



# LINKAGES Project Ghana

## Final Report (1997-2004)

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**Ghana**

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**September 2004**



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Finally to all LINKAGES staff we say well done for such hard work through the years:

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## ABBREVIATIONS AND ACRONYMS

|        |  |
|--------|--|
| ACDEP  | Association of Church Development Projects         |
| AED    | Academy for Educational Development                |
| AIDS   | Acquired Immune Deficiency Syndrome                |
| BCC    | Behavior Change Communication                      |
| CRS    | Catholic Relief Services                           |
| DHMT   | District Health Management Team                    |
| DHS    | Demographic and Health Survey                      |
| EBF    | Exclusive Breastfeeding                            |
| ENA    | Essential Nutrition Actions                        |
| FACS   | Food-Assisted Child Survival                       |
| IYCF   | Infant and Young Child Feeding                     |
| GHS    | Ghana Health Service                               |
| LQAS   | Lot Quality Assurance Sampling                     |
| MtMSG  | Mother-to-Mother Support Group                     |
| NGO    | Non Governmental Organization                      |
| PMTCT  | Prevention of Mother-to-Child Transmission         |
| RAP    | Rapid Assessment Procedure                         |
| RCH    | Reproductive and Child Health                      |
| TCF    | Timely Complementary Feeding                       |
| TIBF   | Timely Initiation of Breastfeeding                 |
| TIPs   | Trials of Improved Practices                       |
| UDS    | University for Development Studies                 |
| UNICEF | United Nations Children's Fund                     |
| USAID  | United States Agency for International Development |
| WHO    | World Health Organization                          |
| WFP    | World Food Program                                 |
| WVI    | World Vision International                         |

## OVERVIEW

The Ghana Health Service (GHS) and the USAID-funded LINKAGES project jointly implemented a national nutrition behavior change communication (BCC) program aimed at making significant improvement in the nutritional status of Ghanaian children by promoting early initiation of breastfeeding, exclusive breastfeeding for the first six months of life and timely and adequate complementary feeding. The program featured a variety of mutually reinforcing strategies, each of which was designed to tackle the problem of nutrition and behavior change from a different angle. Capacity building and community interventions with partners, advocacy and information dissemination, and pre-service curricula reform and development with dozens of schools of medicine, midwifery, nursing, public health and others were core components of the program.

The community component of the program began in 2000 in the Upper East, Upper West and Northern Regions of Ghana where malnutrition rates were considered the most acute according to the 1998 Ghana Demographic and Health Survey (DHS). Together with the GHS, three partner organizations (UNICEF, CRS and the Ghana Red Cross) and three local radio stations, undertook intensive nutrition BCC activities in nine districts in the three northern regions. Within a year, the project had expanded its network to all 24 districts in the three regions and was actively collaborating with 14 partner organizations. In 2003 the network of partners involved in BCC and community nutrition began moving southward to include selected districts in the Brong Ahafo, Ashanti, Volta, Central and Eastern Regions. By the end of the project the total population being reached by the project was approximately 3.26 million (Annex 1).

As a long-term strategy designed to complement the ongoing community interventions, in 2001 the GHS Human Resource Division and LINKAGES added a pre-service curriculum development/training component to the program. Currently all 51 institutions in the country—medicine, nursing and other paramedical institutions—address breastfeeding, BCC and other nutrition issues in their curricula (Annex 2).

## PARTNERS

LINKAGES worked closely with a wide range of groups whose area of operations included nutrition of infant and young children. A brief statement of partner activities and their collaboration with LINKAGES is summarized below.

- **Ghana Health Service:** The GHS has an important network of nutritionists based in regional capitals, districts and occasionally in sub-districts throughout the country. Many of these nutritionists participated in LINKAGES-sponsored nutrition policy events and workshops and were strong advocates for improving infant feeding practices. In the north, the GHS at the regional level and at many of the district and sub-district levels was actively involved in all phases of the community outreach component of the GHS/LINKAGES Project, both independently and in collaboration with partner NGOs.

The GHS has for several years been conducting promotional activities on infant and young child feeding (IYCF) practices through nurses and other health professionals at static daily and weekly antenatal, postnatal and child welfare clinics. Public and community health nurses also address these issues at the community level during outreach (baby weighing/growth promotion) sessions and home visits.

- **Catholic Relief Services (CRS):** The beneficiaries of the CRS/Ghana's Food-Assisted Child Survival (FACS) programs are primarily women and children living in food insecure households in rural farming communities. Focus communities are located in three districts from each of the three northern regions of the country. CRS reaches this population through a variety of community- and health facility-based child survival/nutrition interventions in collaboration with the GHS. The CRS FACS project began in October 1997. In September 2003 the program received a five-year extension and was significantly expanded with support from Food for Peace.

- **The Ghana Red Cross:** The Ghana Red Cross has an extensive network of mothers' clubs operating throughout the country, especially in the north and upper east in particular. These clubs address community development and social service issues. Popular topics are nutrition, children's health, immunizations, community hygiene and income-generating activities. The Ghana Red Cross launched a child survival project in the Upper East with a significant infant feeding component in September 1999. Other topics being addressed by the project include malaria, HIV/AIDS, diarrhoeal disease and acute respiratory infections (ARI). The program was completed in July 2002, and trainings and refreshers ended in April that same year. In spite of this, monitoring activities continue to take place on a regular basis. Additional funding is being solicited.
- **United Nations Children's Fund (UNICEF):** The Ministry of Local Government, with other government agencies and UNICEF, is implementing child survival programs as one of several interconnected community development programs in northern Ghana. The programs work through community health nurses and teams comprised of extension agents, disease surveillance agents, non-formal education literacy teachers, civic educators, agricultural extension agents, District Assemblies and community representatives. As early as 1999, UNICEF invited LINKAGES to work with them on nutrition behavior change communication as an important feature of its development work in the north. UNICEF's Mid Term Review (MTR) of its Plan of Operations conducted in 2003 included nutrition BCC.
- **Association of Church Development Projects (ACDEP):** ACDEP is a network of church sponsored development projects. The current portfolio includes 40 agricultural, water, health and nutrition projects located throughout the three northern regions. The main objective of the network is to enhance the development efforts of individual churches as well as provide a collective platform for their participation in the socio-economic development of the rural poor in Northern Ghana. ACDEP members use a number of approaches to address nutrition issues. This includes conducting growth monitoring/promotion at the facility level and during community outreach work, and

giving health talks on infant feeding during home visits. ACDEP works through women's and men's groups, volunteers, TBAs and health workers. Some project members also run nutrition rehabilitation centers. Additionally, the association operates a micro-credit facility for women.

