHI	Baby-Friendly Hospital Initiative
CIDA	Canadian International Development Agency
CHP	Community Health Promoter
CRS	Catholic Relief Services
DHS	Demographic Health Survey
ENA	Essential Nutrition Actions
ESHE	Essential Services for Health in Ethiopia
FAO	Food and Agricultural Organization
HEW	Health Extension Worker
HIV	Human Immunodeficiency Virus
IYCF	Infant and Young Child Feeding
LAM	Lactational Amenorrhea Method
MOH	Ministry of Health
NGO	Nongovernmental Organization
PEPFAR	President's Emergency Plan for AIDS Relief
PLWHA	People Living with HIV and AIDS
PMTCT	Prevention of Mother-to-Child Transmission (of HIV)
SNNPR	Southern Nations, Nationalities, and Peoples Region
STI	Sexually Transmitted Infections
USAID	United States Agency for International Development
WFP	World Food Program
WHO	World Health Organization

I. Malnutrition in Ethiopia

Women and children in Ethiopia face enormous and complex nutrition problems. One-fourth of Ethiopian women are malnourished, and approximately one-half of children less than five years old are moderately or severely stunted (EDHS 2000). These levels of malnutrition contribute to the country's high under-five mortality (more than 472,000 deaths each year). With an estimated 174 deaths per 1,000 live births, Ethiopia has the sixth highest under-five mortality rate in the world. Analyses show that malnutrition, even in its milder forms, accounts directly or indirectly for 57 percent of under-five deaths in Ethiopia (*PROFILES 2001*, Figure 1).

Figure 1. Causes of under-5 deaths in Ethiopia



Because of a long history of food shortfalls and famine emergencies in Ethiopia, planners in government agencies and the donor community have often viewed malnutrition solely as a food issue. However, as shown in various studies, malnutrition in women and children in Ethiopia is a more complex phenomenon and stems from underlying determinants related to health, care, and household food security.

One of the major causes of malnutrition in Ethiopia is inappropriate child feeding practices. The 2005 Demographic Health Survey (DHS) reported that only 49 percent of infants less than 6 months old were exclusively breastfed. The 2004 Child Survival Strategy for Ethiopia estimates that breastfeeding could prevent 4 percent of child deaths. Poor complementary feeding practices also contribute to malnutrition. The DHS found that one-fourth of children between 9–11 months of age were not receiving complementary foods. Those who were fed complementary foods received too few meals, and these foods lacked critical micronutrients.

The Federal Ministry of Health's National Strategy for Infant and Young Child Feeding identifies several challenges, including:

- reaching illiterate mothers and caregivers with nutrition messages,
- updating health providers with full and accurate information, and
- creating an enabling environment for promotion of appropriate infant and young child feeding practices and improved women's nutrition.

Another challenge is maintaining optimal feeding practices of infants of HIV-positive mothers and ensuring the nutrition and care of HIV-positive individuals. Approximately 1.5 million people—96,000 under the age of five years—are living with HIV or AIDS. The HIV seropositive rate is estimated at 3.5 percent (10.5 percent in urban areas and 1.9 percent in rural areas) (*AIDS in Ethiopia # 5*, 2005).

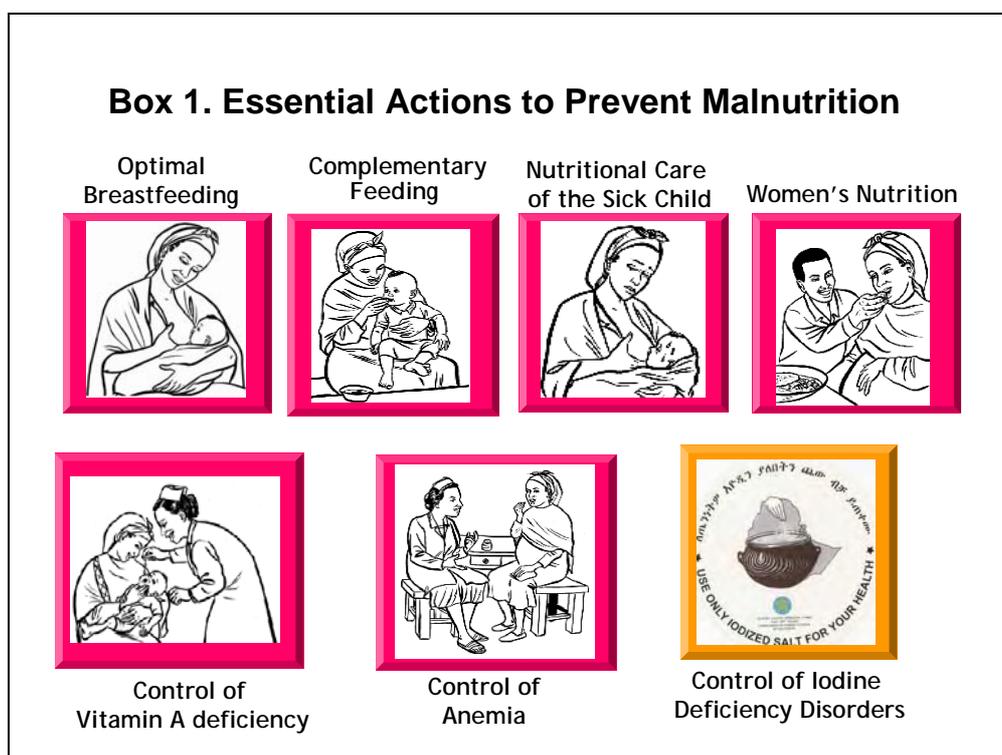
II. ENA Conceptual Framework

The Essential Nutrition Actions (ENA) approach provides a framework for improving nutrition by intervening at the most critical period, targeting vulnerable groups, prioritizing actions, and offering clear guidance on messages and points of delivery.

Timely intervention. The ENA approach focuses on the nutrition of women and children under two years of age. Many babies are born malnourished due to poor maternal nutrition before and during pregnancy. Maternal malnutrition increases the risk of stillbirths and newborn deaths, intrauterine growth restriction, low birthweight, preterm birth, and birth defects. Low birthweight babies are at increased risk of death in the neonatal period, and are more likely to become stunted and wasted children. Micronutrient deficiencies during pregnancy also have lasting effects on the child. Anemia during pregnancy affects infant iron status, increasing the risk of infection, delayed motor development, and intelligence loss. Infants who are vitamin A deficient are at greater risk of growth failure, eye problems, lower resistance to infections, and more frequent and severe episodes of diarrhea and measles.

Most growth faltering occurs during the first year of life. Much of the damage is irreversible. Therefore, any serious effort to address malnutrition and child mortality must focus on improving infant feeding behaviors in the early developmental period.

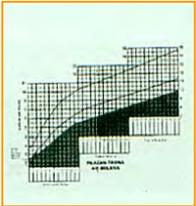
Priority actions. The ENA approach promotes an integrated package of seven proven clusters of nutrition behaviors with high public health impact: optimal breastfeeding (especially exclusive breastfeeding in the first six months), adequate complementary feeding with continued breastfeeding, nutritional care of the sick child, women's nutrition, and the control of anemia, vitamin A deficiency, and iodine deficiency disorders (Box 1).



Multiple contact points. The ENA approach uses multiple program opportunities to deliver appropriate messages and provide adequate nutrition support. Health providers can integrate ENA and counseling into the following six contact points of the lifecycle: 1) antenatal, 2) delivery and immediately postpartum, 3) postnatal and family planning, 4) immunization, 5) growth monitoring/well child, and 6) sick child visits. Box 2 lists the actions that should be promoted during these contact points. This action-oriented approach can also be applied outside the health sector in such settings as communities, schools, agricultural outreach, and emergency programs. The emphasis on preventive actions will strengthen the nutrition resiliency of the population to better cope during times of emergency.

