

Greetings From Ghana #27

UPDATE on Dignity Toilet/Golden Opportunity Fertilizer

I get wrapped up in writing about Ghana and my experiences in Accra and daily life and have a tendency to not mention the reason for my being here and how that is going. This newsletter is about that.

The Dignity Toilet project is unique in a few ways. Rotary has for eons followed the model of: Get a bunch of people. Go somewhere. Buy stuff. Build something for the community. Leave. Turn in the receipts. Get the money back. Repeat. It has been great and much has been accomplished.

We don't follow that model at all. We never have because we did not start out as a Rotary project. Surprisingly, our model has been even more effective than Rotary International's and we have been lauded as such. We go into a community and do an assessment to determine the need and desire for family toilets. We then hire local people and train them. We estimate the cost and send money to a bank account to buy local materials. The exchange rate changes daily so when the money is received by the bank the amount will fluctuate from one deposit to the next but that does not matter. The money is only withdrawn for the amount needed for purchases and receipts are always provided so that withdrawals are shown to match receipts. We know at any moment exactly how much money has been spent and can account for all of it.

We do not build for the community. We build for the individual families and by doing it that way the family makes a contribution so they psychologically own it and we have someone who is serious about maintaining the toilet. If they abuse it they are going back to the bushes and no one wants that.

The Rich Earth Institute in Brattleboro, Vermont has been studying turning urine into fertilizer for over a decade and have shown that it is a viable fertilizer that outperforms chemical fertilizers. One of the opportunities that people have looked at for quite a while was how to monetize the urea-based fertilizer on a small scale and no one has been able to do it except Goodfellow Phiri in Malawi. Goodfellow does it by buying urine from the community and then selling the fertilizer to the local farmers. He started out about 8 years ago with five 55 gallon (200 liters) drums. He now has 100 poly tanks that hold 200 liters each.

It occurred to me some time ago that we do not have over 100 toilets in close proximity to each other. We have 100+ fertilizer producing stations waiting to be tapped. Dignity Toilets have solids going into the chamber below to be desiccated and the urine going outside and into a bucket or directly into the ground. People are throwing away "almost fertilizer."

My goal then became to find a way to marry two projects, each of which will feed the other. The toilets produce fertilizer which we will sell to farmers at a price they can afford. It provides better crops and feeds the soil as well – which commercial fertilizers do not do. The profits will

be used to create more toilets, which'll provide more fertilizer, which will give you money for more toilets.

We are now to a point where we just finished Dignity Toilets #135 and #136 are getting ready to put the finishing touches on #137 and #138. We are also in the growing season here.



The King of Klobatem has given us land we can use and a building for the processing. We just had the soil of our test field analyzed. The tests show the land is good for many crops and marginal for maize.



Last year (see left) we tested whether the fecal fertilizer was viable. (Left treated, right not.) The results were resoundingly . . . yes. The only problem is that it takes about a year and a half to harvest one side of a DT. That means a lot of time for what becomes a fairly small amount of fertilizer.

With the urea-based fertilizer we will be able to collect weekly and should have more than enough to start processing – hopefully this year.

When we informed the soils laboratory what we were doing, the scientist in charge asked to be able to observe our project. This is the kind of response we get on a regular basis. People desperately want fertilizer. People need toilets. And given the option, people want both.

This ultimate marrying of the two projects will give us a way to provide toilets to families, fertilizer to farmers, a way to rebuild the soils, and money to perpetuate the process. And by doing that we will be able to transform this continent. It is a slow process but it is slowly gaining ground. (No pun intended, but it works).

And that is where we are and why I am where I am.