



*A Maman Lumière screening a child for malnutrition using the MUAC (Mid-Upper Arm Circumference) band*

The Extending Service Delivery (ESD) Project, funded by the United States Agency for International Development (USAID) Bureau for Global Health, is designed to address unmet need for family planning (FP) and increase the use of reproductive health and family planning (RH/FP) services at the community level, especially among underserved populations, in order to improve health and socioeconomic development. To accomplish its mission, ESD strengthens global learning and application of best practices; increases access to community-level RH/FP services; and improves capacity for supporting and sustaining RH/FP services. ESD works closely with USAID missions to devise tailored strategies that meet the RH/FP service delivery needs of specific countries. A five-year Leader with Associates Cooperative Agreement, ESD is managed by Pathfinder International in partnership with IntraHealth International, International Centre for Migration and Health, Management Sciences for Health, and Meridian Group International, Inc. Additional technical assistance is provided by Adventist Development and Relief Agency International, the Georgetown University Institute for Reproductive Health, and Save the Children.

## Maman Lumières: Empowering Mothers for Improved Health

### Background

Burundi is a country with a population over eight million, 46 percent of whom are aged 14 or younger. With over ten years of internal conflict, Burundi has faced significant challenges to its national health outcomes. Flooding, drought, and the rising cost of food have impacted national socio-economic and health indicators. As of 2002, 68 percent of Burundi's population lived at or below the poverty line (Central Intelligence Agency 2011). Malnutrition in infants and children under five is a significant challenge in the remote provinces of the north, and the national child mortality rate is 166 per 1,000 live births—ranking Burundi 9<sup>th</sup> in the world for child mortalities (UNICEF 2009). Overall, preventable conditions such as malaria, diarrhea, and the compounding effects of malnutrition are the main causes of child mortality and morbidity. Poor road infrastructure and mountainous terrain pose continuing challenges to accessing health services.

In 2009, to address Burundi's evident need for improved child health indicators, Pathfinder International-Burundi's Maternal and Child Health (MCH) Project began a pilot to implement the Positive-Deviance Hearth (PD-Hearth) technical approach in Muyinga province of northern Burundi. In partnership with Management Sciences for Health, the MCH Project works to treat malnutrition at the community and health facility levels, mobilizing community members to collaboratively address challenges related to malnutrition through local dissemination of healthful behaviors and prevention practices. The PD-Hearth approach uses positive knowledge, attitudes and practices to promote health through peer-to-peer and group messaging.

### PD-Hearth & "Maman Lumières"

The MCH Project began implementation of the PD-Hearth approach by engaging district, provincial, and health facility-level leadership around the issue of malnutrition in their respective catchment areas. Together, staff and leaders

identified common priorities for their areas related to nutrition, and set forth goals for training, including malnutrition screening protocols, screening results analysis skills, procedures for identified cases of malnutrition, processes for balanced menu preparation based on locally available foods, steps to implement PD-Hearth counseling sessions, monitoring and follow-up procedures for identified cases of malnutrition, and tips for scale-up of the intervention. The MCH Project provided all trainings through train-the-trainer sessions, enabling leaders at all levels to disseminate knowledge about PD-Hearth independently. Following the training, project staff supervised and supported trainees to conduct malnutrition screening activities for children under five in their area, and to conduct local inquiries for mothers exhibiting positive deviance in local communities. Such cases provided the selection pool to recruit *MamanLumières*, or “illuminating mothers,” who in turn became the community-based agents to administer the PD-Hearth approach in their local communities.