Behavior change and advocacy. The ENA approach uses behavior change communication at all levels to promote and reinforce the recommended actions. Interpersonal communication, group education, advocacy events, community mobilization, and mass media are among the various communication channels used.

Box 2. Actions to Promote at Health Contact Points

	<p>PREGNANCY: tetanus toxoid, antenatal visits, <i>breastfeeding</i>, <i>iron/folic acid</i>, <i>de-worming</i>, <i>anti-malarial</i>, <i>diet</i>, risk signs, family planning, prevention of sexually transmitted infections (STI), safe delivery, <i>iodized salt</i></p>		<p>DELIVERY: safe delivery, <i>breastfeeding</i>, <i>vitamin A</i>, <i>iron/folic acid</i>, <i>diet</i>, family planning, STI prevention</p>
	<p>POSTNATAL AND FAMILY PLANNING: <i>diet</i>, <i>breastfeeding</i>, <i>iron/folic acid</i>, <i>diet</i>, family planning, STI prevention, child's vaccination</p>		<p>IMMUNIZATION: vaccinations, <i>vitamin A</i>, <i>breastfeeding</i>, <i>de-worming</i>, <i>assess and treat infant's anemia</i>, family planning, and STI referral</p>
	<p>WELL CHILD AND GROWTH MONITORING AND PROMOTION: <i>monitor growth</i>, <i>assess and counsel on infant feeding</i>, <i>promote iodized salt</i>, check and complete vaccination</p>		<p>SICK CHILD: <i>monitor growth</i>, <i>assess and treat per IMCI</i>, <i>counsel on breastfeeding and feeding during illness</i>, <i>assess and treat for anemia</i>, <i>check and complete vitamin A /immunization/ de-worming</i></p>

III. Program Design and Partnerships

The United States Agency for International Development (USAID) in Ethiopia invited the LINKAGES Project to support the government and its partners to address malnutrition, including in the context of HIV and AIDS. The challenge was to develop, in an efficient and rapid manner, a comprehensive, coordinated nutrition program based on multiple partners at all levels in both the public and private sectors.

The program aimed to ensure that nutrition actions were harmonized in relevant health and non-health programs, including activities related to HIV/AIDS, and to extend this type of nutrition support beyond the facility level to the community and family. The program was designed to reach a large number of families of children under two years of age with broad geographic coverage.

In March and June 2003, LINKAGES organized technical updates to introduce the government, donors, and implementing organizations to the Essential Nutrition Actions approach. In 2004 the Federal Ministry of Health (Fed-MOH) adopted this approach, and a multi-level, multi-partner program and implementation plan emerged with defined partner roles and responsibilities.

Achieving broad coverage required the engagement of many partners. The project's primary partners are shown in Box 3. LINKAGES' role included providing assistance to establish a network of partners to support nutrition, formulating appropriate policies and guidelines to deal with malnutrition in women and children, developing human resources in nutrition at all levels, and designing effective nutrition programs at the community level.

One of the first tasks was to achieve harmonization of policies, protocols, guidelines, messages, materials, and training curricula. LINKAGES engaged various partners in working groups, formative research, training, and policy discussions. In this way the partners became invested in the process and the outcome and part of a coordinated effort that increased effectiveness and coverage.

Box 3. Partners in Improving Infant and Young Child Nutrition

- Federal Ministry of Health, Family Health Department - Nutrition and Infectious Diseases, other government ministries (education and rural development)
- Regional Health Bureaus
- USAID through their bilateral Essential Services for Health in Ethiopia (ESHE) and other projects
- International donor agencies (UNICEF, The World Bank, WHO, WFP, FAO)
- International and local non-governmental organizations (NGOs) involved in child survival, reproductive health, community development, food security, safety net, therapeutic care, and prevention of mother-to-child transmission (PMTCT) of HIV programs
- Seven universities and technical and vocational training schools
- Ethiopian Health and Nutrition Research Institute
- Television and radio stations

No single intervention or group can succeed in meeting the challenges (of malnutrition); implementing the (national infant and young child feeding) strategy thus calls for increased political will, public investment, awareness among health workers, involvement of families, and collaboration among regions, international organizations and other concerned parties that will ultimately ensure that all necessary actions are taken.- National Strategy for Infant and Young Child Feeding, Federal Ministry of Health

Lessons Learned in Program Design and Partnerships

- Involvement of potential partners at the very outset in technical updates, formative research, and messages and materials development generated interest and ongoing support for the program.
- NGOs appreciated being included in policy dialogue and part of a broader, national effort to improve nutrition.
- The existence of a large bi-lateral project such as the ESHE Project and engagement of The World Bank, UNICEF, and large NGOs made it possible to help roll out the ENA approach quickly and achieve broad coverage.
- Applying the lessons from other programs facilitated more rapid start up and implementation. Lessons learned from LINKAGES' programs in other countries, particularly Madagascar, Ghana, and Zambia, guided program design and were adapted for Ethiopia.

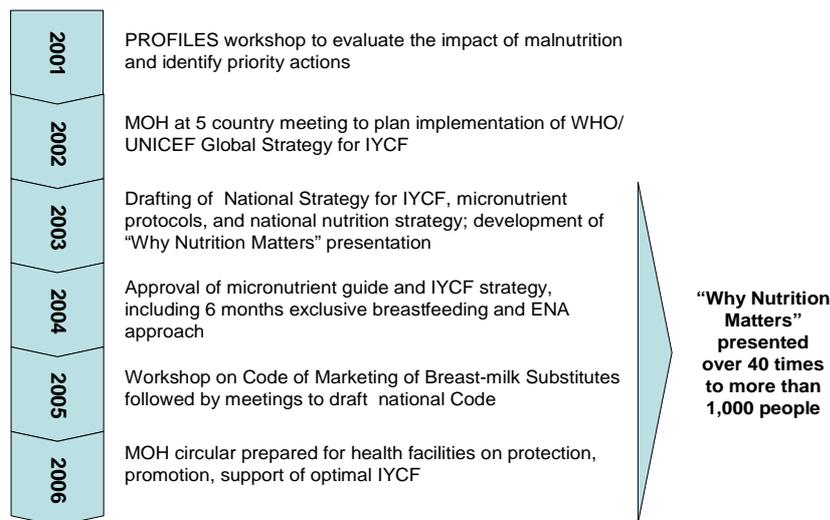
IV. LINKAGES Support to Child Survival

Promotion of appropriate infant and young child feeding (IYCF) is recognized by international health experts as an essential child survival intervention. Optimal nutrition boosts the immune system to protect against diarrhea, pneumonia, malaria, and measles and helps ensure good growth and development. LINKAGES supported efforts to integrate the Essential Nutrition Actions approach into child survival programs and other basic health service activities. These efforts included support for the creation of an enhanced policy environment for child health and nutrition, capacity building and training, community involvement, and behavior change communication.

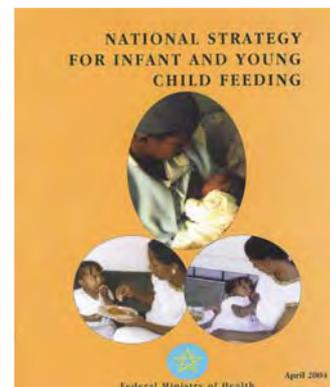
ADVOCACY AND DEVELOPMENT OF STRATEGIES AND GUIDELINES

The objective of LINKAGES' policy and advocacy work was to raise awareness of the importance of nutrition for child survival and economic development and to support the development and dissemination of national guidelines and harmonized messages. Figure 2 summarizes major IYCF policy activities in Ethiopia from 2001-2006.

