

Water, More Water

A simple question from a foreign student to a receptive Rotarian volunteer led over an 8-year period to the marshaling of the resources of 22 Rotary clubs, Rotary International, Water Mission, and Miracles in Action to provide:

- Clean water to 5,000 persons in 750 homes;
- Sanitary facilities for the same 750 homes;
- A 6-classroom school building;
- Smokeless cooking stoves;
- Eye doctor and dentist visits, wheelchairs, scholarships, and more.

Continue with Sally Smith's heartfelt story

WATER, more WATER

by Sally Smith

When we arrived at our destination it was in the foggy darkness of night. We, the Rotary Club of Estero Florida members, happily climbed out of the tightly packed rented SUV with relief to stretch our legs. We had only stopped once in that grueling 9-hour drive, in beautiful Huehuetenango, to use one of the very few clean public usable toilets along the way from Guatemala City to Santa Eulalia.

We took in a surprisingly cold breath of fresh air in the fog that had descended on the village. We were in Guatemala... That is in Central America... Near the Equator, right? Oh, right, I forgot! During that long drive we had climbed to above 10,000 feet above sea level to arrive at this remote mountainous indigenous village of Sataq'Na in Santa Eulalia, Guatemala.

We were welcomed in the only suitable hotel but it had no heat and no hot water. In the morning we were greeted by the fog lifting over the mountains, a view of the spires of the local church, the smell of Guatemalan coffee, and the density of impoverished homes that filled the hillsides. Some were built with 2 x 4's with no fillers between the seams; some of mud and dung; the luckier ones with concrete blocks. We were then swarmed by happy leaders, townspeople and children, all talking rapidly in their indigenous language of Q'anjobal and Spanish.

“Agua, mas agua”, (Water, more water) someone shouted.

We arrived here with that mission in mind. Their closest water sources were a river 1,500 feet below them down a steep wooded terrain; or an antiquated, insufficient 1 ½ inch pipe system carrying water from an upper spring to a holding tank the size of your dinner table. Without enough water and no pumping system, the local community leaders had devised a method for sharing the precious commodity. Townspeople from each of the 13 villages surrounding Santa Eulalia had their turn for water reception to a public tap once every three days. However, during a period of drought, the availability of the water was even more restricted.



Mothers and daughters made the round trip down the mountain dirt path to the river, 1500 feet below, where they washed their laundry, and the livestock animals eliminated and soaked themselves. The only alternative to drawing water from the public tap was an undesirable and physically burdensome trek. Each mother then filled a three-gallon jug with water from the polluted source to balance on her head while carrying her laundry in a burlap sack tied to her chest and her baby wrapped in swaddling on her back. The daughter carried a full one-gallon jug on

her head holding the hand of a younger sibling in her free hand as they climbed back up the mountain. Often this trip was made twice daily.

Poverty abounds in this country and in too many others. Guatemala does not provide social or economic assistance. Public education outside of the large cities ends at 6th grade. Sadly, very few employment opportunities are readily available for those who are uneducated.

So, of all the impoverished areas we witnessed along our arduous drive, you might ask: Why Sataq'Na?

Well, I had been volunteering at the local Literary Council in Bonita Springs, Florida teaching English as a second language. My students were from Mexico, Guatemala and countries of South America. I jumped excitedly at the opportunity to visit a different region of Guatemala for a week with Rotarians and a church group, both from Gainesville, Florida. It was a dental and construction repair trip. I was so taken in as I encountered these humble, loving, appreciative folks that I shared my experience and photos with my students.

One of my students, Julio Mateo of Sataq'Na, raised his hand and asked, "What do we have to do to get our village on the Rotary list for help? We need Water, more Water!!" This plea was not even asking for clean water!! Just a reliable source of water!! The water was not sanitary. During our trip the Rotary members had to rely on bottled water.

That was enough to convince me..... At our next club board meeting, I presented the project request. They eagerly accepted the idea of helping, but naturally we needed to investigate and evaluate the full scope of need. I offered to return there and report back. By the time this trip occurred, Julio Mateo, my student, had moved back permanently and had become a village leader. His brother, Efrain, a U.S. citizen living in Estero, Florida, traveled with us as our guide and translator.

While water sourcing was our primary objective, as we visited numerous homes and the community center, we quickly learned there were many other needs.

My first question was: "Where do the children go to school?"

“Oh”, they replied, “we don’t have a school. The government does not provide one. They only provide the teachers.” We were then led to a series of windowless sheds with floors of mud and straw for sitting and portable church pews serving as the writing surfaces. I was in shock and in tears.

Aware that the water project would take a few years to diagnose, formulate, plan and achieve, I was certain that our Rotary club would, in the meantime, agree to support the building of a much-needed school in Sataq’Na.