### **Maman Lumières**

“Maman Lumières” (ML) are those mothers who show positive behaviors in their community. MLs are mothers whose children are well-nourished and monitored for immunization, and who themselves practice proper hygiene in their homes and demonstrate health seeking behavior. Once selected, MLs are trained to implement behavior change interventions in line with the PD/Hearth approach within their communities, as well as to provide counseling in family planning, malaria prevention, hygiene, and healthy pregnancy practices. During screening activities, children diagnosed with severe acute malnutrition are referred to the health facility for treatment. Those children with moderate acute malnutrition are enrolled in a twelve day in-home “foyer d’apprentissage et de rehabilitation nutritionnelle” (FARN) session in which malnourished children are administered nutrient-rich foods and high-caloric supplemental meals to raise their weight. MLs conduct FARN sessions in groups of six to 14 children and their mothers, and all sessions bring essential interventions into the home setting, focusing on relevant, actionable skills-building for mothers to treat their children’s malnutrition, using each village’s available resources and foods. FARN sessions provide visible results in a short time, enabling mothers to see the benefits of the process upfront, which in turn supports mothers’ buy-in to implement the project’s promoted healthy practices beyond the FARN session, thus preventing future malnutrition cases in their homes.



*Women and their children participate in a PD-Hearth FARN session.*

### **Promising Early Observations**

Though the project is in its early years, it has already seen signs of success. In total, 489 MLs in Muyinga have been trained. In 24 months, the program has screened 80,531 children. Among them 2,285 were referred to health centers for treatment of severe acute malnutrition, and 3,977 have been enrolled in 411 FARN sessions. Among the children enrolled in FARN, 3,838 have successfully gained weight.

The project’s Muyinga pilot has also seen improvements in other indirectly related health indicators. In one FARN session, 12 out of 15 mothers in attendance adopted a family planning method. The chief of one health center reports that the number of women coming for family planning services due to referrals from the light mothers has increased— from 2009 to 2010 the utilization of family planning services at the health facility rose 18 percent. Pit latrines have also

been constructed in many of the villages since the start of the program, and several women are reporting that keeping their home clean and practicing regular hand washing per the program's messaging efforts has significantly reduced the number of dysentery and diarrhea cases in their families. Increases in service uptake at the health facility level for immunization, prenatal and postnatal care have also been reported by health facility staff and coordinators. At the district level, the District Director of Muyinga has reports positive changes: "The knowledge of FARN has been shared down to the community level and ...the amount of malnourished children [seen at health facilities] has reduced". To show support for the use of locally grown foods for the project, one colline (village) administrator has also donated land for the sole use of growing foods for the FARN sessions.

Perhaps most importantly, mothers within and beyond the program have shared their support for the program. Yvonne, a young woman from the Kagari colline, is a testament to the success of the MCH Project model as a behavior change agent 'gone viral.' Although she was not enrolled in a FARN session with her child, she affirms: "I hear from my neighbors who are in the project and I am learning from what they are doing and copying their practices. In this way the mothers in the project are coming back to the village and sharing what they have learned through their testimony." Many mothers report that their involvement with the project has influenced their behaviors at home and that, since adopting the project's recommended practices, they find fewer illnesses within their households, feel healthier overall, and that their children are growing and able to play again.

Efforts to sustain quality are ongoing throughout the two provinces. Mothers are now organizing local civilian associations and opening bank accounts to save funds in support of nutrition promotion. Mothers' civil associations have also begun to procure goats and other livestock as part of revenue- and food-generating activities for their communities, and are partnering with local organizations to develop further opportunities for income generation, including through agriculture and microfinance.

### **Next Step: Scale-Up**

The early successes of the MCH Project have resulted in the Ministry of Health's request for scale-up at the national level, followed by the Provincial Director of Kayanza's request for immediate scale-up in Kayanza province. In response, Pathfinder began scale-up in Kayanza in December 2010. As of May 2011, 17,237 children were screened and 1,111 of those screened were enrolled in 130 FARN sessions. From those enrolled in the initial FARN sessions, 1,022 have gained weight. Steps for scale-up in additional communes are currently underway.

At the national level, the MCH Project model's PD-Hearth approach has been approved and included within the national protocol for the management of acute malnutrition. In addition, the training manual for the project's training of trainers has been requested for use at the national level and is in the process of being standardized. The project continues to support Burundi's national nutrition protocols. Scaling-up of the FARN sessions is ongoing, with coordination from the WHO, World Food Program, and UNICEF, among others.

### **Works Cited**

Central Intelligence Agency. *The World Factbook- Burundi*. May 26, 2011.  
UNICEF. *Burundi*. March 5, 2009.