BPD

Partners in Reducing Chronic Childhood Malnutrition: Saving Lives and Building Healthy Futures in Rural Guatemala

ABPD field staff monitor the height and weight of children pre- and post-intervention to track malnutrition rates and project effectiveness.

As sister organizations, BPD and Asociación BPD (ABPD) are working together to address the principal needs of rural Mayan communities in the Department of Chimaltenango. Based in the US, BPD focuses primarily on advocacy, education, and fund development to support ABPD's work in the field. On the ground in Guatemala, ABPD engages in grassroots development initiatives in Kaqchikel villages, working with local families to mitigate the devastating impacts of poverty on children's health.

Approximately 80 percent of the population in Chimaltenango is indigenous Kaqchikel. Throughout Guatemala, social and economic marginalization has left the indigenous worse off than the rest of the population. This pattern holds true in rural Chimaltenango where between 50 and 75 percent of Kaqchikel children are suffering the dire consequences of malnutrition. In 2012, BPD and ABPD developed a joint strategic plan to ***reduce the rate of chronic malnutrition among these children, putting a new generation on the road to health and well-being.***

Dear Friends and Supporters,

I am very happy to return to BPD as President of the board, having served on the board twice in the past. On behalf of the full board, I'd like to recognize Victoria Ward's leadership as Board President for the past two and a half years. Thank you, Victoria!

This edition of our newsletter will give you a comprehensive view of our exciting, integrated program in Guatemala, which has six pillars – water and sanitation, nutrition education, food security, family planning, community empowerment, and disaster risk reduction. Because they are complementary and mutually reinforcing, these pillars help to reduce chronic childhood malnutrition, giving a new generation the opportunity to reach their full potential.

During a recent trip to Guatemala, I went to several partner villages. I visited homes where I observed clean water flowing from newly installed taps and saw food being cooked over smoke-free stoves. This new community infrastructure reduces children's exposure to life-threatening diarrheal and respiratory diseases, helping protect children from malnutrition. I was inspired to listen to mothers talk about the importance of their home gardens as a source of better nutrition for their young ones.

We are proud of our fifty-year history of support to rural, indigenous villagers in Chimaltenango. There is no doubt about it – we have been successful because of your valuable support. Our continued success in reducing childhood malnutrition depends on your continued participation. Please join us in the battle against childhood malnutrition by becoming a monthly donor, joining our leadership circle, donating securities, telling your friends and neighbors about our work, or organizing a fundraising event where you live.

We thank you for all that you are doing to make this work possible.

Muchas gracias!

Patricia O'Connor

What is chronic childhood malnutrition?

Chronic childhood malnutrition is a debilitating consequence of poverty. Stunting is the telltale sign of chronic malnutrition – but its consequences are far more dire than poor physical growth. It causes cognitive impairments, which are often irreversible, preventing children from reaching their full potential as they grow into adulthood.

How does chronic malnutrition happen?

Chronic malnutrition happens over time and is the result of multiple factors. We can group these factors into three constellations:

- **Nutrition and Health.** This set of factors focuses on the period we call the "first 1000 days" – the short window that includes pregnancy and the first two years of a child's life. In rural Guatemala, low birth weight is associated with poor nutrition during pregnancy. Other factors that influence health and nutrition outcomes in an infant or toddler include breastfeeding practices, whether the child suffers frequent bouts of disease, and the quality of their diet and nutritional intake through age two.

LETTER FROM THE EXECUTIVE DIRECTOR

Dear Friends of BPD,

I hope this letter finds you well and ready to hear good news from Guatemala! We are pleased to elaborate on the nuts and bolts of our work, and share a recent success story.

The village of Saquiyá, located in Patzún, Chimaltenango, is an example of what happens when we approach our work in an integrated fashion and devote the time it takes for long-term change to occur. This means that we have to have a continuous presence in these villages for several years so this change can take root. Reducing the rate of chronic childhood malnutrition requires an intensity of focus on each of our components.

Families in Saquiyá now have access to potable home **water,** gray water filters for drainage, latrines and efficient stoves. In terms of stoves and their impact on health, the World Health Organization recommends a carbon monoxide level between 3 parts per million (ppm) and 9 ppm. With improved stoves, the average ppm in the homes in Saquiyá is down from 39ppm to 5ppm. Think of the health impacts on women and children who spend the majority of the day in their kitchens! Already, improved sanitation, our **food security** projects, and our **nutrition education** have had a dramatic impact on childhood malnutrition rates, reducing them from 52 percent to 38 percent as of March 2013.

The increase in the use of **family planning** methods needs further study, though initial evaluation indicates that the usage has doubled, from 20 percent to 43 percent. The **empowerment** of women and youth will take some time, but we are excited at the early results nonetheless! While our youth have not yet joined any community committees, we are pleased to report that nine women are now members of local committees, up from zero.