- **ActionAid:** ActionAid Ghana works in the three northern regions and in Brong Ahafo to improve access to services to the poor through the use of participatory methodologies. The services provided are in the areas of basic education and the development of peer education strategies for HIV/AIDS, institutional capacity building, advocacy, increasing household food security levels by training farmers in modern agricultural practices and the provision of dams and emergency relief services. ActionAid is collaborating with the Centre for Youth Development and Empowerment (CYDE) in the Tamale Municipality and the DHMT in the West Gonja District of the Northern Region to implement strategies that improve IYCF practices in collaboration with the GHS/LINKAGES Project.
  
- **Freedom From Hunger (FFH):** FFH works with rural banks to develop and disseminate a cost-effective integrated program strategy called “Credit with Education” for the purpose of improving the nutritional status and food security of poor households in rural areas around the country. The “Credit with Education” program offers three key services to poor women in rural communities:
  1. Community-based financial services that provide borrowing and saving opportunities
  2. Non-formal education that offers guidance in maternal and child health and nutrition particularly breastfeeding, child feeding practices, diarrhoeal disease treatment and prevention, immunizations, HIV/AIDS and family planning
  3. A forum for peer group support.
  
- **NewEnergy:** NewEnergy uses a holistic approach to development aimed toward facilitating the improvement and management of rural infrastructure essential for

enhancing the quality of life of rural people. In collaboration with development partners, NewEnergy provides a number of products and services including renewable energy information, solar lanterns and home systems, solar water pumping systems, energy efficiency education, water and sanitation services, and micro-credit and enterprise initiatives. Through its partnership with LINKAGES, NewEnergy piloted a Nutrition BCC program in 10 communities in the West Mamprusi District, which was then expanded to the Gushegu Karaga District of the Northern Region.

- **World Food Program (WFP):** The GHS/Nutrition Unit collaborates with the WFP in executing a food supplementation program in five regions (Ashanti, Western, Upper East, Upper West and Northern Regions) of the country where malnutrition rates are considered especially acute. It is expected that Ashanti and Western Regions will be phased out of the program over the next few years. Under this program, food rations are distributed to pregnant and lactating women as well as children 1–3 years of age at feeding centers in select communities during periods of the year when food is particularly scarce. Center attendants who have been trained to conduct growth monitoring also educate mothers on basic nutrition and hygiene.
- **World Vision International (WVI):** World Vision International operates a holistic community-based development program in mostly marginalized rural areas of the country. The program areas are health and sanitation, education, agriculture, gender and development, micro-enterprise and income generation. The organization works with other existing networks such as the GHS, Ministry of Food and Agriculture and the Ghana Water Company. Under its health program, WVI provides potable water and ventilated improved latrines, health infrastructure development, and nutrition education. WVI operates through the establishment of Area Development Programs in all 10 regions of the country.
- **Mass media:** Journalists and broadcasters from three FM stations in the north (Radio Savannah, URA Radio and Radio Progress) participated in GHS/LINKAGES trainings and incorporated IYCF issues in their broadcasts with support from LINKAGES and

other partners. Popular formats included radio call-in shows, panel discussions and personal testimonies with village leaders, comedies and drama, and educational songs and contests. Programs were broadcast in eight major local languages and English and reached 16 of the 24 districts in the north. Four out of eight remaining districts received partial coverage from these stations. A repeater station recently installed in Yendi will greatly enhance radio coverage to the eastern corridor of the Northern Region.

- **University of Development Studies (UDS):** LINKAGES collaborated with UDS through its Food and Nutrition Security Unit and members stationed in various parts of the country to disseminate nutrition information in ways that are easily understood at the community level. Through the support of LINKAGES, a Nutrition Information Hub was established at the UDS campus at Nyankpala to facilitate access to information on nutrition and food security and to advocate for improved policies.

## **PROJECT DESCRIPTION**

The GHS /LINKAGES project started in early 1997 with a national nutrition workshop and a 1998 GHS assessment of nutrition and community programs nationwide. These activities helped set the stage for the development of GHS guidelines and strategies for nutrition including the identification of breastfeeding promotion and protection as one of its top five child survival strategies for the country.

An important objective of the GHS/LINKAGES strategy for improving infant nutrition was to increase awareness of nutrition issues and then identify ways of translating this awareness into action. To do so, PROFILES, which is both a process and tool for engaging nutrition and health professionals in nutrition data analysis and advocacy, was used. A PROFILES workshop in 1997 brought together a group of prominent Ghanaian nutritionists and other technical experts to define the country's nutrition problems and priorities. Regional workshops using regional data were subsequently organized between 2000 and 2002. Representatives of the GHS, UDS and the Food and Nutrition Security Network participated and developed advocacy presentations for targeted audiences.

