

Critical Success Factors for International Construction Projects



The success of an international construction project depends on many critical factors. We have talked with other Rotary clubs about their experiences, and also witnessed several projects on site that did not achieve what they set to achieve. Perhaps the use of the word "failed" may be a strong term, but if a group of volunteers goes out to raise money, then uses the funds to build a water tower which ends up to be non-operational for six months, it can not really be categorized as a success. Therefore, I wanted to share our experiences so that other clubs can be better prepared when taking on similar projects.

Whether it was pure luck, pre-destination, blessing or a combination of all of these elements, we were able to successfully build a school for 60 children in a week's time in a small community of about 80 families, close to Chinandega, Nicaragua. It was a major challenge, but we did it with a lot of perseverance and hard work. Below follows our story, highlighting what we think were critical factors for our success.



Success Factor 1: Always scout a project; do a pilot if possible

This project came about because our 2004-2005 district governor, Tom Sheriff, took on a fundraising project for what are commonly known as the "children of the dump" in Chinandega. The district raised a substantial amount of money, more than \$30,000, which ended up funding the construction of a high school. A group of 30 or so Rotarians traveled with Tom to Chinandega to explore the needs of that community.

It was interesting to see the contrast between this country and the U.S. in regard to hurricane response. There are still many scattered communities in rural areas that were displaced by previous hurricanes and will never be able to recover the loss of everything they owned. Several of us wanted to make a difference and we were brought in contact with a local missionary, David Cabot, who provided a small project -- finishing up a bread oven for a community that basically lives off of whatever they can scavenge from a local dump.

We finished a wall in one day, which was all the time we had; however, this experience was invaluable. We caught "building fever" because of our interaction with the local community's children. They were adorable, playful, and definitely in need of clothing, food, and education to get a chance to get out of the situation they live in. Through this pilot project, we also got to meet the local Rotarians. We were totally unprepared for this experience, brought the wrong tools, and had no idea what this would take. We made cement on a piece of hardboard by hand, and were carrying water and sand in three pails

that were half broken. The sand for the cement had to be sifted from a pile of rough sand. Through this experience, even though very minimal, we got some idea of what we could expect in a construction project. We told David, “we will be back,” and that is what we did.



Success Factor 2: Have a local champion

We got our champion in the form of David Cabot, who, in addition to being a missionary and very committed to implementing these types of projects, is also member of the local Rotary club in Chinandega. There is a lot of preparation that goes into a construction project. A site has to be allocated, architectural drawings made, and the foundation has to be poured and ready so that we would be able to erect the walls when we arrived. Not only is the preparation critical, but during the construction itself there needs to be someone familiar with the local situation that can help getting the right supplies and make sure the lodging, food and transportation is taken care of, and numerous other small details. David took care of all of this, and more.



It is almost inevitable that some-one gets sick because of the difference in food and exposure to germs and bacteria with which we are not familiar. One of our team members indeed got the stomach-sickness bug, so it was good to have someone who knew exactly what medicine to take and what to do.

There needs to be a local counterpart for the project in the U.S. as well, providing a single point of communication, which worked very well in this case.

Success Factor 3: Involve the local community

Involving the local community can take several forms. In our case, as you can imagine, the local community was very excited about seeing a new school being built for their children. We did not see any men, because it was harvesting season, and therefore they were working full time in the fields. The women however, were a great help. They hauled water for us (we needed water for making cement, which was from a well several hundred yards away), cleaned up the site, collected any nails from the floor for re-use, and prepared and painted the roof beams.

After school was out, at 1 pm, we also had many children hauling bricks, cement, and helping to make the steel re-enforcements. As happened the previous year with building the bread oven, the locals became curious about what was going on and stopped by to help, too.



It is critical to form a good relationship with the local community leader, who will organize the cooking for the local helpers (we couldn't eat lunch without making sure that they had something to eat as well), and organize whatever you are distributing in the community. We brought clothing, small toys, and writing utensils for the kids from the U.S. (it's impossible not to bring anything knowing that they have so little). The community leader is a critical link into the community; otherwise, anything you will hand-out in a non-organized manner will literally cause a riot. Another way to involve the community is by hiring local workers. We had planned to build the school ourselves, but after the first day we quickly discovered that we lacked the skills and experience needed to lay the concrete blocks. Therefore, we decided to hire two local bricklayers (they make about \$7 per day), and later that week we hired a welder. During that whole week, we had a local construction supervisor as well, who was able to tell us how to do the construction.

Success Factor 4: The connection with another rotary club



A major reason for the success of our project is that we had a local counterpart -- the Chinandega Rotary club. They were very involved with the project. Several members met us when we arrived in the hotel to make sure we felt welcome. Also, we attended their local weekly meeting, which was a great deal of fun. In addition, several members came by during the construction.