Another glaring issue that was evident was that as we visited these homes, there were no sinks, no bathrooms, and the women were warming themselves and cooking over open wood fires built on the floor in the center of the main room. Black smoke billowed in the room and throughout the two room shacks without a chimney to direct the smoke out. We couldn’t breathe.

Promising to return, we made our way back home.

Our Estero Club embraced wholeheartedly the humanitarian responsibility to do what it could. In the spirit of the true mission of Rotary, we felt it was important to not just fix one issue and leave. We chose to “adopt” this village and slowly over time fill many other ancillary needs.

The dilemma was – we were supposed to wait to be asked to fill a need; not tell them what they needed.

In this case, they didn’t know to ask for clean water. They had been using the same water sources for hundreds of years. They have been cooking over open fire forever. “What’s wrong with that?”, they insisted.

Not aware that healthier solutions existed, how could they know to ask for them? We erred on the side of offering and educating. The folks were skeptical about the chlorination of the water. Not trusting outsiders, they feared we meant to poison or sterilize them. Over a period of months, our friend and leader, Julio, was able to enlighten them on the value of clean water, to which he had become accustomed while living here in the United States.

With the help of our water engineer partners, Water Mission, we were also able to demonstrate photo samples of the bacteria, fecal matter, and E-coli found in their water sources.

This town of Santa Eulalia does not have a hospital. The nearest is three hours away. They do have a clinic, however, which is manned once a week by a visiting physician. We interviewed her and found that 1 in 3 children die before age 3 due to intestinal diseases. We suggested that those were likely water borne diseases. She also confirmed that there is a high incidence of pulmonary distress and burning of the eyes (likely from the smoke).

Time to get the wheels in motion....

We reached out to our nearby Rotary Club of Lakewood Ranch of Sarasota, Florida for guidance from Ron Myers.

He and his club have completed multiple water project Global Grants each year, mostly in Peru. He became a valuable resource and mentor as we embarked on this journey.

He suggested we contact their water engineering partner, Water Mission, with whom they have successfully completed more than 50 Global Grant water projects over the last 10 years. They agreed to visit the village to do an assessment and prepare a proposal.

As a result of Water Mission's ensuing report, our Rotary club came to realize that the scope of the solution for providing safe drinkable water was so large and costly that it was clear it would have to be executed with a Global Grant and funded in partnership with multiple Rotary clubs and members locally, nationally and internationally for raising funds.

Water Mission asserted, and we agreed, that if we provide clean water and teach the mandatory cleansing of hands, it is of little use if the same sanitary cleansing is not practiced in their bodily relief habits. For the few who had hole in the ground outhouse shanties, they were dilapidated, untreated and lacked privacy. Others used the cornfield to do their business and wiped with a cornstalk leaf. Either barefoot or wearing open toed shoes, the fecal matter followed them into their homes and onto their hands.

So, we chose to break this effort into 6 manageable Global Grants over three years. Phases 1, 2 and 3.

Each year, one portion of the full water project was to be led by the Estero Club and one portion of the sanitary flushable toilet outhouse project was to be led by the Lakewood Ranch club. We embraced Rotary's WASH (Water and Sanitary Hygiene) mode of operation and education.

Next, we went in search of finding an in-country (Guatemala) host club who would partner with us to achieve this goal.

Now, I must admit that we have since learned from Rotary International that we did this part backwards.

Ordinarily, the host clubs would know the surrounding villages and by being in contact, the villagers would reach out to the local Rotary club for assistance. Then the host club would reach out to International Rotary partners for fundraising and sponsoring.

In this case, the village is so remote and three hours away to the closest Rotary club, up a steep, winding, unpaved, pot-hole ridden, cliff edge without barriers drive, that the Guatemala Rotary clubs had not been there. The villagers had never heard of Rotary. How would this event happen if it were not for Julio raising his hand?

After some reluctance, due to distance and road conditions, the Club Rotario de Huehuetenango graciously agreed to partner with us.

In phase 1A we would be providing safe water to 5000 persons, 750 homes, through a metered outdoor spigot into a concrete double sink. One side would be used for collection for drinking, the other side would be for washing dishes and clothing.

In phase 2A we would provide sanitation to the same 750 homes.

Initially we collectively tried to launch both Global Grants at the same time but being our first time out and the Huehuetenango club hesitating to see how this first effort played out, we only launched Phase 1A.

With the generosity of our members and the immense help of a handful of fellow members finding other clubs to join us, we had help from 15 clubs in Florida, 5 out of state, one from England, and one from Taiwan.

While all the paperwork and signatures and fundraising took two years, we moved quickly forward to build a six-classroom school. Since Rotary Global Grants do not allow for building schools, we chose to do it outside a Global Grant.

I was a part-time volunteer with a Naples, Florida based charity called Miracles in Action at the time. The founder's goal primarily was to build schools in Guatemala. They had built over 20 by then.

