



BPD



Water: Local Action to Meet Future Challenge

By Zoe Kopp, BPD Vice President

The villagers that Behrhorst Partners for Development work with see the need and immediate benefit from water projects. “Now we do not need to walk so far for water,” the women often tell us. What they may not always understand is how these projects are helping them prepare for further challenges their children will face. For example, it is estimated in 2025 Guatemala will only produce 40% of the water it needs.

Guatemala is lucky to have its current water resources—38 big rivers and seven large lakes. Yet it barely has enough water now for its rapidly growing population. The water available is not drinkable without treatment as it is contaminated by industrial waste, sewage and pesticides. Because environmental protection in Guatemala is lax, entire lakes, like beautiful Lake Amatitlan, are dead. In the Mayan Highlands, where BPD works, there is plenty of water, sometimes too much in the rainy season; however

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LETTER FROM THE PRESIDENT



Vegetables grown in family gardens are used to increase the nutritional value of household meals.

Dear Friends and Partners of BPD,

In recent months you may have seen headlines or read news articles about the food crisis and food insecurity in Guatemala. The World Health Organization defined food security as existing “when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life.” WHO explains that food security is built on three pillars:

Food availability: sufficient quantities of food available on a consistent basis.

Food access: having sufficient resources to obtain appropriate foods for a nutritious diet.

Food use: appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation.

The issue of food security is real for too many residents of communities served by BPD. In this issue of the newsletter you will read about some of the causes that have increased the severity of food insecurity in Guatemala. You will also see statistics about acute and chronic malnutrition that highlight the magnitude of the problem. In addition, you will read about strategies BPD implements to address this complex community development issue. Our Guatemalan staff teach women relevant ways to increase the nutritional value of household meals and you’ll read how Vidalia, a mom in the community of Cruz Nueva, incorporated changes in the meals she prepares for her family. In addition to providing education, our staff help prepare and serve nutritious meals to children and women who attend the Strong Family Centers. Other staff work with community members to plan and construct community water systems that provide each family with access to running water and increase access to potable water. Still other staff work with women and men on projects to increase family income. All of these strategies, and others, are vitally important to address food insecurity and improve the health and well-being of residents of rural Guatemala.

As we enjoy the bounty of summer harvests, let’s also remember those for whom availability, access and appropriate use of food is less certain. We are grateful for our donors who make it possible for BPD to tackle food insecurity in the rural highlands of Guatemala. Together we are making a difference for women like Vidalia and their families.

Sincerely,

Narra Smith Cox
BPD Board President





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there is not enough in the dry season.

Luckily, there are underground water sources in the Highlands which can provide communities with their water needs. These water sources need to be protected from contamination at the source as well as in the village. BPD educates the local water committees on how to protect the water source and maintain and test the water system's quality. Building latrines and education on their use is also an important part of this process. We also partner with the community to build gray water filters; this allows water that has been used for washing to be safely diverted from homes. Efficient use of water is important for today and the future.

Deforestation is another issue in Guatemala as trees help maintain water levels. Trees also help reduce droughts and floods. Every year, 50,000 acres of forest are lost in Guatemala and 60% of the forests have been lost during the last 50 years. Deforestation in the Mayan Highlands has led to many devastating mudslides in recent years. BPD partners with communities to improve agriculture and provides efficient cooking stoves to prevent deforestation. We also partner with villages in reforestation and education on the importance of maintaining forests for the health of the community.

BPD Partners on the Basics to Plan for the Future



Guatemala is facing a nutritional crisis, especially in the Guatemalan Highlands where as many as 80% of children are chronically malnourished. This is one of the highest rates of chronic malnutrition in the world. Our water and sanitation projects are vital to good nutrition as clean water, sanitary latrines and clean hands mean reductions in gastrointestinal disease, a major contributor to malnutrition in children under age five.

By working with communities, we use our partnership



Stoves like these use 60-70% less wood than traditional open cooking fires.

as a way of empowering communities so they are better able to meet their future needs. The communities learn about financial and technical resources that are available locally. They learn about the strength of community from working on projects together. Water and other community projects help develop leadership capabilities in both men and women. ■

The breakdown of costs on this sign shows how BPD's funds are matched by money and efforts of the local municipal government as well as the community itself. Partnerships are key to meeting current and future needs





Vidalia's Story

Vidalia Hernández, mother to six children, was born in 1967 in the village of Cruz Nueva. Ever since she was young, she has liked to be involved in different kinds of activities at her village and in 2005 she was elected to the water committee. After the water project was approved and built by ABPD, Vidalia became interested in learning new things to improve her family's and her community's quality of life.

