



MADAGASCAR

1997-2006

Total Country Population 15 million
Project Catchment Population 2–6 million
 at different phases of the program

Project Catchment Area 4 provinces with 10 districts in Antananarivo, 13 in Fianarantsoa, 2 in Tulear, and 1 in Mahajana

Country Profile

In Madagascar, one in 13 children dies before reaching the first birthday and one in eight dies before the age of 5. Malnutrition is an underlying cause in 54 percent of all under five deaths. Among 19 sub-Saharan African countries for which Demographic Health Survey data are available, Madagascar has the highest proportion of children under the age of three years who are stunted (low height for age). Malnutrition is often a result of poor feeding practices and complementary foods that are inadequate in quality, quantity, and/or density.

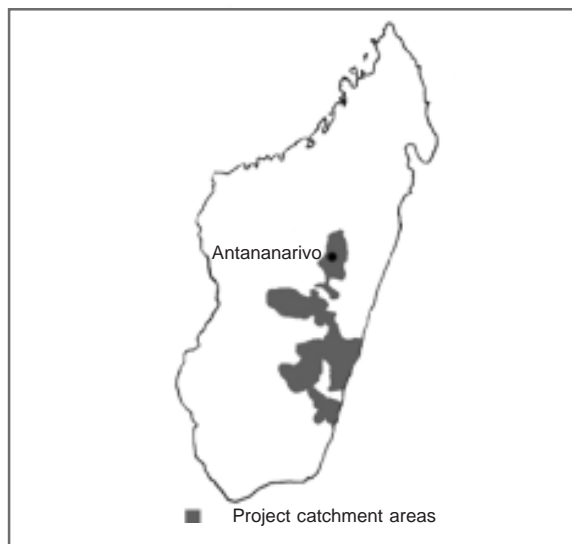
Program Design

From 1997–2006 the LINKAGES Project supported activities in Madagascar to address these problems. The project was funded by the United States for International Development and managed by the Academy for Educational Development. Four phases characterized the Madagascar program, described below.

Phase 1: National Policy Activities. For the first two years (1997–1999), LINKAGES provided support to the Ministry of Health for national policy activities, particularly the establishment and coordination of an intersectoral nutrition action group, known as the GAIN (Groupe d'Actions Intersectoriel pour la Nutrition).

Phase 2: District and Community Activities. In 1999 LINKAGES' focus expanded to the district level, with activities in ten districts in Antananarivo and Fianarantsoa, the two provinces with most of the Madagasy population. LINKAGES built its community approach on the Integrated Management of Childhood Illness (IMCI) strategy adopted by the MOH and supported by JSI, UNICEF, and WHO, as well as the BASICS I Project's communication strategy of promoting small "do-able" actions with easily recognizable health benefits. This allowed an integrated approach involving training, community mobilization, and harmonization of IEC messages and materials on child survival and nutrition. As part of the strong field alliance forged with JSI's reproductive health activities, the program also offered the lactational amenorrhea method (LAM) as one of the modern family planning methods.

The nutrition component of the strategy was based on Essential Nutrition Actions (ENA) that promote optimal breastfeeding, adequate complementary feeding with breastfeeding, nutri-



tional care of the sick child, and women's nutrition, as well as control of anemia, vitamin A deficiency, and iodine deficiency disorders. These seven actions were promoted at all possible contacts within and outside the health sector. In the health sector they were promoted during pregnancy, at delivery and immediate postpartum, during postnatal and family planning periods, during immunization and growth monitoring/well child sessions, and when the child was sick.

In 2001 the implementation phase was at its peak and covered 23 districts with about 6 million people. The program reached a significantly larger population through mass media, IEC materials used throughout the country, and training provided to non-governmental organizations (NGOs) working in districts outside of the program area.

Phase 3: Provincial Focus. In mid-2002 LINKAGES adapted to changes in the health sector and refocused its efforts to the provincial level. The project provided support for provincial nutrition action groups; promotion of self-learning ENA training modules; mass media, especially radio and television; Baby-Friendly Hospital, Clinic, and Workplace initiatives; pre-service medical and paramedical training; and training of private doctors. In early 2003, with co-funding from USAID and the Global Forum for Health Research, LINKAGES expanded this "provincial package" to three districts of the two coastal provinces of Tulear and Mahajanga covering a population of 1.4 million.

