

Bolivian Water Project – Cochabamba



Stan Galanski
Photo taken in 2009

Editor: Stan Galanski

Space Center Rotary (SCR) led three other clubs (Friendswood, Vienna, and Wintertur) in establishing a Matching Grant Project (MG 56831) in Bolivia, which has covered 3 years. This was an agricultural project in the rural Andean Mountain areas 80 kms outside the City of Cochabamba. The goal of the project was to locate a continuous water source, distribute it throughout the Village of Aramasi, and train the village occupants to grow and maintain fruits and vegetables, which were absent in their diet. Rotary Year 2005-2006

Work began on this project in the fall of 2005 and was completed in December 2006. Rotarians from the participating clubs (e.g., Franz Albrecht - Wintertur, Switzerland), led by Stan Galanski (SCR), visited the Host Club (Tunari Cochabamba) and the Village of Aramasi in June 2006. There, they witnessed the successful tapping of an underground spring and the piping of this water over 3 kms into the Village. During this visit, the farmers of the community were in the process of digging trenches to route the water, via PVC pipes, to each home in the village. Preliminary garden plots had been started and produce was beginning to be harvested (on a small scale). It was the opinion of the visiting Rotarians that the initial and projected long-term success of this project was dependent on the everyday presence of a professional Agriculturalist (Jose), whose salary the MG was funding.

On this trip, a fellow Rotarian (Peter Reichers) from Napa Sunrise Club (Napa Valley, CA) accompanied Stan in examining the mountainous terrain high above this community (about 4 kilometers upstream of the village). The purpose of this topographic review was to determine if a year-round water source could be found or harnessed, so the farmers in that territory could acquire a constant water supply for their crops, versus having to bow to 7 months of near-drought conditions. Their investigation proved that a dam structure could be built high above the village, creating a mile long lake that would provide constant running water to the nearby farmlands. Stan and Peter started collaboration with the local Bolivian Government authorities to see if there were sufficient funds for such a project. After many meetings it was determined that the Tapacari (County) Government only had about 40% of the necessary funds to complete such a dam project. Hence, Peter and Stan returned to the U.S. to review the technical specifications for the dam and begin fund raising for the remainder of the projected funds. The Tapacari Government said they had to spend their money by December 2007 or lose the money altogether.

Because of SCR's success in water projects in and around Cochabamba, other Bolivian communities had contacted Stan about wanting/needing Rotary support for water projects. One such community was the small town of Concepcion, located 25 kms outside of Tarija, the southern territorial capital of Bolivia, known for its grape-growing and wine making industry. Peter and Stan visited a school for orphaned girls in Concepcion, run by the Dominican Sisters ("Servants of the Lord"), who supported 250 young people with no fresh water source for their institution. Aligning themselves with the nearby Tarija-Aranjuez Rotary Club, and meeting with local engineers and geologists, Stan and Peter concluded that a water well would be most appropriate for the Girl's School's needs. Hence, Stan returned to the U.S. in July 2006 to draft a Matching Grant for this water well project.

Rotary Year 2006-2007

Unfortunately, by the time Stan had submitted the grant for the Concepcion Water Well, the deadline for MG approvals (for the RY) had expired, so its review was postponed until the next RY (2007-2008). Most of the delay was attributed to a restructuring of the Tarija-Aranjuez Rotary Club and lack of communication with the U.S.

In June 2007, Stan returned to the Village of Aramasi. This time he was accompanied by Geoffrey Atwater, the incoming President of SCR. When they arrived, they found a village that had been transformed from a brown and gray terrain to a patchwork of GreenGardens associated with 70 home sites, all fed by the water from the spring tapped the prior year. In short, this project (and the associated MG 56831) proved to be a complete success, even to the point that surrounding villages were now pleading with the local NGO (Amistad Mission) to come teach them how to grow such plentiful gardens. Geoff and Stan met with the Tunari Cochabamba Rotary Club and finalized all the paperwork for MG 56831, while they were there.

During this visit, a meeting was held with representatives from the Tapacari Government, and the villagers. It was determined that a local Civil Engineering Contractor, while not fully funded, was going to start construction of the dam in November 2007. This only put more pressure on the interested Rotarians to try and come up with the complimentary funds (\$67,000) to complete the project. A second visit of the potential dam site was made by Stan, Geoff, and John Nodalski (Sugarland Rotary Club). John was a member of Living Water, and had experience in large water projects. He confirmed that such a project was viable, but would require careful design.

Leaving Cochabamba, Geoff, Stan and John visited Concepcion (that same June) to assure the Sisters of their intent to generate a matching grant to build their well.

Rotary Year 2007-2008

Upon returning to the U.S., the water well grant was crafted, reviewed, published and approved (MG 64413). The funds were finally allocated and delivered into the Tarija-Aranjuez bank account in April 2008.

While this was going on, the Tapacari Government began constructing the dam above the Village of Aramasi in November 2007. Unfortunately (as expected), they were only able to build half of the required dimensions and left it standing (in December 2008) until additional funds could be found, either by the government - projected to take another 3 years, or from Rotary. Through some heavy lobbying, SCR was able to combine Rotary Club and TRF contributions totaling \$53,000 by March 2008, and get another MG approved for the construction of this dam (MG 67468). Stan was able to get the

remaining funds from the local NGO (Amistad Mission) who had a vested interest in the success of this project.

Right before the Drilling contractor was to begin work on the Concepcion Water Well (April 2008), he made a final review of the local community records and found that several attempts had been made in the past year to drill water wells in that area . only to come up dry. Hence, with this new and validated information, the Drilling Contractor retracted his proposal (so as not to waste Rotary's money). With this news, it was apparent that an alternative plan had to be put into place. Stan immediately got concurrence from TRF that the money could sit in the Tarija-Aranjuez account while a Plan B could be devised, and that the MG proposal could be amended if an alternative water project could be scoped for the Dominican Girl's School.

In June of 2008, Geoffrey Atwater and Peter Reichers returned to Concepcion to review the historical findings on previous water well bores and validated what the contractor had reported. They learned that a new water source was to be coming on-line in the coming year (channeled water from a fluctuating river) and that a Water Purification System would be needed. Hence, readings and tests were taken by Peter to determine if an existing (water purification) solution, deployed by Engineers Without Borders, would be viable for this community. They concluded that such a system was viable and could be deployed within a year, once EWB resources could be freed up to install the equipment. Hence, MG 64413 was to be rescoped and put on hold for 6 months, until technical supporting elements could be scheduled to do the job.

While all this was taking place, John Nodalski had convinced local Interact Clubs to devise a sacrificial project that would allow High School students to raise money (in addition to the \$23,000 MG) for the Concepcion Water Purification System. This was most needed and welcome, since the MG could not pay for the requisite water tanks and piping system into the school dormitories.

Rotary Year 2008-09

Lastly, after their visit to Tarija, Geoff and Peter rendezvoused with Stan in Cochabamba (June 2008) and they proceeded to go to Aramasi once again to witness the progressive state of the dam in the mountains above the village. Sure enough, the Tapacari Government had kept their word and built half a dam (before running out of money). Peter, Geoff, and Stan then met with the Dam Contractor to review his designs, costs, and schedule to complete the dam . once the Rotary funds arrived in the Tunari-Cochabamba bank account. A final agreement was made during this visit, that the contractor would finish the dam in 100 days for the same amount he had quoted six months earlier (despite rapid inflation within the country). The local Rotarians (Tunari Club) were asked to keep a close watch on the contractor's progress and periodically report back to SCR and Peter Reichers (who had evolved into a dedicated consultant on the project). If all goes well, the project should be completed by October 2008.