In 2006, the James Hogan Strong Family Center launched activities in this village and Vidalia was elected president of the Center's board. She is now one of the trained promoters helping ABPD design and implement programs and projects. She said, "Before attending the Center, I didn't know that women could be leaders in their homes and villages. Some of my neighbors had the potential to be leaders, but there were no places to develop their skills." Now she thinks that through the training, educational talks and activities developed at the Center, women have an opportunity

to become leaders. She also says that the women have improved their families' personal and home hygiene. For example, in the past, grandmas used to say that it was not good for a woman to take a shower when she was having her period as it would cause colds. Vidalia now knows that such a belief is not true. In addition, Vidalia has improved her family's nutrition, cooking balanced and nutritious recipes using a variety of vegetables harvested at her own family garden.

Although she was a victim of domestic violence and lost her husband many years ago, Vi-

dalía never gave up hope for a better life. She continues struggling for her children, getting involved in different village committees to foster development projects to improve her community. ■



BPD donors are saying...

I was a member of the first tour group in the mid-80s. It was a wonderful experience, and I wanted to do it again, but was not able to do so. And now, at age 92, I am sure it isn't possible. But as long as I can, I will support BPD. I was so impressed by the people in the villages and the work Carroll [Dr. Behrhorst] was doing. I knew him from St. John's College in Winfield, Kansas.

—Marie (Billig) Stephens





Food Security Uncertain in Guatemala

by Paco Enriquez, ABPD Executive Director.

In 2010 there were many weather disasters in Guatemala that affected the whole country. The rains started in May with tropical storm Agatha followed by unusually high amounts of rainfall during the remaining rainy season. The season ended with a bang in September with two tropical depressions that overwhelmed the country's resources to deal with the effects to infrastructure and crops.

This kind of excessive rain causes floods near the coasts and mudslides in the Highlands. Chimaltenango (where ABPD works) is located in the Guatemalan Highlands, so normally mudslides occur during the rainy season, damaging crops and closing roads. However, during the last few years the effects of these massive rainstorms and hurricanes have had a bigger than usual impact on the infrastructure—roads, bridges and schools—and on the population's health, nutrition, living conditions and livelihoods.

Most of the rural population in the Chimaltenango area rely on agriculture not only to feed their families by growing corn, beans and other basic crops but to provide employment on large private or industrial farms. Even in the best of times, most rural Guatemalans have barely enough land to grow sufficient food that will last until the next crop.

According to a 2010 United Nations World Food Program report, 49.3% of Guatemalan children under age five suffer from chronic malnutrition. UNICEF estimates that the rate among rural Mayan children is as high as 80%. Guatemala has the 4th highest rate of chronic malnutrition in the world and the highest in Latin American. Just a small decrease in food intake can very quickly lead to acute malnutrition, especially in children. Nutritional status is also affected by limited access to safe water and sanitary latrines, the large size of families and the lack of nutritional knowledge.

Situation after 2010 tropical storms

When tropical depression E11 hit Chimaltenango last September the corn and beans were almost ready to harvest, leaving no time to replant any of the damaged crops.



Village residents who helped restore infrastructure were provided with corn in a food-for-work program.

After an assessment by ABPD and Oxfam, we found that people lost about 60% of their corn crop and 100% of their beans. These two crops form the base of rural Guatemalans' diet. Other farmers who have a bit more land also lost their vegetable crops. People had some corn left from the previous harvest, but their main concern was what would happen after January when their stock ran out. We also found very poor hygiene conditions in the communities as the water systems and latrines were damaged. These conditions lead to chronic malnutrition which is worsened by gastrointestinal diseases.

Emergency project

With Oxfam's economic support, ABPD worked with nine communities where there was substantial damage to homes and infrastructure. We focused on two areas: hygiene/sanitation and food security. Working with local residents, we repaired all the damaged water systems and provided safe water to the communities by installing chlorinators. Staff gave educational talks to families about safe water and hygiene and provided hygiene kits. To address food security, staff made presentations about nutrition, but primarily ABPD administered a food-for-work program.





Thanks to funding from Oxfam, water systems damaged by Tropical Storm Agatha were repaired in nine communities.