Figure 2. IYCF Advocacy and Policy Initiatives in Ethiopia



- **Infant and young child feeding strategy and micronutrient protocols.** In 2003 the World Health Organization (WHO) and the Nutrition Department of the Fed-MOH began to develop micronutrient protocols and a national infant and young child feeding strategy. LINKAGES facilitated continuation of this work with the formation of a working group and a subsequent workshop that brought together the government, NGOs, and donors. In 2004 the Fed-MOH approved the "National Strategy for Infant and Young Child



Feeding.” The strategy includes aspects related to HIV/AIDS and emergency situations, endorses the ENA approach, and recommends 6 months of exclusive breastfeeding, representing a shift from the previous 4 to 6 month recommendation. The same year the ministry adopted the “National Guideline for Control and Prevention of Micronutrient Deficiencies.” The project helped disseminate the IYCF strategy and micronutrient guideline by incorporating them in pre-service nutrition training curricula, in-service training, health education materials, and strategic planning workshops. Four thousand copies of the IYCF national strategy were printed and distributed to all 11 regions of Ethiopia and to program partners. LINKAGES also provided technical support for the drafting of a national nutrition policy.

- **Working groups and advocacy events.** LINKAGES advocated for infant and young child feeding through participation in the Fed-MOH Nutrition Working Group and the Child Survival Partnership, comprising UNICEF, WHO, the World Bank, and the United States and the Canadian International Development Agencies (USAID and CIDA). Staff provided technical updates at donor, government, and NGO meetings and made presentations at advocacy events and training courses in all regions of the country. In a three-year period, the presentation “Why Nutrition Matters” was made over 40 times to more than 1,000 people.
- **Code of Marketing of Breastmilk Substitutes.** Through a collaborative effort between the Fed-MOH, UNICEF, and LINKAGES, a draft Code of Marketing of Breastmilk Substitutes was formulated in 2005 and is now under review. Aspects of the Code were incorporated in a circular prepared by the Fed-MOH for public and private health facilities.

Lessons Learned in Advocacy and Policy Work

- Policy dialogue requires a shared understanding of the problem and the solution.
- Creation of formal and informal networks provides a forum for sharing information, involving others in the process, and energizing advocates.
- Policy development is complicated by continual staff changes among partners, including donors, which lengthens the process.
- Incorporation of nutrition guidelines in health sector development and other relevant documents will help ensure broader application.
- Formal approval of a policy is only one step in the process to be followed by resource commitment and garnering support among those responsible for implementation.

CAPACITY BUILDING THROUGH TRAINING

Implementation of the Essential Nutrition Actions approach required building the capacity of many groups. Those trained included professors, physicians, nurses, regional health bureau staff, *woreda* health teams, health extension workers, front-line community volunteers, radio station directors and producers, and program managers and staff of organizations involved in child survival, reproductive health, food security, Title II, and inpatient and outpatient therapeutic care. Some received training in all aspects of ENA; others were trained primarily in breastfeeding.

Over a 3½ year period, more than 35,000 people received training in breastfeeding through LINKAGES and its partners.

The Federal Ministry of Health and LINKAGES collaborated in the development of the following six training courses:

1. **ENA Technical Course** gives state-of-the art technical updates on the importance of nutrition, the nutrition situation in Ethiopia, IYCF, micronutrients, women's nutrition, behavior change communication, and monitoring and evaluation
2. **ENA Counselors' Course** builds counseling and negotiations skills through classroom and field practice
3. **ENA Course for Community Promoters** provides the knowledge and skills to counsel and negotiate small "doable" actions to improve ENA including infant and young child feeding practices and newborn care
4. **Baby-Friendly Hospital Initiative (BFHI)** includes self-assessment tools adapted for Ethiopia and facility-based learning sessions
5. **Lactation Management Course** strengthens breastfeeding knowledge and skills to counsel mothers
6. **Lactational Amenorrhea Method** strengthens knowledge and practices on LAM as a modern family planning method

All MOH federal and regional nutrition staff received training in ENA. With support from WHO, UNICEF, and the USAID-funded Essential Services for Health in Ethiopia (ESHE) bilateral project, key government staff stationed in 11 regions attended similar trainings. Other government agencies represented in the training courses included the Ministry of Agriculture and the Ethiopian Health and Nutrition Research Institute. Staff from UNICEF, the World Food Program, the World Bank, USAID-funded projects, and more than 16 national and international NGOs participated in one or more of the trainings.

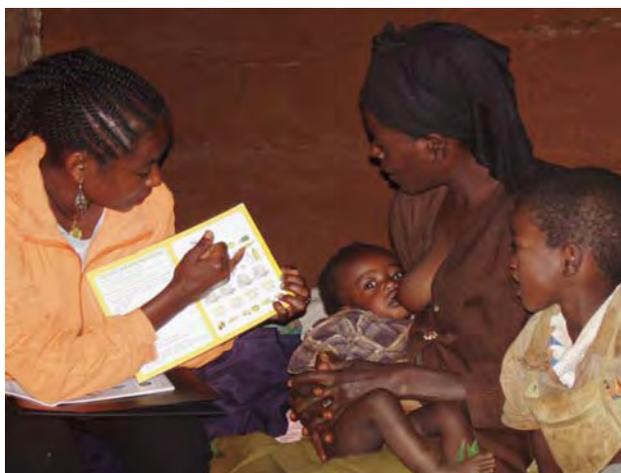
LINKAGES conducted 149 trainings between July 2003 and October 2006. These trainings lasted from three to six days, with an average of 21 participants. During each of the trainings, participants received handouts in English, Amharic, and sometimes in Oromiffa that summarized the key points of the course. Table 1 identifies the audience, the length of each training course, and the number trained.

Table 1. Summary of Training Provided through LINKAGES, July 2003 – October 2006

TITLE	AUDIENCE	LENGTH	NUMBER TRAINED
ENA Technical Course (English)	Instructors, health managers, program staff	4 days	467
ENA Counselor's Course (English, Amharic)	Instructors, NGO staff, health professionals	6 days	835
ENA Course for Community Promoters Modules I and II (English, Amharic, Oromiffa, Tigrigna)	Community health and nutrition promoters, many of whom are illiterate	2 3-day modules	2382
Baby-Friendly Hospital Initiative (English, Amharic)	Hospital staff	3 days	22
Lactation Management (English, Amharic)	Instructors, NGO staff, health workers	3 days	207
Lactational Amenorrhea Method (English)	Instructors, NGO staff, health workers, community-based reproductive health agents	3 days	179

The training courses were designed with the following features:

- *State-of-the-art* – continuously updated with the most recent technical information
- *Practical* – focused on building skills in counseling, negotiation, and the use of counseling cards and other job aids
- *Participatory* – involved participants in role plays, brainstorming exercises, demonstrations, and practice in the classroom and community using new skills (shown above)
- *Action oriented* – included development of action plans
- *Tailored* – responsive to literacy limitations of community promoters, time limitations of hospital staff, and specific needs of an organization
- *Modified* – adapted for HIV and emergency contexts
- *Evaluated* – included pre- and post-tests and performance monitoring



One of the innovative features of the training was cost sharing. LINKAGES frequently provided facilitators for the training, and the partners covered other expenses. Many partners followed up training-of-trainers by incorporating aspects of

ENA in their own trainings. The ESHE Project adapted the breastfeeding module to train more than 28,000 community health promoters. ESHE also trained nearly 1,500 health workers in breastfeeding and complementary feeding, and Save the Children/US trained 5,000 people with their own facilitators.

In some cases LINKAGES' trainers served as co-facilitators when an organization such as Catholic Relief Services (CRS) rolled out its ENA training. Hazel Simpson, Health Program Manager for CRS, said "*LINKAGES' ongoing, on-the-ground support built up the confidence of our staff and made a huge contribution to the success of our training. The counseling and communication skills that were learned can also be applied to many areas of our work.*" Box 4 gives an example of how one organization incorporated the initial ENA training into its program activities.