YOU are important to our success in Saquiyá – and in other communities that are ready to start projects with us once we have the resources in place. Please help us to help them. Thank you for your support!

Sincerely,

Paco Enríquez

- **Environmental.** The lack of clean water and poor sanitation in most homes leads to high rates of diarrheal disease. Indoor air pollution causes a high incidence of respiratory disease. Young children spend large quantities of time with their mothers in closed, unventilated kitchens where food is cooked over open fires. Respiratory and diarrheal diseases compromise children's immune systems and reduce nutrient absorption. Other environmental factors include limited access to productive agricultural land, and the adverse effects of climate change on production resulting in crop destruction and pre- and post-harvest losses.
- **Empowerment**. Centuries of social, economic, and political exclusion have left Mayan communities in a disadvan-

taged situation of chronic, grinding poverty. As people organize, they become agents of change in their communities: they can create effective relationships with their local governments, address their lack of access to basic health services, and stimulate environmental changes that impact their health and well-being. The ability of women to control the number and spacing of their children is an example of powerful decision-making that results in autonomy for women and creates healthier families. However, there is a dearth of access to family planning in these communities.

So, what's our approach...

Our evidence-based approach is grounded in a synthesis of international research, results from previous project evaluations, inputs from members of local community development councils, and advice from other key informants.

We are:

- Focusing on the first 1,000 days. The consequences of malnutrition during this period are often irreversible. Good nutrition for mothers and children during this time period matters.

- Emphasizing best practices related to exclusive breastfeeding for the first six months, followed by the gradual introduction of nutritious solid foods, with continued breastfeeding for an additional 18 to 24 months.

- Providing potable water and improving household hygiene and sanitation. Access to water and sanitation helps to reduce water-borne and acute respiratory diseases that contribute to malnutrition.

- Understanding air quality. Indoor air pollution (smoke from cook stoves) negatively affects the absorption of nutrients.

- Increasing the capacity to produce basic grains and foods that are rich in micronutrients so that the most vulnerable people benefit from dietary improvements.

- Introducing more animal proteins to children and pregnant women through our goat project. Families with children under 5 receive a milking goat. The family in turn offers its first female offspring to another family facing the same conditions.

- Creating sustainable change. Women's active participation in economic decisions, household food production, and health care choices for their young children can all help to reduce malnutrition.

… and how are we doing it?

We know what we have to do and why, so the next step is to do it! We focus on six integral components, each as vital as the other. Standing alone, no component can deliver its maximum benefit; when implemented in coordination, these sustainable practices will decrease chronic malnutrition and create healthy communities over time. We are not looking for short-term impacts. Rather, we work with individual communities who want long-term, sustainable change, helping them develop the capacity to achieve it.

1. Increase access to water and household hygiene and sanitation.

We work with communities to bring running water to every home, install gray water filters and ecological latrines, build

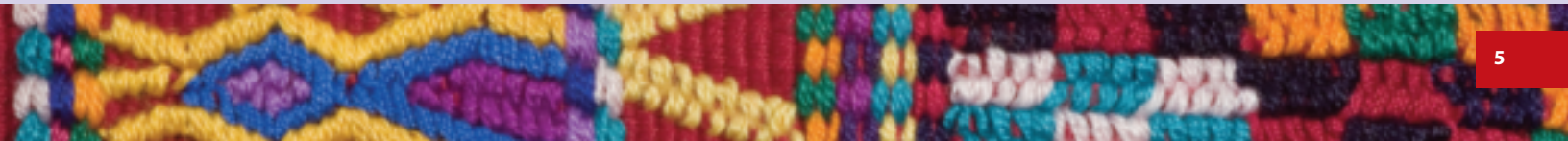
improved cook stoves, deal with adequate disposal of solid waste, and implement our health education plan to ensure that families adopt appropriate hygienic practices such as hand washing.

Potable water is an essential component in our fight against malnutrition. Water-borne illnesses such as diarrhea can be fatal, especially to children suffering from chronic malnutrition. Sanitary and hygienic homes offer healthier environments for families. For this reason, we educate families on the importance of hand washing, using latrines, and removing waste water from homes via our gray water filtration system. Potable water and efficient stoves lessen the need for firewood, thereby decreasing deforestation and erosion. Water no longer has to be boiled and less firewood is needed for cooking. Improved indoor air quality due to efficient cook stoves saves lives; the World Health Organization reported 4.3 million deaths in 2012 that were attributable to indoor air pollution, 19,000 in the Americas alone.

Women and children are the traditional water bearers and wood gatherers in these communities, spending several hours a day on these tasks. Without these responsibilities, girls can stay in school, and women have more control over their time. Keeping girls in school is a long-term objective in increasing women's autonomy in the home. As women are empowered to make decisions about time allocation in the home, birth spacing family planning, and the use of resources, nutrition improves for the whole family.