The process of developing tailored messages and materials began in late 1999 with a literature review of all available research on infant and young child feeding (IYCF) practices in the three northern regions. This was followed by formative research, the purpose of which was to address any information gaps identified from the literature review and to gather additional information on behaviors that could be used to help shape the content of messages for the program's three key target audiences: pregnant women and mothers with young children, fathers and grandmothers. Two workshops were organized to design and pretest the messages and prepare various audio and visual materials for the various audiences. As a result of these activities, thousands of counseling cards for mothers, larger cards for grandmothers and older women and a poster for men were produced. and distributed to partners, After partner staff received a brief training in the use of the materials, the counseling cards and posters were distributed to the

partners. This process and use of the same materials helped standardize the new messages throughout the northern part of the country.

Capacity building events for community-level activities, in the form of training of trainers (TOT) workshops, were organized for partner representatives to develop transferable skills for communicating key messages on IYCF. These skills included behavior change communication (BCC), creating and facilitating mother-to-mother support groups (MtMSG), and breastfeeding and complementary feeding basics. The workshops enabled trainers to train community representatives to encourage women and families to try, adopt and maintain the new behaviors being promoted.

Training was also conducted to support the Baby-Friendly Hospital Initiative, a global effort to improve infant health through improved maternity services. LINKAGES collaborated with the Reproductive and Child Health (RCH) Unit of the GHS and UNICEF to train health workers in BFHI and conduct assessments in several districts in the north including Bole, Savalugu Nanton, Gushegu Karaga and East Mamprushi. In addition, LINKAGES staff were periodically called on by the GHS to help with facility assessments in the southern parts of the country.

Curriculum development at the pre-service level was initiated in 2001 with the formation of an 18-member task force composed of key GHS personnel, lecturers and tutors from training institutions throughout the country. To ensure that future health providers were equipped with the most up-to-date technical information and counseling skills to promote breastfeeding and other nutrition behaviors, the task force recommended revisions to the curricula. After reviewing the duties of medical and paramedical personnel and the adequacy of the existing curricula to prepare them for their posts, the task force identified gaps and opportunities and revised the nutrition curricula of health training institutions to include topics such as lactation management, BCC, feeding of the sick child, essential nutrition actions (ENA), micronutrients, PMTCT of HIV/AIDS, etc. Training workshops were then organized for tutors, lecturers and preceptors (supervisors for student practicums) in these new areas. A monitoring team made up of task force members

regularly monitored the use of the new curricula by schools throughout the country and presented the results at the annual refresher meetings for the heads of training institutions.

As mentioned previously, journalists from several local radio stations in the north were involved throughout the program including the Mother-to-Mother Support Group trainings, messages and materials development workshops and other capacity-building events. The stations aired programs on IYCF and breastfeeding in English as well as eight other languages, reaching communities in almost all of the 24 districts in the north. These programs focused on the key messages of IYCF and used a variety of formats such as radio call-in shows, quiz programs, dramatic comedies, and panel discussions with local nutrition experts that had received training by LINKAGES. Other programs featured practical advice on breastfeeding and young child feeding from community leaders such as chiefs and opinion leaders. Radio programs were a regular feature of annual World Breastfeeding Week celebrations. Over the years, LINKAGES produced and distributed to partners several thousand T-shirts and stickers to mark the occasion with each year's theme inscribed on them. Often these materials were used as important prizes for the station's radio call-in shows and quiz programs

An integral component of the GHS/LINKAGES BCC strategy was monitoring and evaluation. LINKAGES used rapid assessment procedures (RAPs) to collect quantitative and qualitative data to help track both outcome and process indicators of the program. The surveys employed cluster-sampling methodology in the north and lot quality assurance sampling (LQAS) in the south. Results of these surveys were made available to partners at annual review conferences to motivate them and help them pinpoint areas for improvement and fine-tune their interventions and messages.

## MAJOR PROJECT ACCOMPLISHMENTS

The following are the achievements of the BCC project to improve infant and young child nutrition:

- Forty-five people were trained in nutrition advocacy using PROFILES computer-based tools between 1997 and 2000. Those trained represented academia, the media, the GHS and the Ministries of Education and Food and Agriculture.
- Through the support of the USAID mission in Ghana, LINKAGES set up an Information Hub under the Food and Nutrition Security Network Unit of the UDS in Nyampkala. The Hub stores information on topical issues on food security and nutrition for members of the network and general public. LINKAGES co-sponsored two annual general meetings of the network and one one-week national training.
- Twenty-one capacity-building workshops were organized on optimal IYCF practices for partner representatives. Approximately 600 participants attended at least one of them, Participants included staff of the GHS (medical officers, various categories of nurses, nutrition officers, technical officers, disease control officers); representatives of the district assemblies, local government, Ministry of Food and Agriculture, and Ghana Education Service; radio presenters and journalists; program officers; volunteer workers and community-level agents with partner organizations. The partners in turn rolled out trainings for their district- and community-level networks with thousands of people trained in breastfeeding and complementary feeding. They also carried out activities such as durbars (community festivals) and awareness-raising events, especially during World Breastfeeding Week, conducted home visits, and conveyed information and skills acquired through LINKAGES-supported trainings and materials to approximately 1,600 women's groups throughout the country.
- Four major trainings for staff of facilities from Bole, East Mamprusi, and Gushegu Karaga Districts as well as other facilities in the north were organized to prepare them

towards becoming Baby Friendly. Three hundred and four (304) staff attended the trainings. LINKAGES funded the assessment of 18 facilities in the East Mamprusi and Savelugu Nanton Districts in northern Ghana. Thirteen of the facilities passed the global criteria towards becoming “Baby Friendly”. LINKAGES also provided technical assistance in assessing 16 facilities in the Eastern Region and seven in the Ashanti Region.