Box 4. Integration of LAM Training in Reproductive Health Programs

The lactational amenorrhea method improves breastfeeding practices, protects child health, and offers a safe and effective method of family planning. Pathfinder International – Ethiopia saw the inclusion of LAM in its services as one way of expanding family planning options and offering alternatives to hormonal, surgical, and barrier methods. LINKAGES joined with Pathfinder to launch the integration of LAM into community-based reproductive health activities. This involved:

- Two training of trainers for Pathfinder's implementing partner organizations and five training workshops on LAM for community-based reproductive health agents in six *woredas*
- Training of Pathfinder staff in ENA and BCC with a focus on exclusive breastfeeding, early initiation of breastfeeding, and nutrition for pregnant and lactating women
- Adaptation for Ethiopia of the generic LAM module developed by LINKAGES' Washington office and translation, by Pathfinder, of the adapted module into Amharic

Follow up was carried out to determine the extent to which the ESHE Project and MOH staff had integrated ENA technical and behavior change communication training into cascade training and to assess the knowledge of trained staff. A similar exercise was conducted for six NGOs that had participated in the ENA Counselors' Course. The follow up pointed out the importance of in-house training, commitment by those trained to brief other staff, and sharing of training materials. Staff members who conducted trainings retained knowledge more than those who only attended the trainings. The follow up also showed the importance of in-house training of new staff due to high staff turnover. Out of 12 NGOs that had participated in an ENA training for trainers on BCC skills, four no longer had ENA trained staff in the organization. In another organization, only two of the six ENA trained staff remained.

Lessons Learned in In-service Capacity Building

- A good way of reinforcing and updating staff knowledge is to involve them in training facilitation.
- Both individualized and group trainings for NGOs are valuable. Individualized trainings appear to increase an NGO's motivation to conduct cascade trainings and implement nutrition activities. Collective training with other NGOs allows for exchange of ideas and builds relationships among partners.

INTEGRATION OF ENA IN PRE-SERVICE EDUCATION AND BFHI

Capacity building included pre-service as well as in-service training. In collaboration with the Carter Center's Ethiopia Public Health Training Initiative, LINKAGES worked with seven universities (Addis Ababa, Alemaya, Debu, Defense, Gondar, Jimma, and Mekelle) to upgrade their training. To harmonize pre-service education with the in-service mandate, teachers and instructors from these schools were trained using the same ENA courses and materials as in-service personnel. In addition to the ENA trainings, they participated in a course on the application of adult learning principles and methodologies in classroom instruction. They also attended workshops on such topics as the integration of ENA in basic, advanced, and professional courses; development of ENA lesson plans; and using tools for monitoring the quality of teaching and measuring outcomes. Faculty from para-medical schools for nurses and midwives and technical and vocational schools participated in selected ENA training activities. Box 5 describes the efforts of one university to incorporate ENA.

In some cases the training was held jointly for several universities; other times it was held at a university for the staff of that training institution. Each university and its practicum sites received multiple sets of training manuals, course handouts and transparencies, ENA lesson plans, the IYCF strategy document and micronutrient guide, job aids, posters, demonstration dolls and breasts, technical documents, and counseling and other resource materials (between 20–60 copies depending on the item).

A baseline assessment was conducted in the seven universities in April/May 2005 and a follow-up assessment in July/August 2006 to determine the status of ENA integration. This involved a review of the implementation of action plans, the quality of teaching, and student and instructor ENA knowledge and skills. By the time of the 2006 assessment, Mekelle was the only

Box 5. Training Tomorrow's Health Providers in ENA

Debu University is one of seven universities participating in a program to integrate the Essential Nutrition Actions approach.



Dr. Zelalem, Dean of the College of Health Sciences at Debu, observed that *“the ENA approach has helped shift instruction from broad topics to focused attention on areas of greatest public health significance. The most important part of the initiative is the integration of the Essential Nutrition Actions in the curricula.”*

Several changes have already taken place at Debu. ENA is included in medical, public health officer, and nursing training. As part of the exams, students are evaluated on their knowledge of ENA. A four-person team made up of staff from various disciplines—public health, obstetrics and gynecology, pediatrics, and nursing—is in place to update staff, orient newcomers, develop outlines for lesson plans, and train on ENA.

Even changes have been made in the way information is presented in the classroom, including the use of teaching aids such as dolls to demonstrate proper positioning when breastfeeding and demonstrations of how to negotiate changes in feeding practices when counseling mothers. *“However, with 80 students in a class, shifting from lecture to more student participation is challenging,”* Dr. Zelalem observed.

university that had formally integrated ENA in its teaching program. However, instructors trained in ENA from the other universities included ENA in nutrition and other relevant courses that they taught. The assessment found that few learning materials such as job aids and counseling cards were available for students, especially at clinical practicum sites. Other findings included no clear link between theoretical and practical sessions, large class size, and high staff turnover.

Involvement with the universities in pre-service activities to improve their practicum sites led to efforts to implement the WHO/UNICEF Baby-Friendly Hospital Initiative (BFHI) in hospitals affiliated with the seven universities plus two hospitals in Addis (Zewditu and St. Paul). The aim of BFHI is to ensure that hospital routines and procedures remain fully supportive of successful initiation and establishment of breastfeeding. The Ten Steps to Successful Breastfeeding form the centerpiece of the Baby-Friendly Hospital Initiative, and their implementation is a requirement for official certification as a baby-friendly hospital. Box 6 lists the activities undertaken to create this supportive environment in health facilities.

Box 6. Creating Baby-Friendly Hospitals

The Fed-MOH and LINKAGES collaborated in the following BFHI activities:

- Organized a workshop on BFHI and the Code of Marketing of Breastmilk Substitutes with UNICEF
- Adapted the new WHO/UNICEF BFHI module for Ethiopia and used it to train 157 staff from seven hospitals
- Field tested and adapted the BFHI self-assessment tool and used it during training to collect baseline data
- Adapted 20 learning sessions on BFHI for Ethiopia that were originally developed in Madagascar for instruction and discussion as part of hospital staff updates
- Produced and distributed a poster listing the Ten Steps to Successful Breastfeeding integrated into the ENA approach

The hospital self-assessment in February/March 2006 revealed that no hospital met all Ten Steps. A plan of action was developed at that time to move the hospitals toward achieving baby-friendly status. At baseline none of the hospitals had a breastfeeding policy, but five months later two hospitals (Defense and Black Lion) had adopted a breastfeeding policy. Defense Hospital was the only hospital that had trained staff using the BFHI learning sessions. The MOH's workplan for next year includes expansion of BFHI to other hospitals and a formal external assessment.



Lessons Learned in ENA Integration in Pre-Service Education

- Investment in pre-service education is a long-term commitment because of staff turnover, university politics, and ongoing demand for resources and materials.
- Despite the lengthy process, integration of ENA into pre-service curricula is critical to ensure that future health providers are equipped with the information and skills needed to support optimal infant and young child feeding and improved maternal nutrition.
- Implementation of the action plans requires regular meetings of ENA teams in each university and full engagement of university authorities in the ENA integration process. Otherwise, the initiative remains lodged in individual instructors and not the institution.
- The private sector is an important contributor of health services and deserves more attention in efforts to integrate ENA in pre-service education.
- Working with the universities in pre-service integration offers a good entry point for BFHI.

COMMUNITY APPROACH

LINKAGES collaborated with the USAID bilateral ESHE Project and the Regional Health Bureaus to involve communities and households as partners in promoting healthy behaviors. LINKAGES also provided training and tools to NGOs for their community outreach activities.