Phase 4: Added Emphasis on Complementary Feeding. In the final two years of the program (2005–2006), LINKAGES strengthened past achievements made in breastfeeding while intensifying the focus on complementary feeding. In addition to the provincial approach, LINKAGES carried out activities in eight districts of the two original provinces, updated complementary feeding messages, tested new complementary feeding indicators, and supported implementation of the national nutrition policy.

Program Components and Activities

The following sections describe LINKAGES' five main program components in Madagascar.

1. Policy, Advocacy, and Partnerships

GAIN

In 1997 LINKAGES supported the Ministry of Health (MOH) in establishing and coordinating an intersectoral nutrition group. More than 50 organizations joined the GAIN. Representatives of government ministries, donors, and international and national NGOs met to harmonize nutrition messages, exchange information including new program and scientific knowledge, share lessons learned from the field, reach consensus on micronutrient protocols, and develop a nutrition IEC and advocacy strategy. Five provincial GAINs were later established to decentralize the process of nutrition coordination and to disseminate and strengthen new national policies/protocols on nutrition.

Eighty national and 35 provincial meetings were held with participation from approximately 1,500 people at the national level and 900 people at the provincial level. Workshops or training sessions were also organized for GAIN members (80 at the national level with more than 750 participants and approximately 20 at the provincial level with 400 participants). The national nutrition policy was completed in April 2004 after a national validation workshop by GAIN members and the government representative. GAIN also played a major role in development of the national nutrition action plan and the national community-based nutrition program.

Profiles as an advocacy tool

One of the first GAIN workshops used *Profiles*, a process for nutrition policy analysis and advocacy. Participants collected, reviewed, and analyzed nutrition data and prepared advocacy presentations on the consequences of malnutrition for the country's health, education, and economy. Over time four *Profiles* presentations were developed (national, two provincial, and one on the benefits of breastfeeding). They were viewed by more than 1,400 legislators, government officials, health professionals, journalists, and NGO partners in addition to those who viewed the video version of the national presentation. In 2005 the national *Profiles* was updated with the latest Demographic and Health Survey (DHS) data, put on DVD in Malagasy, and translated into French for a broader audience.

Partnerships

Strategic alliances with technical and programmatic partners forged a common vision, allowed for rapid program expansion, and encouraged sustainable activities. Each partner offered a particular set of skills, outreach, and geographic coverage. Partners included the following groups:

Ministry of Health, Nutrition Unit. At the national and provincial levels, LINKAGES worked with the Ministry of Health and its Nutrition Unit along with other ministry partners. The Nutrition Unit invited major nutrition stakeholders to participate in development of the ENA approach from the beginning. At the district level, LINKAGES worked with MOH management teams, under supervision of the regional medical director, in the implementation of nutrition activities.

LINKAGES and Jereo Salama Isika. From 1999 to 2003 the two USAID-funded projects joined forces to achieve their objectives and increase program coverage. They employed two field agents—most of whom were medical doctors—in each of the 23 districts. These field agents assisted district-level MOH personnel in their training and supervision efforts and served as a link between community-based organizations and the MOH. The LINKAGES agents conducted training and mobilized, coordinated, and supervised nutrition activities in community and health facilities. The Jereo Salama Isika agents provided training and support in immunization, reproductive health, and non-nutrition aspects of IMCI.

Community-based Organizations and NGOs. Grassroots organizations implemented the vast majority of the community ENA activities. The project provided technical assistance, training modules, and materials to help them succeed in their efforts. In addition, LINKAGES assisted NGOs implementing USAID Title II programs and/or receiving USAID centrally funded grants.

Donor community. Technical partners included some USAID projects (such as MOST, Measure Communication, Health and Environment) as well as PSI, UNICEF, WHO, and the World Bank. They actively participated in the GAIN and shared costs for training, workshops, media, translation, and dissemination of materials.