Residents who helped restore basic infrastructure such as roads or schools were provided with corn during the five months it took to finish repairs. In normal times, people have to buy corn for about five months every year. So, between the corn we provided and the money they saved by not having to purchase corn, their situation was about the same as it is most years. With the money saved from not buying corn, families had the resources to buy protein and fat to round out the family diet. The project involved over 900 families in nine villages in the municipalities of Patzún and San Martín Jilotepeque. However, main food security problems were in Patzún, so the food-for-work program was focused there.

Results

We constantly monitored the project and conducted a final assessment to measure its impact once the project was almost complete. This assessment revealed that the sanitation and hygiene conditions have dramatically improved in the communities because of the access to safe water. The population reported a significant reduction of gastrointestinal diseases which we know will have a positive impact on the nutritional status of the population.

There was also a big impact from the repaired infrastructure. Once the roads and schools were repaired and cleaned, people were able to travel to markets and jobs and children were able to attend school. The availability of corn

and other food returned to normal levels with no reports of acute malnutrition in these communities. However, food prices have skyrocketed in the whole country, especially for corn and beans, Guatemalan diet staples. The government was expecting a decrease of the prices in spring because of good harvests on the coast (where there are two crops a year) but prices are still high and predicted to go higher. In Chimaltenango, the corn price this year is 200 quetzales (about \$27) a quintal and an average family of six needs 1.8 quintals a month.

The only source of income for most families in this area comes from working on commercial farms two to three days a week, where they earn an average of 300-400 quetzales (\$35-50) a month. Women can sell some traditional weaving, adding an additional 150 quetzales to the family's income. This means that 65-90% of their income is used to buy corn leaving little money for other food, school fees, medicines etc.

Given the current situation, it's possible that a food crisis could happen during the next few months, several months before the 2011 crop is harvested. There are some solutions but most of them are long-term, such as improving agricultural techniques, providing family planning methods, diversifying sources of livelihoods, investing in education, improving diets, etc. In the meantime, people need to eat. Apart from food-for-work or cash-for-work programs other short-term solutions are not apparent. However, we will continue to monitor the situation, and



network with government agencies and other non-governmental organizations to help ensure that people get adequate nutrition. We promise to share information with you on our web site at www.behrhorst.org and on our Facebook and Twitter pages. ■

Paula Latshaw provided funding for a school in El Quetzal in memory of her Aunt Nadine Alexander, who was a teacher for over 50 years. Thanks to her generosity, these children (shown in their makeshift school), will soon be attending a new, well-constructed two-room school that provides protection from the elements.



Marty Zumbiel, age 7 is almost as tall as this adult Mayan woman. His sister Elizabeth, age 10, is taller and their mother, Sonya is taller than almost all Mayan men.

Facts about Guatemalan Health and Nutrition

- Life expectancy: 65 males, 74 Females
- Under age five mortality: 45 per 1,000 (compare to 7 in the US; 3-4 in most Western European countries)
- Primary causes of death for children ages 1-5: respiratory and diarrheal diseases
- Percent of chronic malnutrition in indigenous children: 70-80%
- Ranking of chronic malnutrition in children: 4th highest in the world; highest in Latin America and the Caribbean
- Growth Stunting: 80% in rural areas
- Average height of adult Mayan: 4'6" females, 5"2" males
- Percent of minimum wage needed to cover the basic food basket: 75%
- Poverty Rate: 70% countrywide, higher in rural areas

Sources: UNICEF and the World Health Organization (WHO), 2011



Newsletters are occasional publications of Behrhorst Partners for Development, 2411 S. Superior St., Milwaukee, WI 53207. The non-sectarian, nonpolitical organization is a network of friends dedicated to continuing the labor begun by Dr. Carroll Behrhorst in 1962, promoting health and development, especially among the rural poor of Highland Guatemala. Tax-deductible contributions to Behrhorst Partners for Development are forwarded directly to projects, except for the minimal amount required to provide for advocacy.

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Community members are saying...

The stoves contribute to diminished firewood consumption and there is no more smoke in our homes. Running water is a great benefit for our families because it is cleaner than the water we obtained from the river. The gray water filters have been very useful—now we don't see standing water at our patios anymore. ABPD its different than the others organizations. We like the way they work. We trust them. —*Gonzalo Castellanos - Chonoxté*

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Funding from Feed the Dream supports activities in eight Strong Family Centers that employ several strategies to chronic malnutrition in children under age 7 and women of child-bearing age. These women are learning new recipes that that incorporate nutritious vegetables to improve the health of their families.