2. Ensure food security.

According to the United Nations, Guatemala is the second most vulnerable country in the world to global climate change; this makes work on adaptation indispensable. We are introducing ecologically sustainable agriculture techniques to



improve the production of basic grains such as corn and beans through the use of more sustainable fertilizing practices; improving soil quality and soil preservation; reducing harvest-related risks; and using seeds that are less susceptible to the effects of climate change. Goats are being introduced for their milk, a good source of animal proteins. At the same time, it is important to improve storage of grains and the post-harvest management of crops to reduce losses. We are piloting new approaches for storage of basic grains including the use of rotating funds, enabling farmers to buy food from the open market when prices are low and consume their stored grain when prices are high. We are also introducing family gardens, which ensure a low-cost and easily available source of vitamins through fruits and vegetables with surplus being sold for profit.

How you can help:

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Binghamton, NY 13902

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Contact: Jennifer Turck at jturck@behrhorst.org

The disastrous impacts of climate change result in erosion, the destruction of crops, and a need to nurture plants that can weather extremes. New techniques to maintain and increase food production levels are vital for survival, otherwise food sources are compromised. Increasing production rates of basic grains and the availability of fresh vegetables from the family gardens simply means there is more good food in the home.

3. Nutrition education.

Participatory community education and capacity-building methods focus on nutrition during pregnancy, exclusive breastfeeding for 6 months, the introduction of complementary foods after 6 months of age with continued breastfeeding until the child is at least 2 years, and how to use locally available food to prepare nutritious meals. Women are taught adequate and hygienic food handling as part of this process. Nutritious snacks using traditional foods such as amaranth are provided at all of the community activities. To facilitate mothers' participation, we train local youth in early stimulation techniques, which the youth then use to care for children while their mothers attend the workshops.

By the time we leave a community, the vast majority of participating mothers practice exclusive breast-feeding. Up to 80 percent of participating families have incorporated new nutritional foods into their diets, including vegetables and meat, at least twice a week.

4. Increase access to family planning.

The right to determine the number and spacing of one's children is a fundamental right and is also enshrined in the Guatemalan Constitution. The possibility of having a smaller family with well-spaced births has both direct and indirect effects on nutrition and the social development of children less than 5 years of age. High birth rates contribute to large total family size and closely spaced births, and are an indirect contributor to chronic malnutrition. The family planning component of the program is integrated into all of our training activities. Nearly one third of married, indigenous women of reproductive age have a self-reported, unmet need for contraception.

The percentage of families who use family planning methods doubled in the communities where we provided training. When families can determine the number and spacing of their children, the youngest and most vulnerable in the family have greater access to good nutrition. Mothers are healthier and have more control over their own lives, thereby increasing their autonomy through the power of decision-making.

5. Mobilize and empower communities to achieve local development.

BPD strives to mobilize the entire community to address health issues. We are especially focused on empowering women and youth to participate more fully in the local development process. We use a capacity-building methodology to analyze community needs and define the local activities and partners to solve the problems. Graphics for non-literate community members are used to stimulate thinking, engage people's creative abilities, and develop solutions they can apply to their everyday living – both in their individual families and collectively in their communities.

This is the component that makes our projects sustainable. When women achieve autonomy in the home, and when a community has a sense of power over its future, then the integrated components come together. This paradigm shift in the minds of the women, youth, and men in the community is what results in long-term improvements to the health and well-being of the community.

6. Assist communities to respond to natural disasters and reduce their vulnerability to future disasters.

Climate change is devastating. It is getting worse and communities all over the world are struggling to find ways to mitigate its impact. We cannot talk about nutrition if we don't have a plan to ensure that basic human needs can be met as we confront the increased frequency and intensity of floods, storms, heat waves, and drought. We work with communities that suffer from flooding and other natural disasters. When necessary and appropriate, we distribute food and other relief supplies, and rebuild damaged water systems, latrines, schools, and other small infrastructure. In order to strengthen community resiliency to recurring disasters, we facilitate disaster risk reduction (DRR) activities, drawing on and adapting existing tools and methodologies that have been developed to put this approach into practice.

DRR activities are usually focused on specific locations, addressing the particular vulnerabilities and capacities of the community, and its culture and processes. Activities include collecting/managing the information and data that has been gathered, educating people about their risks, and building people's capacity to devise and implement risk reduction measures. This proactive approach decreases community vulnerabilities and preserves its necessary infrastructure, saving time and lives in the process.

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Asociación BPD staff is on the ground, carrying out this vital work in their capacities as Executive Director, Program Director, Accountant, Administrator, Monitoring and Evaluation Specialist, Social Worker, Agronomist, Nutrition Educator, Sanitation Technician, and Housekeeping and Maintenance Personnel.