They also served as guides when we visited the local children's hospital to find out what its needs were. It was very encouraging to see several Rotary wheel chairs in the hospital, and to see how another Rotary club had contributed to the construction of one of the buildings. However, the hospital's needs are still kind of overwhelming, ranging from a lack of up-to-date X-ray and Ultrasound units to simple breathalyzers and pulse meters for the new born. Even beds are scarce, expectant mother sometimes have to share a bed, even though they only stay a single day for the delivery.

The local club is also essential in making sure that there is some type of continuity when we leave after our week is over. It ensures that the project is not abandoned, and finishes up whatever tasks remain. In our project, stuccoing the walls was done after our departure. The money we brought for the construction did not pass through any bureaucracy layers, with the risk of being diverted or a percentage being kept. All of it was directly spent, and there was not any overhead involved. Last but not least, even although we were operating in a Third-World country, we never felt unsafe or not taken care of. One of our members fell and got a little cut to his head. We took him to one of the local Rotary members, who is a physician, and he was taken care of immediately.

Success Factor 5: Get government support

Imagine building a school and not having any teachers to work in it. This is applicable to any project of this type: you need healthcare workers to practice in a clinic you are building or collectors of upkeep fees to maintain a water irrigation system and wells. Even more important for Third-World countries is to make sure that security is in place, otherwise anything you would put in place would be stripped as soon as it is erected. As soon as there were supplies available on the job site, there was a security guard who literally camped on our site - living under a near-by tree to make sure the supplies were left alone.



Also, when getting supplies to stock the project (in our case books) you will need direction as to what type of materials the facility will need. We talked with the office of the Nicaraguan Secretary of Education and got a list from them, which we used for our purchases at the local stores.

Success Factor 6: Have sufficient funding, including an emergency fund

It seems kind of obvious to write that you need to have sufficient funds for the project; however, the first year we went to Chinandega we left a project that was incomplete (and it is still there in an unfinished state). Apparently, it is not uncommon for a group of volunteers to arrive with insufficient funding or time to complete the project. What a waste of energy, money, effort, and dedication.

You have to count on the fact that things will break down, and that you will need to have funds available to resolve it very fast. Our metal grinder, needed to cut the steel bars, broke down after three days so we had to send one of our team members into town to buy a new one so we wouldn't be stuck. I was also keeping a close eye on my circular saw because I was kind of expecting it would not hold out and that we would have had to buy a new one.

Success Factor 7: Be totally self-supporting

By being totally self-supporting I mean that you have to make sure you have all the tools needed to do the job.

We had a hard time, believe it or not, in finding a drill bit. We brought three electric drills but no one thought of bringing a bit. The first two days we were drilling holes with makeshift bits fashioned from long metal nails. We learned to bring our own hammers, tape measures (remember that in any country outside the U.S. you need a metric measure!),



and for sure we will bring our own nails and screws next time. We bought an electric metal cut-off saw that we used to cut the metal beams for the roof. Another thing we forgot to bring was spare saw blades. It was interesting to realize how dependent we were on being able to go to our hometown hardware store and get whatever we needed. In developing countries, the distance and availability of materials are major obstacles and can jeopardize your project.

You also need to be aware that you can't rely on the local water supply and will have to establish a distilled water and food-supply chain, both for yourselves and to take care of lunch for you and the local volunteers at the job site. We brought in Gatorade powder from the U.S. so we could make our own supply of liquids. Working in tropical heat, you need to drink at least two gallons per day of non-alcoholic and non-caffeinated liquids so that you don't become dehydrated.

As you might imagine, when you get international construction fever, there is no way you can get it out of your system. You only need to look at some of the pictures of the kids to appreciate that. We will continue to travel to Chinandega, Nicaragua and invite any interested club to participate -- either financially or in person -- to help us build schools and clinics. Education and health is the only ticket to a better life for these kids.



As anyone who ever has been involved with a project like this knows, not only do the people you are trying to help benefit, you come out of the experience a different person. I travel extensively for business throughout the year, and have seen many slums and people with poor living conditions. Being involved with these Rotary projects makes me feel that I make a little difference in helping those in unfortunate circumstances that do not have access to the same resources and opportunities we have in the Western world. In addition, what better way to create goodwill and develop better friendships than through having these types of personal experiences?



We left a plaque with the school in Chinandega; many of the students and their families will remember those “gringos” for a long time, and they all will know where Texas is on the map. As one of the local rotary members mentioned during our dedication, “Maybe there will be a future doctor educated in this school, who will make a difference for these people.”

Please contact the Denton and Flowermound Rotary clubs in Texas for more details if interested in participating or if you're looking for advice when embarking similar projects.

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