- In 2001 LINKAGES funded lactation management training for 53 health workers from three facilities in the Upper West Region.
- Three national Mother-to-Mother Support Group exchange meetings were organized to provide MtMSG leaders the opportunity to give updates of their activities, share experiences and receive new technical information with peers. The meetings also provided a forum for the leaders to be briefed on the annual theme for World Breastfeeding Week and begin making plans for community events. Approximately 150 leaders from throughout the country attended the exchange meetings.
- Eight pre-service task force meetings; 12 trainings for lecturers, tutors and preceptors on lactation management, BCC, the ENAs, and PMTC; one nutrition awareness-building conference and two annual review conferences for the pre-service program were organized between 2001 and 2004. In all 119 lecturers/tutors and 53 instructors nationwide participated in at least one of the 12 trainings organized by LINKAGES. In addition, LINKAGES funded two monitoring activities to track the progress of the pre-service work and improve the quality of the program. By 2003 questions on breastfeeding and the ENAs were included as part of national qualifying exams for nurses and midwives in Ghana.
- Almost 500 radio programs featuring panel discussions, call-in shows, dramatic comedies, quizzes, and musical requests were sponsored by LINKAGES and broadcast in English and eight local languages through three local stations in the three northern

regions. In 2003, a new national radio station in the Upper West broadcast a series of dramatic and humorous plays on IYCF under the direction of a radio journalist and regular LINKAGES collaborator from the Upper East.

A list of project reports, documents, and materials is found in Annex 3.

## RESULTS

### **Rapid Assessment Procedures (RAPs)**

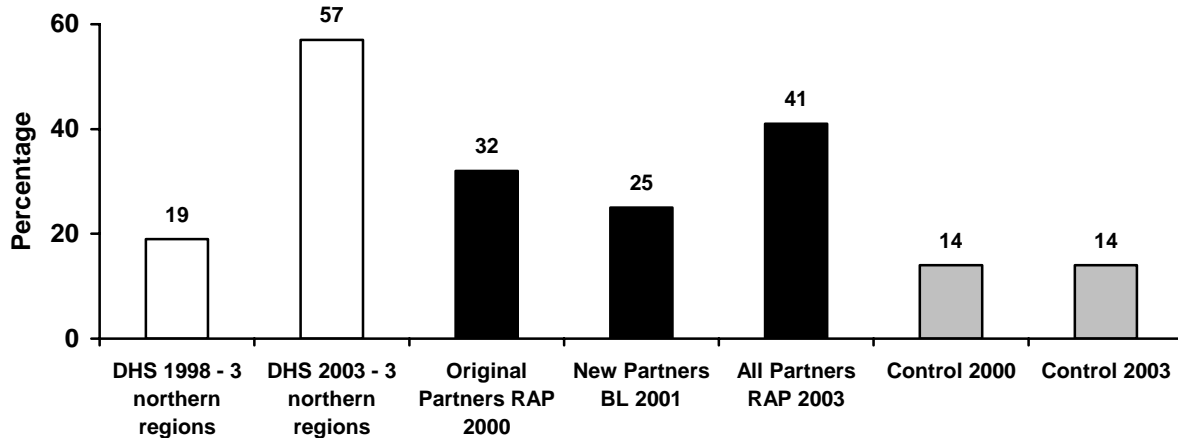
On an annual basis, LINKAGES collected data on key indicators. The rapid assessment procedure served as a tool to quickly measure progress in achieving targets and inform program management of areas that needed special attention. The first RAP was conducted in 2000 for the original partners (UNICEF, Catholic Relief Services, and the Ghana Red Cross). In 2001 the same partners participated in the RAP while a baseline survey was carried out for new partners (ACDEP, ActionAid, Freedom From Hunger, NewEnergy, World Food Program, and World Vision). All partners were surveyed as part of the 2002 and 2003 RAPs.

### Northern Ghana

- The results of the RAP surveys indicate success in improving infant feeding practices. Timely initiation of breastfeeding (TIBF) (the percentage of infants less than 12 months old who are put to the breast within one hour of birth) increased from 32 % in 2000 to 41 % in 2003 in program areas. Exclusive breastfeeding (EBF) among children less than six months old increased from 68 % in 2000 to 79 % in 2003. Timely complementary feeding (TCF) among infants 6 through 9 months old increased from 74 % in 2000 to 79 % in 2003.
- A survey in non-program areas in 2003 showed that 14 % of children were put to the breast within the first hour of birth, the same as in 2000 in non-program areas. Sixty-nine (69) percent of children less than six months old were exclusively breastfed in

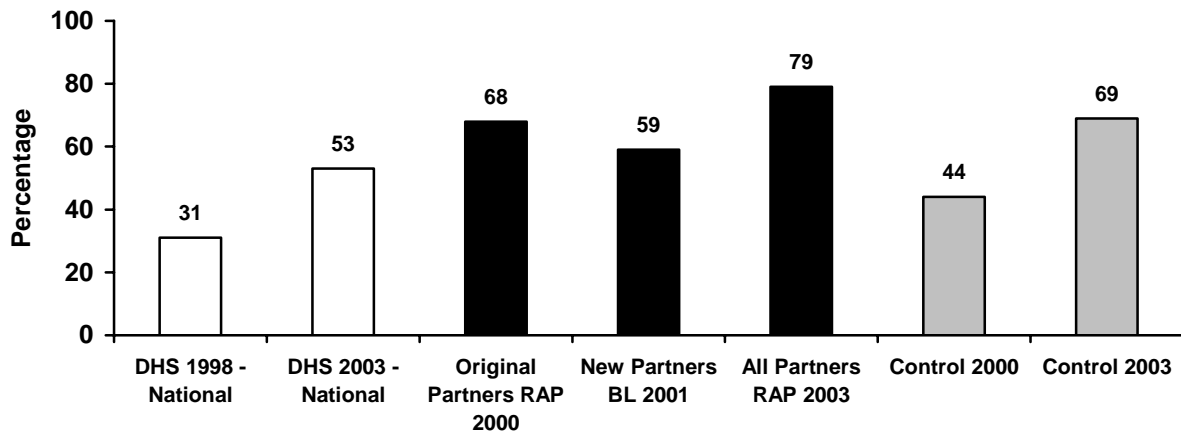
the 24 hours prior to the survey, up from 44% in 2000. Sixty-four (64) percent of children 6 through 9 months old received complementary foods in addition to breast milk, down from 74% in 2000.

