

Baños Secos By Rob Gunther

As a part of Peace Corps Ecuador, Omnibus 102's training during the summer of 2009, a then-current Volunteer, Craig Adams, visited Cayambe to deliver a presentation about baños secos, a type of composting toilet. Craig started out by explaining the many inefficiencies of dealing with Western sanitation systems. At his farm in the US, for example, state law required the installation and use of a gigantic septic tank that, in his telling, would only serve its purpose for about 20 years. After that period, the accumulated waste would basically just sit there, eventually corroding the walls of the tank, where it would then slowly leak out, contaminating the land and water for years to come.

In Craig's view, this was a ridiculously shortsighted and environmentally destructive (not to mention expensive) solution to a problem that humans have been grappling with since the dawn of civilization: effective waste management. How did the West develop such a twisted relationship with one of our most basic bodily functions? One answer lies in Victorian England, where a general sense of disgust with the human body fermented and mutated over centuries of landed gentry and priggish aristocracy. As the Industrial Revolution concentrated higher numbers of people in smaller spaces, our connection with the land diminished. Trash and waste left to collect in the streets all but defined urban squalor. When indoor plumbing and sewer systems were eventually developed, populations naturally let out a collective sigh of relief as they flushed their problems down the drain.

But where does it all go? Gallons of fresh water are wasted every time, and scores of chemicals are dumped in an effort to "treat" our waste and stop contamination. But it all eventually makes its way back to the water supply. This is true for a well-developed American city, and the problem is even more pronounced in areas without highly developed sewers and pipes. As nations struggle to emulate the luxuries of the developed world, tons of human waste are dumped directly into water supplies, all for a flush toilet. Communicable diseases thrive and spread among populations living in non-existent sanitary conditions. This is clearly not a sustainable solution.

Nor is it the only solution. In other parts of the world, humans have been composting and reusing their waste for centuries. That's what Craig was talking about during training. With minimal investment and just a little bit of maintenance, human waste can be safely and effectively converted to nutrient rich fertilizer. This makes total sense; instead of attempting to chemically process our waste, while at the same time chemically enriching our soil, we have a completely natural way to kill both birds with the same stone: composting toilets.

This was all news to me. I had never heard of anything like this before. I was smitten. As I got to site, I read all of the literature available through Peace Corps on composting and ecological bathrooms. I was even fortunate enough to be placed at a site with an actual need for sanitation systems. Located in the subtropical zone of Cotopaxi, my site is comprised of 15 or so recintos, or small communities, spread out across the foothills of the Andes. In at least three recintos there was a complete lack of any bathrooms; the people actually had to hike away from their houses to relieve their bodily functions wherever they could. In addition to contaminating the many rivers snaking

through the mountains, numerous preventable diseases were easily spread as nearly all of the children suffered from various intestinal worms and parasites.

But where to start? While all of this made sense in my head, I struggled to think of how to translate my ideas from English to Spanish, and then to reality. Plus, I had just learned about all of this very recently. Now I'm supposed to be teaching it to a group of people that I barely knew in a language that I was still struggling to grasp? Under qualified doesn't begin to describe how I was feeling.

Much of what happened next was due to dumb luck. I had been shadowing my counterpart at my host organization for some months. We mostly focused on community gardening and home compost piles. And when I say we, I really mean my counterpart – he doing all of the working and talking, and me just kind of following him around smiling, shaking hands, and raking and shoveling on command. Which really was great; I was extremely lucky and grateful for Jobany's patience and lack of frustration with a clueless foreigner living in his shadow, constantly asking what must have been ridiculous and repetitive questions.

As I was saying, I didn't really feel like much of an organizer. The idea of spreading the gospel of composting toilets seemed like a total pipe dream. And then the blind luck struck. One day about six months into my service, I happened to be sitting around at a meeting with my counterpart, our organization, and the members of the junta parroquial, our community's local government. The meeting went along as usual: everybody arriving late and, upon arriving, delivering a long, drawn-out introduction. Then someone started talking about the latrine situation, or lack thereof, in the outer recintos. The general consensus was that the town had to get its act together and start building some latrines.

I couldn't let an opportunity like this pass by without my at least trying to throw my two cents in. In the spirit of a rural community meeting in Ecuador, I waited for the smallest pause in between someone else's sentences and hurled myself into the conversation. In my very best gringo Spanish, I exaggerated (or lied, if you prefer) that I had experience in baños secos, a type of composting toilet that I thought would be a perfect solution for the community's needs. Who knows if anyone even understood what I was getting at? Everybody kind of just stared at me and tried to smile and nod along politely. Then I showed them a slide show of photos that Craig had sent me, and people started to get what I was talking about.

I explained that I could apply for a grant through USAID's PL-480 program, and both my counterpart organization and the junta made it a point of the meeting to officially consider what I had to say. Just that consideration right there felt like the definition of a Peace Corps success.

After that, things just started happening on their own. A field trip was organized with the junta and my counterpart organization to the province of Santo Domingo de las Tsachilas to investigate various types of existing composting toilets that were currently in use. Through this experience, we gained actual knowledge of the ideas and theories, which had been up until now, just a bunch of talk. We saw many different designs, each bathroom slightly different to meet the needs of its community and geography, but with the same overall goal of composting human waste.

We met with a local maestro (a carpenter, architect, plumber, and electrician all rolled into one) to start working on a design of how our baños secos would look and

function in our unique environment. I began the arduous task of completing the 20 plus page PL-480 grant, in Spanish. My host organization and the junta met with community members to see if this was a project that they would like to implement. And the communities were really in to this; this wasn't one of those projects where a foreign organization dumps a bunch of money and supplies somewhere and then splits. Members of the communities set up their own schedule: which families would be receiving toilets, how they would proceed with construction, and so on.

After a few months of juggling around schedules, grants in foreign languages, quotes on materials, and a few last minute trips to the Peace Corps office in Quito, the project was approved and we got the money. Construction is currently underway for 35 families to each build a composting toilet. Our team monitors the progress and instructs the community of the proper use and maintenance.

Once materials and equipment were purchased and delivered, my role in this project has been sort of hands off, which, I think is exactly what is expected of us as Peace Corps Volunteers. We're not here to just do things for people; this isn't charity. Our role is to facilitate good ideas, get the ball rolling on projects, and let the communities do what they need to do for themselves. I'm not deluding myself; without my presence, that community meeting would have probably ended up with the people eventually getting their latrines. I simply introduced an environmentally friendly view of sanitation, and then provided a means of financing.

Overall, I'd say it was a success; and I'll be spending the remainder of my service making sure that there aren't any problems when it comes to actually composting the human waste. I strongly encourage other Volunteers who are interested in this type of project to get in touch with your Program Managers, read all of the available literature from the office, and start talking with your community.