They agreed to raise the funds if we would provide all the classroom equipment. There was no unowned space available, let alone a flat space. One owner gave up his animal grazing area so that the school could be erected into the side of the hill. A rectangular area was carved by hand out of the side of the hill and the school was quickly erected.

Rotarians from our club and others returned for the grand opening of the school. If only you could have seen the excited faces of the children and the grateful handshakes and hugs of the teachers and principal. It was a colorful and celebratory day. We came laden with books and paper materials and pencils and crayons. The desks and whiteboards had already been installed.



The water project finally got underway shortly afterwards. The villagers created and sustained a WASH committee. They were responsible for overseeing the local volunteer labor, the train-the-trainer network of villagers who would be trained to go out among their neighbors to teach and reinforce the necessary cleansing skills, and to oversee the maintenance of the system and chlorination levels. Other various committees were initiated as well.

Water Mission sent their engineering employees from Mexico and Honduras to work, lead, teach and delegate the volunteer members of the community. This was their first project in Guatemala, so, they did not have an existing local home base of employees. The WASH committee strictly maintained a schedule of at least one different volunteer villager per day

from each of the 13 beneficiary villages, including Sataq'Na, surrounding Santa Eulalia.

With my commitment to return twice a year to observe the project and move forward with other objectives, always accompanied by other Rotarians, we accomplished many other things while the water project continued to grind forward over a period of four years.

It was eight in total if you include the discovery visit, the partner hunting, the fund raising, the engineering formulation and the active build.

Not wanting to be empty-handed and useless on the visits we always had a task to do.

On several trips we brought volunteer dentists from the Gainesville Rotary Club, the Lakewood Ranch Club and the Huehuetenango Club. Our fellow Rotarians, untrained in any medical field, did the best they could washing instruments, handing instruments to the doctor as needed, keeping a list of who had been served and how many teeth were removed, etc.

My funniest moment I experienced was after a multiple tooth removal on a 50-year-old woman. Because hygiene and a good healthy diet are not present and they chew on sugar cane, by that age the teeth are decayed and black and falling out. They are used to seeing middle-aged women who are mostly toothless. This woman had to have all remaining teeth, except two, extracted. When we were done, she looked in the hand held mirror and demanded we pull the other two. We did not, but we asked "Why?" She said, "Because I want to be beautiful like my other aunts", (who were toothless). As she left, she patted me on the shoulder and said, "I feel sorry for you, you have too many teeth."

Another time we brought an eye doctor. No villagers had glasses. None had been tested. They didn't know it was needed. It was fun to see the amazement occur when a woman could easily thread a needle without the help of her daughter.

We partnered with the Sanibel-Captiva Florida club and the Huehuetenango club to bring wheelchairs twice.

A few years after the school was built, a mudslide occurred during a heavy torrent of rain and they almost stood to lose the school building that had been built into the wall of ground. They dug around it and we provided funds for them to go purchase used 18-wheeler tires to brick style stack to hold back the dirt with stability. We provided iron window covers to prevent further break-ins and we provided funds for the students to purchase instruments for a marching band. Several Estero members provided scholarships to select students to pursue private high school education.

At the school, we installed two Sanitary Toilets and two sanitary hand washing stations. The toilet buildings have toilet paper and a bucket to flush the water down. The best part is that there is no odor because they contain an elbow trap, just like ours, that does not let the odor back up.

Remember the open wood fires in their homes?

In order to feed those fires, the fathers and sons had to travel daily to find and chop down trees and branches for firewood. This had been done for hundreds of years to the landscape is almost devoid of trees. They had to travel further each day to find a new stand of

trees. The sons were taken with them to assist because of the load and the distance. So, after third grade, they were removed from continuing school to do this. The girls continued through sixth grade and eventually became teachers.

So, for health and educational reasons, we chose to search for a local solution. Again, through our partner, Miracles in Action, we were put in touch with a person in Antigua, Guatemala. Our contact had been using a local metallurgist who builds concrete block stoves with a combustion compartment and a stove pipe through the roof for exhaust. The stove surface has a large flat panel surface surrounded by a safety panel of wood so the little ones' fingers will not be singed. The surface has two round metal pieces which can be lifted.

The immediate benefits are: no one has to sit on the ground to use the fire; no children would be burned when falling near the fire; it has a flat surface for the pots and tortillas and it is vented to remove smoke. An important outcome is that, due to the combustion compartment, only a few small sticks are needed per day to sustain the fire. So, now the fathers go alone weekly for branches only. The sons have returned to school to finish through sixth grade. We had to build two more classrooms!! And, the deforestation has declined, at least in this area.

It is amazing how Julio's simple question, "What do we have to do to get our village on the Rotary list for help?", has led to improved education and more healthful lives for the villagers of Sataq'Na, as well as having enriched the personal experiences for many Rotarians.



Many pictures follow at the "**Gallery**" tab under "**Club Links**" at the top.