**Fig 1 Timely Initiation of Breastfeeding: The percentage of infants 0-<12 months old who were put to the breast within one hour after delivery in program and control districts**

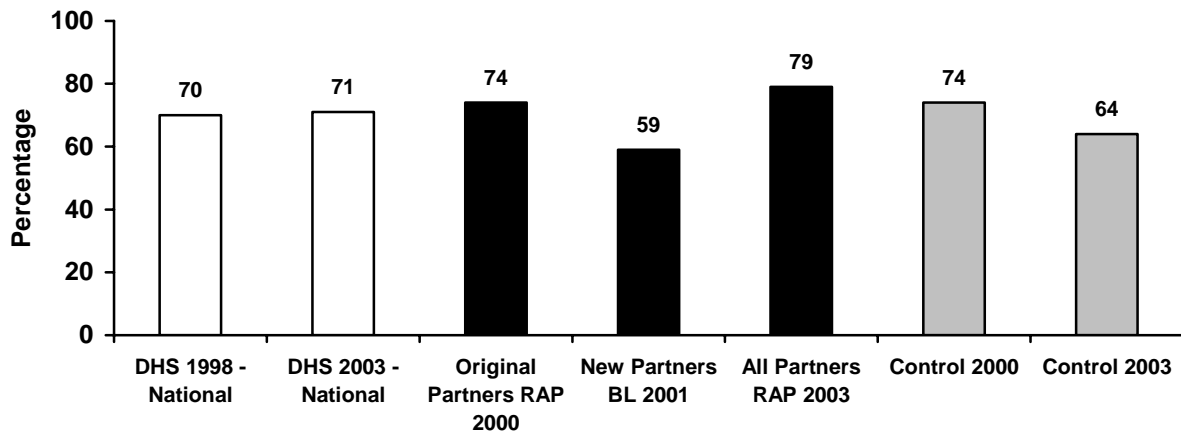


- Doing a further comparison, DHS results show that nationally, TIBF rose from 25% in 1998 to 46% in 2003. Among the three northern regions where IYCF was actively promoted by LINKAGES and partners, the TIBF rate increased from 19% in 1998 to 57% in 2003 (figure 1). While the Upper East Region recorded the highest TIBF rate nationwide at 86%, the rate in the Upper West Region was only 18%. The rate in the Northern Region was 54%. The national level EBF rate increased from 31% in 1998 to 53%. Timely complementary feeding according to the 2003 DHS among children 6–9 months was 71%, about the same as the 1998 rate of 70% (see figures 2 and 3 for trends in EBF and TCF rates). The DHS report did not break down EBF and TCF data by regions so no detailed analysis can be made.

**Fig 2 Exclusive Breastfeeding: The percentage of infants 0-<6 months old who received only breastmilk with vitamins, mineral supplements or medicines in the past 24 hours in program and control districts**



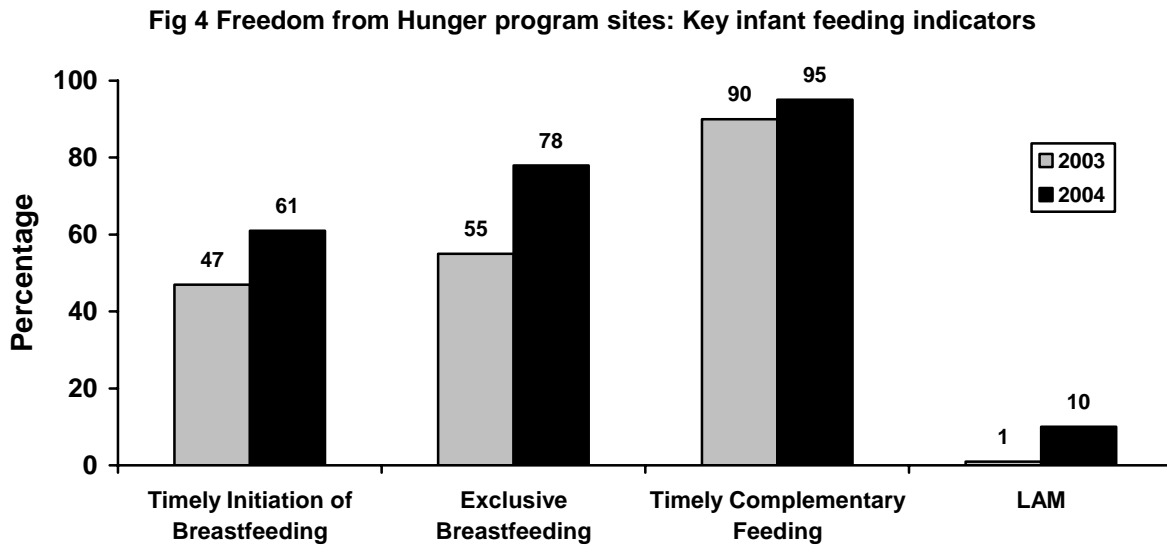
**Fig 3 Timely Complementary Feeding: The percentage of infants 6-<10 months old who received breastmilk and semi-solid or solid foods in the past 24 hours in program and control districts**



Southern Ghana

- After a year of intensive work by LINKAGES with Freedom from Hunger’s program to provide health and nutrition education to members of credit and saving associations at the community level, the proportion of children put to the breast within the first hour of delivery increased from 47% in 2003 to 61% in 2004. Exclusive breastfeeding

rose from 55% in 2003 to 78% in 2004, and timely complementary feeding increased from 90% to 95%. The proportion of women with infants less than 6 months old that used the lactational amenorrhea method (LAM) as a family planning method rose from 1% to 10%. See figure 4.