Many years of GAIN workshops and meetings, advocacy, and partnerships resulted in a National Nutrition Policy across sectors and a strategy for its implementation. Late in 2005 the government established the National Office of Nutrition (ONN) to coordinate implementation of the policy. LINKAGES worked closely with the ONN in designing curricula for training community promoters in community-based nutrition and developing communication strategies for implementation of the national nutrition policy.

2. Capacity Building

One aim of the Madagascar program was to train as many individuals as possible in practical skills needed to successfully promote improved ENA practices within families. The following groups received training through the program.

LINKAGES and Jereo Salama Isika staff

Before initiating program activities, LINKAGES and Jereo Salama Isika field staff received training in the Essential Nutrition Actions, child survival, and reproductive health. They learned how to engage the target audience through trials of improved practices, negotiation of new practices with mothers, and storytelling. One of their primary activities was building the capacity of health workers and community group leaders in interpersonal communication skills.

MOH Service Providers

Primary health care providers and regional managers received training on all aspects of ENA including the use of the nutrition jobs aids. To comply with the MOH training policy, LINKAGES developed self-directed learning modules on these topics and distributed more than 1,000 copies. In 2006 LINKAGES updated the ENA module with new scientific knowledge on such topics as HIV and held a national training session on the updated module for all regional nutrition program managers.

Pre-service Training of Health Care Providers

To ensure that future health care providers in Madagascar are knowledgeable about breastfeeding and other Essential Nutrition Actions, LINKAGES and the MOH, with co-funding from the Japanese government, integrated nutrition into pre-service curricula of all pre-service training schools in the country (two medical schools and seven nursing and midwifery schools, including one private school). The revised nutrition curricula were introduced in the fall of 2001 in tandem with the incorporation of IMCI into the pre-service curricula of these same schools. LINKAGES provided materials, resources, and training on breastfeeding and ENA for professors and instructors in each school who then trained 131 medical doctors and 136 nurses, teachers, and instructors in ENA. In addition, 145 pre-service tutors and instructors were introduced to ENA through the self-training modules.

Baby-Friendly Hospital Initiative (BFHI)

As part of its advocacy agenda, LINKAGES assisted the MOH in the creation of supportive environments for breastfeeding. Activities included a GAIN workshop to identify strategies for revitalizing the Baby-Friendly Hospital Initiative, design and later updating of a monitoring tool for self-evaluating implementation of BFHI's ten steps for successful breastfeeding, development of four self-instructional training modules for facilities with maternities, and distribution of job aids and counseling cards to health personnel. By

2006 many of the 67 hospitals and 3 health facilities certified as baby friendly had carried out self-assessments and self-instructional training.

Baby-Friendly Workplaces

The project supported the MOH in its advocacy for the establishment of lactation rooms at the workplace and development of modules to increase the understanding of the importance and benefits of optimal breastfeeding and complementary feeding practices for both employer and employee. By 2006 11 workplaces were designated as baby friendly.

NGO Service Providers and Private Sector Providers

Staff from local Malagasy NGOs and international partners, such as Catholic Relief Services, CARE, and the Adventist Development and Relief Agency, participated in ENA training. Through Population Services International (PSI), LINKAGES trained private physicians in ENA, explained the nutrition jobs aids, and distributed health newsletters on nutrition and child survival.

Types of people and numbers trained

Health workers: 350 in ENA, 1,900 in breastfeeding & LAM, 2,086 in complementary feeding & feeding of the sick child, 1,100 in women's nutrition & micronutrients

Community health promoters: 12,073 in community mobilization

Community-level trainers: 252 in community mobilization

Members of women's groups: 4,496 in breastfeeding and LAM, 3,506 in complementary feeding and feeding of the sick child

NGO staff/GAIN members: 760 in ENA, 83 in complementary feeding & feeding the sick child, 286 on 'ENA during Crisis' [Trained NGO staff then trained 1,500 additional persons in ENA in their project sites.]