The goal of the national Health Services Extension Program is to increase the access of communities to preventive services through the deployment of two health extension workers (HEWs) for every *kebele* in Ethiopia. The plan is to train and deploy 30,000 HEWs nationwide by 2009. Each worker is responsible for around 500 households.

To support the work of health extension workers, the ESHE Project is training community health promoters (CHPs) in three regions: Amhara, Oromia, and Southern Nations, Nationalities, and Peoples (SNNPR). At monthly meetings organized by HEWs, the promoters discuss the progress they have made and the challenges they face. Together they try to find solutions to the challenges posed in the community (Box 7).

The promoters are volunteers, selected by the community, who attend short trainings on key health themes. With one community health promoter to 30–50 households, the CHPs expand the promotion and organizational work of health extension workers. HEWs are all women, but the community health promoters are both men and women. In one area, many priests function as health promoters.

The Academy for Educational Development (AED), which manages the LINKAGES Project, provides technical assistance for the community nutrition and behavior change components of the ESHE Project. LINKAGES collaborated with ESHE in coordinating training of trainers and developing behavior change communication tools. The training emphasized action-based messages and negotiation with caregivers. To date, the ESHE Project has trained nearly 28,000 community health promoters. In the next two years, approximately 20,000 more CHPs will be trained.

Box 7. Reaching Mothers with Life-saving Messages

Tefanesh Fantahun, a 27-year-old health extension worker from Kabele



Wezele, SNNPR left her studies in animal science to become a health extension worker.

“As an educated person, I feel a responsibility to help others. I want to see improvements in health in my community and the neighboring villages.” Tefanesh received 10 months’ training in 16 health topics. Now she immunizes children, conducts home visits, and mobilizes the community to improve sanitation and protect against major illnesses. Her biggest challenge is reaching the 500 households she is assigned. *“The roads are bad so I can’t use a bicycle. I have to travel by foot. To reach some communities I must cross rivers and climb steep hills.”*

Tefanesh supervises 16 volunteer health promoters and meets with each once a week. The promoters report to her on pregnancies, births, and sick children. Once a month she meets with all of the volunteers at the health post. This is a time to provide updates on infant and young child feeding. In a country where approximately 470 children under the age of 5 die from malnutrition every day, messages that Tefanesh and her team of volunteers share with mothers on early initiation of breastfeeding, feeding colostrum, and exclusive breastfeeding can be life saving.

The community health promoters are encouraged to take action in their own home and then promote messages among their friends and neighbors. Elfenesh, a community health promoter from Wochika Village, SNNPR said, *“I try to take the new knowledge I receive during training and make changes in my own life. My own personal example is the best message I can give.”* Volunteers are asked to promote health messages during everyday activities such as the coffee ceremony, visits to neighbors, religious ceremonies, meetings of traditional money lending groups, and while fetching water and purchasing food at the market. They also help organize the community for outreach services. Box 8 describes how one health promoter helped improve breastfeeding practices in her community.

Box 8. Seeing Is Believing



Remembering the advice she received during pregnancy from a community health promoter, Bedria Umere initiated breastfeeding soon after birth in her home in West Harerge zone in Oromia. The traditional birth attendant present at the delivery wanted Bedria to wait until the placenta was expelled. In two previous pregnancies, Bedria experienced delayed expulsion, which resulted in massage and manual manipulation for more than a day. This time early initiation of breastfeeding stimulated expulsion, to Bedria’s relief and the TBA’s surprise and praise. Bedria benefited as well as her daughter Nesima. The newborn received colostrum, which community health promoter Demere Tilahun called “God’s gift” or the “first immunization.” Often babies are given “hoja,” a local milk drink or fermented yeast water, instead of colostrum until the placenta is expelled.

Lessons Learned in Community Approach

- Dynamic volunteers are always present in communities and can be mobilized for promotion of behaviors that benefit them and their families.
- Messages on breastfeeding serve as an entry point for promoting other messages. Breastfeeding messages empower families to take immediate action to improve their children’s lives and do not depend on logistics, delivery systems, or supplies for their adoption.
- Starting out by promoting behaviors that are one time and fairly easy to change helps gain the confidence of the community and its receptiveness to other recommended practices. For example, when people saw the impact of immediate initiation of breastfeeding on the expulsion of the placenta, they valued the community health promoter’s advice, and the promoter became more credible in their eyes.

ENA IMPLEMENTATION USING BEHAVIOR CHANGE COMMUNICATION

LINKAGES applied a behavior change communication strategy to reach various audiences. At the beginning of the project, LINKAGES trained staff of five NGOs (CARE, CRS, Pathfinder, Save the Children-US, CONCERN) and engaged two research centers in SNNPR in formative research. The study was undertaken in nine communities in three regions among agriculturalists, pastoralists, and urban residents. Focus group discussions and key informant interviews identified beliefs and practices, obstacles to better IYCF and maternal dietary practices, and potential channels for delivering key messages. Another workshop was held with the formative research partners to analyze the research findings. The partners used the findings, along with WHO's *Guiding Principles for Complementary Feeding of the Breastfed Child*, to design and pre-test messages and materials and develop the BCC strategy (Box 9).



Box 9. Pre-testing Counseling Materials

As part of a messages and materials development workshop, participants reviewed the findings of the formative research and discussed the underlying reasons for malnutrition. They decided that men should be a priority audience and developed messages and a poster on fathers as good family providers. Based on

feedback they received during pre-tests, workshop participants refined the messages and images, which served as prototypes for materials developed by some NGOs.

The objective of the BCC strategy was to harmonize messages among partners and saturate project areas with these messages using multiple channels of communication. These channels included interpersonal communication (health provider with mother, community worker with mother, and mother with mother), group discussions, informal contacts, community events, and mass media. The messages and materials focused on small, do-able actions that lead to improved health and nutrition for infants, young children, and their families. As the project progressed, partners expressed the need for additional visuals to make the messages come alive and for materials to aid health care providers and community health workers in their communications with mothers and other family members.

Print Materials

Over the course of three years, various types of print materials were developed to support and reinforce messages. A short description of each product is provided along with the numbers produced by LINKAGES and the languages of each product, shown in parentheses.

- **6 IYCF counseling cards** encourage men as “wise fathers” to promote better infant, child, and women’s nutrition. Illustrated laminated cards and a CD-Rom of the materials were shared with more than 40 partners. CARE, Save the Children UK/US, and CRS adapted the materials for their programs and, along with the Ethiopian Nutrition and Health Research Institute, produced a poster with the images and key messages. (1,000 - Amharic, English)

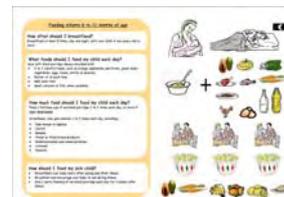


- **Booklet on key ENA messages** helps ensure that all partners provide the same messages. (200 - English, Amharic, Oromiffa)

- **Family health card** helps parents follow the actions they need for the health and nutrition of their children. The same booklet but larger is used by the health provider in negotiating appropriate practices with parents. The booklet, with detailed pictures and child survival and ENA messages, was developed by The Health Communication Partnership in collaboration with the ESHE Project and LINKAGES. UNICEF, several NGOs, and the World Bank use the family health card in their programs. LINKAGES enlarged and laminated many of the drawings in the booklet for use in community programs. (Amharic, Tigrigna, Oromiffa)



- **Complementary feeding counseling tool** summarizes current recommendations for appropriate complementary feeding of older infants and young children for use by illiterate community health promoters. (4,500 - Amharic, Tigrigna, Oromiffa)



- **6 job aids** for health professionals and health extension workers summarize what to do at each health contact point and include ENA, child survival, and reproductive health messages. (1,100 sets - Amharic)

- **Complementary feeding recipe book** features recipes using indigenous, locally available foods for three major staple diets. (500 - English, Amharic)

- **BFHI poster** lists the 10 Steps to Successful Breast-feeding for display in health facilities. (300 - Amharic)



Audio Visuals

In addition to print materials, the project used audio visuals to promote and reinforce ENA messages and complement training activities.