### Cost-effectiveness Study

A cost-effectiveness study in northern Ghana in 2002 of the efforts of LINKAGES and its partners to increase exclusive breastfeeding and timely initiation of breastfeeding showed a positive relationship between the costs incurred in a district and the behavioral outcomes. The factors affecting costs included the level of partner participation in implementation, the size of interventions, and baseline rates. The cost of replicating this package of interventions was \$16 per targeted child, while the cost per new exclusive breastfeeding acceptor was \$34. The cost per new acceptor of timely initiation of breastfeeding was \$45. The study also showed that LINKAGES could increase its cost effectiveness by selecting partners who were ready and able to implement relatively intensive community-level activities, increasing its target population in program districts and selecting populations that had lower baseline EBF and TIBF rates.

## LESSONS LEARNED AND RECOMMENDATIONS

In February 2003 LINKAGES organized a Lessons Learned/Way Forward conference for its partners to reflect on three years of experience in northern Ghana. The following lessons were shared by the partners:

### **Working with radio**

- To prevent listeners from being bored, producers used a wide range of formats to present programs such as stories, songs, poems, dramatic comedies, etc. The key to active participation by listeners is to keep the broadcasts lively.
- The source of information should be credible because listeners, in general, believe that what they hear on the radio is the truth. Radio and health partners need to collaborate so that messages are accurate and consistent.
- Radio listenership should be broadened. This can be done by visiting areas with limited access and having one-on-one interviews with people in the community. Listeners usually enjoy programs more when people ‘like themselves’ share their own experiences.

### **Expanding opportunities to promote better infant feeding**

- When entire communities are mobilized to promote exclusive breastfeeding, everyone gets involved. Some communities discovered that engaging everyone in various ways through “Baby-Friendly Community Initiatives” was a good way to promote better infant and young child feeding practices.
- All stakeholders of IYCF in the community have a role to play and should be involved, including men, older women, and other development sectors outside of health.
- Micro-credit with education can improve food security and knowledge of infant feeding.
- Involvement of district assemblies will help ensure the continuous funding and sustainability of programs in the communities.

### **Mother-to-mother support groups**

- Support groups achieve greater impact when everyone in the community understands their purpose and is supportive of their activities.
- Visits and sharing among people outside their own community helps to motivate leaders and enhance their self-image and pride in their work.

### **Challenges to promoting timely and appropriate complementary feeding**

- Complementary feeding messages need to be consistent and coordinated. Caregivers become confused about when to start complementary feeding because they receive different advice from health workers with some saying “about 6 months,” “around 6 months” or “at 6 months.”
- Negotiation should be a key element of complementary feeding counseling so that a mother knows how to enrich porridges and other easily prepared foods and is encouraged to try feeding them to her child.
- Even when knowledge about the best ways to feed young children is high, this cannot always be put into practice because of poverty. These constraints need to be addressed by introducing income-generating activities to ensure that women have the resources needed to put into practice what they have learned.

### **Community entry or ‘getting started’**

- An important first step for community entry is listening to the community and understanding how to guide them through the process of identifying what needs to be done and how.
- Community entry is a dynamic process requiring patience and diplomacy. One needs to be mindful of one’s attitude, understand the local culture, and identify problems and their solutions with the community to enhance success in program entry and later program implementation.

- Community entry involves working with communities. Giving gifts at the outset may interfere with future relationships. It is often better to integrate development issues into existing programs rather than trying to establish new programs. Community exit plans are as important as entry plans and should be clearly thought through.

## **ANNEX 1:**

### **Population Coverage of GHS/LINKAGES and Partner Community-Level Program in Ghana**

LINKAGES has been collaborating with the Ghana Health Service (GHS), PVOs/NGOs and other partners to implement a nutrition behavior change program in Ghana to improve infant feeding practices in Ghana. At the time the program began in the year 2000, it was particularly active in the three northern regions where community level strategies featured building the capacity of the GHS and partners to design, implement and evaluate effective nutrition behavior change communication programs in the areas where they work. Approaches used include radio, print materials, interpersonal counseling, community discussions, community theatre, fairs and song, mother-to-mother support groups and exchange visits. During the year 2003, LINKAGES expanded its activities by working with Freedom From Hunger (FFH) in the Eastern and Central Regions, World Vision in the Ashanti Region and Ghana Red Cross in the Brong Ahafo Region all in southern Ghana to promote good infant and young child feeding behaviors.

Representatives of Food Nutrition and Security Network based in the south were trained up by LINKAGES in July 2003 and are also expected to roll out the program in due course.

Estimated coverage figures presented in the attached table are based on the 2000 population and housing census data for districts where LINKAGES has trained up one or more GHS and /or NGO staff people and follow-up activities and/or trainings have taken place. For FFH and Ghana Red Cross in the Brong Ahafo Region, population figures were provided by program officers based in the districts and represent communities with active program presence. Seventeen districts in the north receive broadcast from at least one of the local FM stations based in the north where LINKAGES has been doing regular radio programs on infant and child feeding. Four have only partial radio coverage and two no coverage in the north. In total, the LINKAGES community level program reaches 22 out of the 24 districts in the north and seven districts in the south.

Under the pre-service curricula development component of the BCC program, 51 health training institutions located in all 10 regions of the country have their nutrition curricula revised and at least one tutor, lecturer and/ or preceptors trained in the Essential Nutrition Actions, BCC and/or lactation management. In all, 117 tutors and 32 preceptors have been trained up by LINKAGES nationwide and are expected to pass the acquired knowledge and skills to their students. The national qualifying examinations for nurses and midwives now include nutrition questions based on the updated curricula.