Private physicians: 500 in ENA

3. Community Involvement

Involvement of community members, families, and mothers was a key component of LINKAGES' intervention in Madagascar, as it brought improved feeding practices to the home. Local health promoters, community-level trainers (members of the community), and members of women's groups received training on technical topics such as breastfeeding and ENA, counseling and negotiation techniques, and use of IEC materials. Local leaders, local NGOs, and community volunteers participated in short, practical training on child survival, nutrition, and reproductive health. Nutrition volunteers were chosen who

were well regarded in their community or belonged to existing associations or groups affiliated with income-generating, health/nutrition, or social and religious activities. These women volunteers conducted various educational activities such as home visits and group discussions at the community health center, participated in national or commune-sponsored health and nutrition events, and promoted ENA behaviors in their daily activities and contacts with mothers and pregnant women.

4. Behavior Change Communication

LINKAGES used interpersonal communications, community mobilization, and mass media to promote improved infant and young child feeding and women's nutrition. Harmonization of messages from the national to the community level and saturation of these messages resulted in repeated delivery of consistent messages through multiple channels.

Home visits, group discussions, counseling and educational talks at health facilities, and informal encounters provided opportunities for health workers and community volunteers to negotiate with mothers to try out a new feeding

Mass media

LINKAGES reinforced breastfeeding, complementary feeding, and women's nutrition messages through the mass media. Articles on nutrition frequently appeared in the press, partly as a result of journalists' participation in GAIN workshops, technical updates, and special events such as World Breastfeeding Week. Key messages were conveyed through local radio broadcasts, national radio and television spots, traditional singers, and songs by pop singer "Poopy," Madagascar's musical celebrity and breastfeeding/nutrition ambassador. Local radio announcers received training to improve their ability to talk about ENA, child survival, and reproductive health issues during their broadcasts. Audio music tapes containing key messages were distributed to drivers of public transport vehicles.

Radio and television spots were widely disseminated with approximately 33,000 broadcasts by 20 radio stations and 2,500 broadcasts by television stations. The Malagasy pop singer wrote seven songs with nutrition messages and sang them during 60 concerts attended by over 300,000 people. She also promoted nutrition during press conferences, local community festivals, and World Breastfeeding Week.

practice and to support them in their efforts to adopt and maintain this practice. Resources such as counseling cards, newsletters, a women's health book, and nutrition job aids assisted them in their work. Village theater, festivals, and other community events served as channels for celebrating accomplishments, sharing information, and launching new activities.

5. Monitoring and Evaluation

To assess changes in infant and young child feeding practices and LAM use, and to establish the relevance of the ENA approach, LINKAGES conducted rapid assessments at program and control sites in October 2000, October 2001, October 2002, and November 2004. In November 2005, LINKAGES conducted an endline survey to be compared to the baseline surveys conducted by JSI in 2000 and by BASICS in 1996 for two original districts. The DHS results served as points of comparison. The program in Madagascar was one of the first to document improved breastfeeding practices and improvement in almost all of the Essential Nutrition Actions at a large scale. This latest finding confirms that by promoting a set of nutrition actions, each one reinforces the other, and vice versa.

The quantitative surveys included interviews with mothers of children 0–5 months old, 6–11 months old, and 12–23 months old. The results presented below are after five years (2000–2005) of program implementation and demonstrate significant improvements in practices as measured by key indicators.

Indicator	Baseline (%)	2005 Endline (%)
Timely Initiation of breastfeeding (within first hour)	34	68
Exclusive breastfeeding in first six months	46	70
Continuation of breastfeeding among children 18–23 months	52	71
IYCF Indicator among children 6–23 months old (continued breastfeeding, feeding frequency, and dietary diversity)	37 2003/2004 DHS; no baseline	81
Vitamin A supplementation of women within first two weeks after delivery	17	54
Iron folic acid supplementation among pregnant women	28	76
Additional meals among breastfeeding women	62	74
LAM use	2	24

For more information on the Madagascar country program, visit www.aed.linkages.mg and www.linkagesproject.org or contact aguyon@aed.org.



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