- **Video** (“The Mother’s Gift”) demonstrates positioning and attachment for optimal breastfeeding and can be shown at health facilities. (600 - English, Amharic, Oromiffa)

- **Cassettes/CDs** with 10 audio spots on breastfeeding, 14 on complementary feeding, and 10 on women’s nutrition were produced and distributed to partners for regional and local radio, community programs, and listening clubs. Breastfeeding stories were also included. (1,425 - Amharic, Oromiffa)
- **Television** incorporated messages on breastfeeding, complementary feeding, and women’s nutrition during regularly scheduled 20-minute health programs.

LINKAGES collaborated with ESHE in organizing three radio workshops, each on an aspect of ENA—breastfeeding, complementary feeding, and women’s nutrition (Box 10). Participants represented educational media, radio station directors and producers, Ethiopia television, NGOs, and regional health bureau staff. The workshops guided media producers on ways to promote healthy behaviors and make their health programs more interesting. They also built the capacity of partners to work with the media and use this communication channel. In addition to the radio workshops, LINKAGES conducted IYCF workshops in three regions for radio, newspaper, magazine, and television journalists to familiarize them with the issues.

Box 10. Developing Radio Spots

During three radio workshops, participants created, produced, pretested, and recorded radio spots, stories, and short dramas in a local radio station or on site with rented professional recording equipment. The spots were later refined and produced in a professional studio, put on cassettes or CDs, and distributed to partners to place on local radio stations or use in their programs and listening clubs. The ESHE Project distributed the spots and stories to 10 government educational radio stations that provided free broadcast time. Radio Voice of the South, a commercial station, also provided free air time.

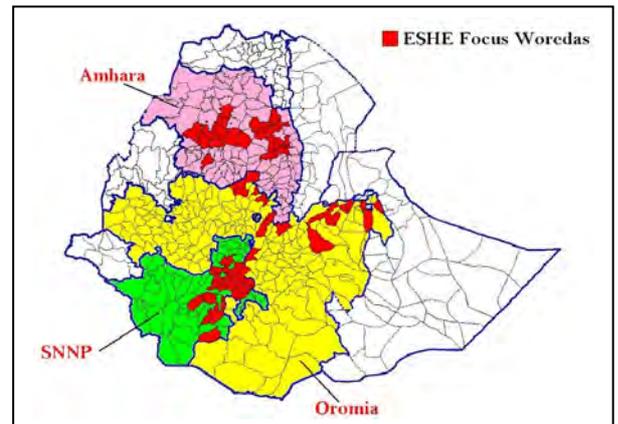


Lessons Learned in Development and Use of BCC Materials

- Formative research helps pinpoint problem areas and identify opportunities to improve practices.
- At the beginning of a project, it is a good investment of time to harmonize messages at all levels in the health system, among partners, in print materials, and in the media to ensure consistent health information.
- The illustrated family health card and complementary feeding tool make it easy for health workers and promoters to draw the interest of mothers—particularly those who are non-literate—and discuss optimal infant and young child feeding practices.
- Providing the right messages at the right time makes the message immediate and relevant. For example, focusing messages during pregnancy on early initiation of breastfeeding and feeding of colostrum encourages women to adopt the new optimal behaviors when they give birth.
- Radio can reinforce the messages of community health promoters and health extension workers. Placing radio spots on national radio would result in higher coverage than restricting spots to programs on regional stations that primarily broadcast educational programs for school children.

MONITORING AND EVALUATION

In May/June 2006 LINKAGES and the ESHE Project collaborated in a community assessment of behavior change. The assessment targeted 2,200 households in each region (Amhara, Oromia, and Southern Nations, Nationalities and Peoples) among communities where community health promoters had been active for at least six months. The results from five indicators are reported and compared with results from the baseline surveys conducted in each region prior to implementation of any interventions. The baseline surveys were conducted in June 2003 in SNNPR, May 2004 in Oromia, and December 2004 in Amhara.

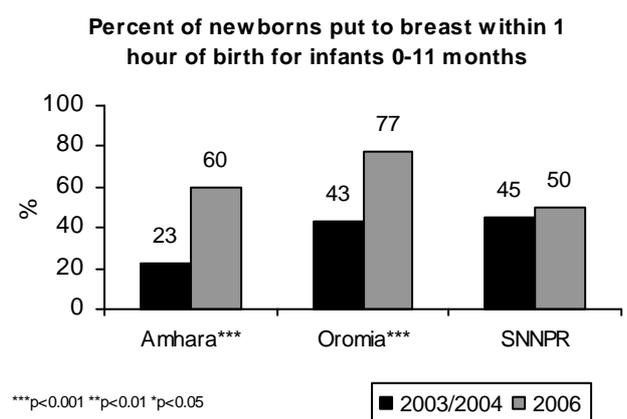


1. Breastfeeding of children

Early initiation of breastfeeding offers warmth, promotes bonding, and also helps the mother by reducing the risk of postpartum haemorrhage. Most newborns are ready to find the nipple and latch onto the breast within the first hour of birth, if provided with immediate skin-to-skin contact. Skin-to-skin contact during the first hour stabilizes the baby's temperature, respiratory rate, and blood sugar level. Because colostrum (the first milk) contains high levels of antibodies, vitamin A, and other protective factors, it is often called the "first immunization." Formative research indicates that Ethiopian women often discard colostrum and introduce foods such as butter, sugar water, and herbal concoctions. During the first six months, babies need only breastmilk which provides total food security.

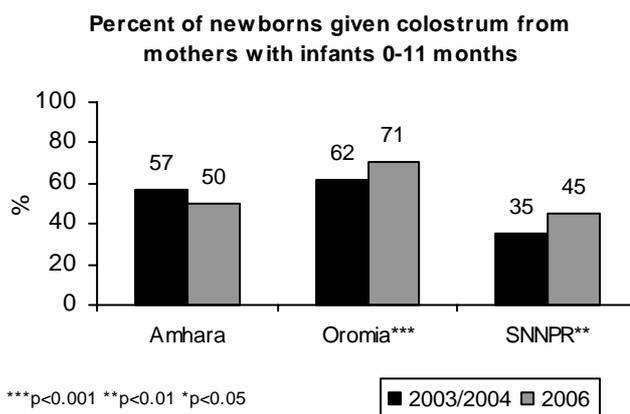
1.1. Initiation of breastfeeding within one hour of birth increased significantly in project sites in Amhara and Oromia but showed no statistically significant change in SNNPR.

At baseline from 23–45 percent of women initiated breastfeeding within the first hour. By the time of the community assessment, one-half to three-quarters started breastfeeding within one hour of birth. LINKAGES collected information on timely initiation of breastfeeding among mothers with infants under 12 months of age while the 2005 Ethiopia Demographic Health Survey (DHS) collected it among mothers with children under five years of age. The national DHS figure for initiation of breastfeeding within the first hour of birth was 69 percent.



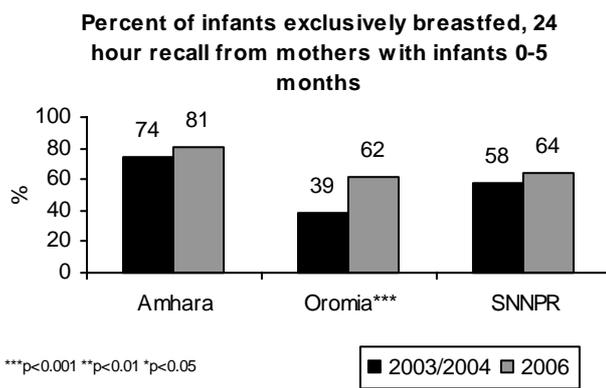
1.2 Feeding of colostrum showed marked improvement in Oromia and SNNPR but no statistically significant change in Amhara.