## POPULATION COVERAGE OF GHS/LINKAGES AND PARTNER PROGRAM IN GHANA

| Regions     | No. | District                          | District population<br>(2000 Population<br>Census Data) | NGO Focus District For<br>GHS/LINKAGES Partnership | Mass media reach for Radio Savannah<br>(Northern), URA Radio (Upper East), Radio<br>Upper West, or Radio Progress (Upper west) | LINKAGES<br>sponsored BFHI<br>Training |
|-------------|-----|-----------------------------------|---|--|--|--|
| Northern    | 1.  | West Mamprusi                     | 115025  | New Energy, ACDEP                                  | C  | No                                     |
|             | 2.  | East Mamprusi                     | 174863  | CRS, ACDEP   | C  | Yes                                    |
|             | 3.  | Savelugu-Nanton                   | 89968   | World Vision, UNICEF                               | C  | No                                     |
|             | 4.  | Gushiegu-Karaga                   | 125430  | World Vision, New Energy                           | P  | Yes                                    |
|             | 5.  | Yendi                             | 130504  | UNICEF, Ghana Red Cross                            | P  | No                                     |
|             | 6.  | Tolon-Kumbungu                    | 132833  | UNICEF   | C  | No                                     |
|             | 7.  | Zabzugu-Tatale                    | 79201   | UNICEF   | NC   | No                                     |
|             | 8.  | West Gonja                        | 139329  | ActionAid  | P  | No                                     |
|             | 9.  | Tamale                            | 293881  | ActionAid, Freedom from<br>Hunger                  | C  | No                                     |
|             | 10. | Saboba Chereponi                  | 93847   | WFP  | NC   | No                                     |
|             | 11. | Nanumba                           | 144278  | WFP  | NC   | No                                     |
|             | 12. | East Gonja                        | 174500  | ACDEP  | P  | No                                     |
| Upper East  | 13. | Bongo                             | 77885   | CRS, Ghana Red Cross                               | C  | No                                     |
|             | 14. | Builsa                            | 75375   | UNICEF, Ghana Red Cross,<br>ACDEP                  | C  | No                                     |
|             | 15. | Bolgatanga                        | 228815  | Ghana Red Cross, ACDEP                             | C  | No                                     |
|             | 16. | Bawku West                        | 80606   | Ghana Red Cross                                    | C  | No                                     |
|             | 17. | Bawku East                        | 307917  | Ghana Red Cross, ACDEP,<br>UNICEF                  | C  | No                                     |
|             | 18. | Kassena Nankani                   | 149491  | Ghana Red Cross                                    | C  | No                                     |
| Upper West  | 19. | Lawra                             | 87525   | CRS, Ghana Red Cross                               | C  | No                                     |
|             | 20. | Nadowli                           | 82716   | World Vision, Ghana Red Cross                      | C  | No                                     |
|             | 21. | Jirapa-Lambussie                  | 96834   | WFP, Ghana Red Cross                               | C  | No                                     |
|             | 22. | Wa                                | 224066  | Ghana Red Cross                                    | C  | Yes (for 2<br>facilities)              |
| Central     | 23. | Ewutu-Effutu-Senya<br>(Bawjiase)  | 23023*  | Freedom from Hunger                                | NC   | No                                     |
|             | 24. | Asikuma Odoben<br>Brakwa (Brakwa) | 59116*  | Freedom from Hunger                                | NC   | No                                     |
| Eastern     | 25. | Manya Krobo (Asesewa)             | 28922*  | Freedom from Hunger                                | NC   | No                                     |
| Ashanti     | 26. | Ejura Sekyedumasi                 | 81115   | World Vision                                       | NC   | No                                     |
| Brong Ahafo | 27. | Sunyani                           | 14900   | Ghana Red Cross                                    | NC   | No                                     |
|             | 28. | Berekum                           | 17216   | Ghana Red Cross                                    | NC   | No                                     |
|             | 29. | Wenchi                            | 41916   | Ghana Red Cross                                    | NC   | No                                     |
| Total       |     |                                   | <b>3260036</b>  |  |  |  |

Key: C – Complete coverage  
P – Partial coverage  
NC-No coverage  
NB: \* Indicates population in the district with active program presence

## Annex 2:

### Lectures/Tutors and Preceptors Trained by LINKAGES as of April 2004

| Institution                              | No. of lecturers/tutors trained | No. of preceptors trained |
|--|---------------------------------|---------------------------|
| 1. Rural Health Training School          | 5                               | 2                         |
| 2. State Registered Nurses Schools       |                                 |                           |
| Berekum                                  | 3                               |                           |
| Bolgatanga                               | 3                               |                           |
| Bawku                                    | 2                               | 1                         |
| Agogo                                    | 3                               | 2                         |
| Kumasi                                   | 3                               |                           |
| Cape Coast                               | 2                               | 4                         |
| Sekondi                                  | 3                               |                           |
| Koforidua                                | 3                               |                           |
| Nkawkaw                                  | 2                               |                           |
| 37 Military Hospital                     | 4                               |                           |
| Jirrapa                                  | 2                               | 1                         |
| Korle-Bu                                 | 6                               |                           |
| Ho                                       | 3                               | 1                         |
| Tamale                                   | 2                               |                           |
| Pantang                                  | 2                               |                           |
| Ankaful                                  | 2                               |                           |
| 3. Schools of Hygiene                    |                                 |                           |
| Korle-Bu                                 | 2                               |                           |
| Ho                                       | 2                               |                           |
| Tamale                                   | 3                               |                           |
| 4. Community Nursing Training School     |                                 |                           |
| Tamale                                   | 3                               | 2                         |
| Ho                                       | 2                               | 1                         |
| Winneba                                  | 2                               | 3                         |
| Akim Oda                                 | 2                               | 1                         |
| Esiama                                   | 3                               | 2                         |
| Navrongo                                 | 1                               | 2                         |
| 5. Public Health Nursing Training School | 2                               | 2                         |
| 6. Midwifery                             |                                 |                           |
| Berekum                                  | 3                               | 3                         |
| Bolgatanga                               | 2                               | 1                         |
| Kumasi                                   | 2                               |                           |
| Mampong                                  | 2                               |                           |
| Offinso                                  | 2                               |                           |
| Koforidua                                | 2                               |                           |
| Atibie                                   | 2                               | 1                         |
| Jirrapa                                  | 1                               | 1                         |
| Hohoe                                    | 2                               |                           |