Feeding of colostrum was very low (35 percent) at baseline in SNNPR. The ESHE 2006 assessment reported 9–10 percentage point gains in two regions (Oromia and SNNPR), which indicates that more women now recognize the value of colostrum. The 2005 DHS reported that only 45 percent of newborns received colostrum, which is the same as the SNNPR 2006 community assessment rate, somewhat lower than the Amhara rate (50 percent), and considerably lower than the Oromia rate (71 percent). As with timely initiation of breastfeeding, LINKAGES collected information on feeding of colostrum among mothers with infants less than 12 months of age while the DHS collected this information among mothers with children less than 5 years of age.



1.3 Exclusive breastfeeding for the first six months showed large increases in Oromia but no statistically significant change in Amhara and SNNPR.

Exclusive breastfeeding increased 23 percentage points in Oromia. Both at baseline and at the 2006 assessment, Amhara showed the highest rates of exclusive breastfeeding (74–81 percent). Oromia and SNNPR reached similar rates in 2006 (62 percent and 64 percent respectively) although Oromia started at a much lower level. For all three regions, the exclusive breastfeeding rate in 2006 was considerably higher than the national DHS rate (49 percent).

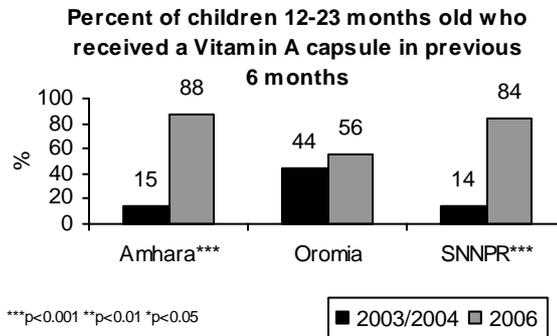


2. Control of Vitamin A Deficiency

Breastmilk is rich in vitamin A. During the first six months, mothers need to breastfeed exclusively to increase their babies’ vitamin A stores. Postpartum vitamin A supplementation of lactating women within 45 days of delivery will raise breastmilk vitamin A content. Starting at six months, vitamin A must come from breastmilk, vitamin A rich foods, and supplements. In vitamin A deficient areas such as Ethiopia, semi-annual high-dose vitamin A supplements starting at six months are recommended for children.

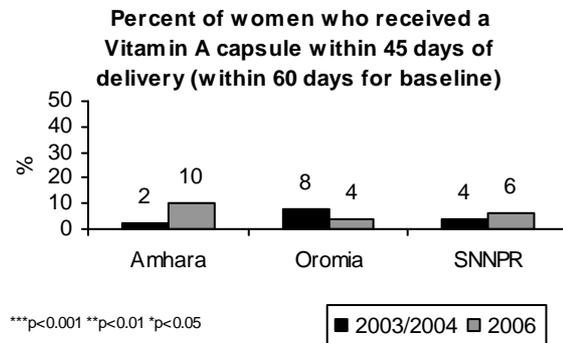
2.1 Amhara and SNNPR showed dramatic improvements in vitamin A supplementation of children 12-23 months; the change was more moderate in Oromia.

Findings of the community assessment demonstrate the effectiveness of the Enhanced Outreach Strategy of the Regional Health Bureaus and UNICEF to distribute vitamin A supplements as well as the mobilization efforts of community health promoters. Both efforts were initiated after the ESHE baseline. Promoters encourage mothers to take their child for vitamin A supplementation every six months, starting when the child is six months old. At baseline vitamin A supplementation of children 12–23 months in Amhara and SNNPR was very low (14-15 percent) but increased dramatically – by 70 percentage points or more. Although Oromia started at a much higher level (44 percent) than the other two regions and increased vitamin A supplementation by 12 percentage points, the rate in 2006 (56 percent) was lower than in Amhara and SNNPR. The national rate for vitamin A supplementation of children 6–59 months in the past 6 months was 46 percent.



2.2 Despite promotion efforts, postpartum vitamin A supplementation of women remains critically low.

The low level of postpartum vitamin A supplementation can be attributed to two factors. First, postpartum vitamin A supplementation is not part of the Enhanced Outreach Strategy. Second, most women deliver at home and do not have access to vitamin A. It is customary in many areas for women to be confined to the home for several weeks after delivery. The 2005 DHS reported a higher national rate of postpartum vitamin A supplementation (21 percent) than in any of the three regions surveyed as part of the 2006 community assessment.



Up until the 2006 assessment, the primary focus of ESHE’s nutrition activities in the community was promotion of optimal breastfeeding practices in the first six months and vitamin A supplementation. During the next two years, more attention will be given to complementary feeding, iron supplementation, and other essential nutrition actions. Current information indicates that in all three regions, introduction of complementary foods is too late with only 40–60 percent of children receiving complementary foods in addition to breastmilk by 10 months of age. Dietary diversity is very low with the majority of children eating from two or less food groups a day.

Information was collected on continued breastfeeding from 6 to 24 months, age-appropriate frequency of feeding, and dietary diversity among children 6 to less than 24 months old. These three child feeding practices are combined to create a new proposed infant and young child feeding indicator. Ethiopia was one of the first countries to use this indicator in a field setting. ESHE's endline survey in 2008 will assess progress made in improving feeding practices among children 6–24 months and will compare the IYCF indicator from the two surveys.

Lessons Learned in Monitoring and Evaluation

- Results from the 2006 community assessment are encouraging given the short time for program implementation. More sizable increases in optimal practices are expected as health extension workers and community health promoters receive additional training and gain experience.
- Changes in infant feeding practices are one measurement of program progress, but activities such as training outcomes, pre-service curricula development, etc. are also important to monitor because they too measure the program's achievements.

V. ENA in the Context of HIV

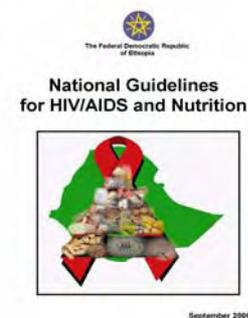
The Essential Nutrition Actions approach is relevant in the context of HIV as well as in child survival programs. In July 2003 LINKAGES participated in a two-day national implementation planning meeting on the prevention of mother-to-child transmission (PMTCT) of HIV. At this meeting it was agreed that LINKAGES' role would be to equip health workers and managers at PMTCT sites with updated technical information, practical counseling skills, and BCC materials to support mothers in their infant feeding choices in an HIV context. In 2005 another role was defined—to develop guidelines and BCC materials on nutrition care and support of people living with HIV and AIDS (PLWHA).

USAID provided funding for these activities through the Hareg Project (Presidential Initiative on PMTCT) and the President's Emergency Plan for AIDS Relief (PEPFAR). LINKAGES worked closely with the Federal Ministry of Health's Departments of Family Health and Infectious Diseases in implementation.

ADVOCACY AND DEVELOPMENT OF GUIDELINES

In March 2004 the project organized a symposium attended by more than 100 key stakeholders to raise awareness of the importance of nutrition in the care and support of people living with HIV and AIDS and the role of infant and young child feeding in PMTCT programs. Over the next two years LINKAGES made numerous presentations on these topics to different audiences. More than 1,100 people saw the presentation on infant feeding in the context of HIV, and approximately 900 viewed the presentation on nutrition and HIV and AIDS.