| <b>Institution</b>                      | <b>No. of lecturers/tutors trained</b> | <b>No. of preceptors trained</b> |
|---|--|----------------------------------|
| Korle-Bu                                | 3                                      |                                  |
| 37 Military Hospital                    | 1                                      |                                  |
| 7. Health Sciences Education Cape Coast | 3                                      |                                  |
| 8. University of Dev. Studies           | 7                                      |                                  |
| 9. School of Public Health              | 1                                      | 1                                |
| 10. KNUST-School of Medical Sciences    | 5                                      |                                  |
| 11. University of Ghana Medical School  | 7                                      |                                  |
| 12. Regional Health Administration, Ho  |  | 1                                |
| <b>Total</b>                            | <b>117</b>                             | <b>32</b>                        |

## Appendix 3:

### Materials and Tools Produced

Abundant research, training, BCC, and evaluation materials emerged from the LINKAGES project in Ghana.

#### Publications and Reports

- Profiles Advocacy Presentations and Scripts
  - Nutrition in Ghana: Investing Now for the Year 2020 (national presentation developed in 1997)
  - Nutrition in the Ashanti Region: Investing Now for the Year 2020 (developed in 1998)
  - Nutrition in the Greater Accra Region: Investing Now for the Year 2020, developed in 1998)
  - Nutrition in the Northern Region: Investing Now for the Year 2020 (developed in 1998)
  - Nutrition in the Eastern Region: Investing Now for the Year 2020 (developed in 1999)
  - Nutrition in the Upper West Region: Investing Now for the Year 2020 (developed in 1999)
  
- Formative Research Reports
  - Mensah-Homiah, Joseph; Gamor, Gladys and Keith, Nancy, *TIPS in Infants and Young Children 0-24 Months: Consultative Research in Northern Ghana*, June 2000
  
  - Adjei, Eunice; Schubert, Joan and Adjei, Hanna, *Current Child Feeding Practices in the Central and Greater Accra Regions*, July 2001
  
  - Owusu, W.B.; Gyetuah, Esther Y. and Twenefour, Douglas, *Infant and Young Child Feeding Practices (Literature Review)*, August 2002
  
  - Adjei, Eunice and Schubert, Joan, *Changes in Child Feeding Practices in Northern Ghana: Understanding the Issues through Qualitative Research*, September 2004
  
- Other Publications
  - Abt Associates Inc., *Cost and Effectiveness Analysis of LINKAGES' Breastfeeding Interventions in Ghana*, December 2002
  
  - Martin, Luann and Schubert, Joan, *Development of Messages and Materials to Promote Improved Infant and Young Child Feeding: A Case Study in Northern Ghana*, 2003

- LINKAGES, *Lessons Learned in Promoting Better Infant and Young Child Feeding: Experiences from Northern Ghana*, February 2003
- World LINKAGES: Ghana. 1997-2004
- Program Evaluation Reports
  - A community assessment on improved infant feeding practices in northern Ghana, 2000
  - Follow-up survey on breastfeeding and complementary feeding knowledge and practices in northern Ghana, 2001
  - Follow-up Survey II: A rapid appraisal of breastfeeding and complementary feeding knowledge and practices in northern Ghana, 2002
  - Follow-up Survey III: A rapid appraisal of breastfeeding and complementary feeding knowledge and practices in Ghana, 2003
- Survey Instruments – Breastfeeding and Complementary Feeding Knowledge and Behaviors, 2000-2003
  - Mothers of Children Under 12 Months of Age
  - Husbands
  - Older Mothers/Mothers-in-law

### **Training Modules**

- Behavior Change Communication for Improved Infant Feeding Training Modules, 2003
  - Module One: Training of Trainers in Negotiating Sustainable Behavior Change
  - Module Two: Training of Trainers for Mother-to-Mother Support Groups

### **Media**

- Counseling cards on breastfeeding and infant feeding (8 cards; topics include colostrum feeding, exclusive breastfeeding, avoiding giving water to infants, emptying one breast before offering the other, dealing with the perception of not enough milk, introduction of complementary food, good foods for children, and tips for feeding children)
- Counseling cards on breastfeeding and infant feeding, specifically for grandmothers and traditional birth attendants (9 cards; topics include grannies and good infant feeding, colostrum feeding, good positioning for breastfeeding, exclusive breastfeeding, avoiding giving water to infants, emptying one breast before offering the other, complementary feeding at six months, good foods for children, tips for feeding children)
- Poster for Men: "The Good Father"

- Radio programs
  - Ten breastfeeding-themed radio dramas
  - World Breastfeeding Week Radio programs, 2000
  
- LINKAGES Breastfeeding promotion calendars, produced with the Ministry of Health
  - 2000
  - 2001
  - 2002
  - 2004
  
- T-shirts
  - Exclusive Breastfeeding T-Shirt, 2000: “When you give the breast, you give your best”
  - World Breastfeeding Week T-Shirt, 2000: “Exclusive Breastfeeding Promotion”
  - World Breastfeeding Week T-Shirt, 2001: “Breastfeeding in the Information Age”
  - World Breastfeeding Week T-Shirt, 2002: “Healthy Mothers, Healthy Babies”
  - World Breastfeeding Week T-shirt, 2003: “Breastfeeding in a Globalized World for Peace and Justice”
  - World Breastfeeding Week T-shirt, 2004: “Exclusive Breastfeeding: The Gold Standard”