LINKAGES also helped advance policy initiatives by facilitating development of guidelines on nutrition and HIV. In August 2005 the project, in collaboration with the Ministry of Health and the USAID-funded FANTA Project, organized a national consultation workshop to develop guidelines on nutrition and HIV/AIDS, which were finalized by the MOH in September 2006. One thousand copies of the guidelines were printed.



CAPACITY BUILDING THROUGH TRAINING

As part of the PMTCT training strategy, LINKAGES developed the ENA in the Context of HIV/AIDS Course. This four-day course for health staff and managers of PMTCT sites provided technical updates on IYCF and nutrition in the context of HIV/AIDS and guidance on counseling to support infant feeding options. A three-day refresher course was added to further strengthen counseling and negotiation skills to support infant feeding options using the infant feeding/PMTCT tool. LINKAGES also designed a four-hour session on infant feeding to be inserted in the current course taught in all PMTCT sites.

Training in these courses was provided for health staff and managers of 23 PMTCT sites in six regions. Two hundred MOH personnel, health managers, and primary

health workers received training in the ENA in the Context of HIV/AIDS Course in 2004, and 178 participated in the refresher training in 2005. In addition, the four-day technical course was offered to 65 instructors from seven universities in 2006.

BEHAVIOR CHANGE COMMUNICATION

A behavioral assessment was conducted with UNICEF and three universities (Debu, Gondar, and Jimma) in November/December 2003 in three study locations. The assessment investigated knowledge, attitudes, and practices that influence mother-to-child transmission of HIV, including those related to utilization of antenatal care and HIV counseling and testing services, management of labor and delivery, and use of antiretroviral drugs. The assessment also examined infant and young child feeding practices, the feasibility of different feeding options for HIV-positive women, and care and support for HIV-positive women.

Another study, this one on women's nutrition for HIV-positive women, assessed prevailing local beliefs so that accurate and relevant messages could be formulated to improve the nutritional practices of pregnant and lactating women and support them to optimally feed their infants. This study was conducted with the same universities.

Findings from the two studies were used to develop messages and strategies for BCC, training and capacity building, and community mobilization programs for antenatal care and counseling and testing. To support trained health staff, the project developed the following materials and distributed them to partners and all 267 PMTCT sites in the country.

- **Infant feeding-PMTCT counseling tool** (desktop flip chart) and **2 mini posters** (10-step counseling checklists) provide information on assessing the feeding options of HIV-positive women, HIV-negative women, and women of unknown status; safer breastfeeding; and replacement feeding. (1,000 - Amharic)



- **Nutrition and HIV/AIDS materials** include a measurement chart on body mass index (BMI) as well as four posters, counseling cards, and a brochure for PLWHA on five ways to live positively with HIV/AIDS: 1) eat sufficient quantities and a variety of foods, 2) keep food clean, 3) make feeding a social activity, 4) follow a healthy life style (exercise and avoid drinking alcohol, smoking, or chewing chat), and 5) seek medical treatment when symptoms appear such as recurrent diarrhea, weight loss, etc. (1,000 BMI charts, 2,500 posters, 1,000 counseling cards, 5,000 brochures - Amharic)

MONITORING AND EVALUATION

Lastly, LINKAGES' support for HIV and infant feeding included assistance for the following monitoring and evaluation activities:

- household baseline survey in April/May 2004 on behaviors related to PMTCT, infant and young child feeding, and women's nutrition in areas served by 12 PMTCT sites in six regions,
- development of indicators on infant feeding in the context of HIV, a supervisory checklist on infant feeding counseling, and a register to monitor PMTCT service delivery, and
- a knowledge test and skills assessment of health staff trained in infant feeding and PMTCT in 12 PMTCT sites in Addis Ababa and Adama. Some of the key findings of the assessment are reported in Box 11.

Box 11. Findings of PMTCT Site Assessment

- Health workers who received intensive training on infant feeding had better knowledge; however, few remained posted due to high staff turnover.
- Most of the PMTCT sites offered breastfeeding counseling, but few provided replacement feeding demonstrations.
- Most women chose exclusive breastfeeding as their feeding option; however, counseling on optimal breastfeeding practices was not always offered to support this choice.
- PMTCT counselors said that their greatest challenges in counseling women on infant feeding options were emotional strain/stress, the client's resistance to advice, and limited options because of finances.

Lessons Learned in HIV and Infant Feeding

- Advocacy, up-to-date technical information, and the creation of partnerships were the three successful elements for incorporating nutrition in HIV and AIDS programs.
- The support needed by health workers to provide adequate counseling on infant feeding has been greatly underestimated in the management of PMTCT programs.
- The concept of AFASS (acceptable, feasible, affordable, safe, and acceptable) as conditions to consider when determining the best option for infant feeding in an HIV context appeared difficult for most health providers to include in their counseling. Providers focused primarily on the affordability issue.

VI. The Way Forward

Although the LINKAGES Project ended in October 2006, its contribution will continue in Ethiopia through:

- trained health instructors, providers, and promoters;
- materials, training modules, and policies;
- the ENA framework for addressing malnutrition; and
- the ongoing work of partners, including the promotion of nutrition in the community through the ESHE Project.

Annex 1. Project Documentation

Formative Research Reports

Amare Y. Infant and Young Child Feeding Practices in Ethiopia: Findings from Formative Research in Selected Communities. LINKAGES Ethiopia: AED, September 2003.

Amare Y, Deneke K. The Behavioral Assessment on Prevention of Maternal to Child Transmission of HIV and Infant and Young Child Feeding: A Report on Three Community Studies in Addis Ababa, Gondar and Jimma Zone, Ethiopia. AED: LINKAGES Ethiopia, December 2003.

Amare Y. Women's Nutrition: Beliefs and Practices during Pregnancy and Lactation including for HIV Positive Women: Findings from Dilla, Jimma & South Gondar. AED: LINKAGES Ethiopia, July 2004.

Performance Monitoring Reports

Beyero M, Guyon A, Stone-Jimenez M. Performance Monitoring Report for NGOs and ESHE/MOH after ENA Training. AED: LINKAGES Ethiopia, August 2006.

Guyon A, Stone-Jimenez M, Beyero M. Qualitative Assessment on Infant Feeding Counseling in PMTCT Sites - Addis Ababa, Ethiopia. AED: LINKAGES Ethiopia, July 2006.

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Deneke K, Rubin J, Franklin N, Guyon, A. Prevention of Mother to Child Transmission (PMTCT) Baseline Survey Ethiopia. AED: LINKAGES Ethiopia, April 2004.

Quinn VJ, Guyon AB, Beyero M, Nanda G. The Essential Nutrition Actions: Findings from the Baseline Surveys of 2003-04 Conducted in ESHE II Project Sites in Amhara, Oromia and SNNPR Regions of Ethiopia. AED: LINKAGES Ethiopia, May 2006.

Guyon AB, Beyero M, Hainsworth M, Mulligan B, Solomon E. Community Assessment in Selected ESHE Focus Woredas in Amhara, Oromia, and SNNPR, Ethiopia: The LINKAGES Project Endline Survey. AED: LINKAGES Ethiopia, October 2006.

Annex B. Staff of LINKAGES Ethiopia Program

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Mengistu Tafesse	Pre-service and Training Officer
Abdulselem Jirga	Training Officer
Antenanie Enyew	Training Officer
Eleni Asmare	Training Officer
Mulu G/Medhin	Training Officer
Tatek Wondimu	Training Officer
Senait Zewdie	Pre-service Training Manager
Samuel Asfaw	Administrative and Finance Manager
Tesfahiwot Dillnessa	Training Assistant
Wubet Berhane	Receptionist/Secretary
Samson Tesfaye	Driver
Abebaw Mequanint	Driver
Aster Mekonnen	Janitor

