

Report to Rotarians on Kiruru WaSH GG 1639013

Dear Fellow Rotarians,

1 May 2018:

Our team is in the process of finishing the Progress Report, from our first year working on this project. There is much news, both good and challenges. As soon as that report is available, we will send it to you. Meanwhile, below is a rather complete summary by topic, and a description of the work planned in coming months.

Here is a [Google Drive link to nearly all of our photos](#), in folders by topic ... but we think too many for you to digest! :-) We hope to pull together a representative group and set them aside in another folder, for you, in the coming weeks.

We thank you so much for your caring for the people of Kiruru, for this WaSH project, and your continued support. In a few days Stew will travel to be with Rtns Seiya, Mfanga and Gasiano ... and when the water flows there will be a wonderful celebration by the village people of Kiruru. We will take photos, and make a another report in the coming months.

Yours in Friendship and Rotary Service,
Stew and Seiya

Describe the progress you've made so far.

Overall summary: NGOs were retained, partnerships developed (to best of ability) with Mwanga District offices and officers (water engineer, health). Baseline study of sanitation was conducted. Artisans were trained on several toilet styles, demonstration toilets constructed, microfinance arrangement was set up. Water borehole locations researched and studied, and borehole drilled; alternative sites considered but not feasible, so borehole was completed. Village dug trenches. Land arranged for the village. Water tanks, stands, pumps, distribution piping, domestic taps and animal trough are installed, system is being tested and verified. School WaSH clubs formed, with education and celebrations of both Global Handwashing and World Toilet days.

List your project activities to date. In your description, tell us where the activity took place, who participated, and what has been accomplished.

Survey water sources

We Rotarians have engaged and relied on the technical assistance of Water Mission Tanzania (WMT), always reviewing their progress, and making strong efforts to connect them with the Mwanga District and its water engineer. WMT reviewed various reports, viewed and tested nearby boreholes. They hired a geotech expert to review soils, do some VES (soil electrical resistance measurement) studies. Based on all this, in discussion with us, WMT selected what appeared to be the best site to drill.

Drill Borehole

A professional drilling firm was hired, and found water at about 120 meters below the surface. However it was only 18 liters per minute, and our usage and tariff plans call for over 100. The borehole is at the edge of the village on the donated land of Mr. Mustafa, about 4km away from central Kiruru.

Search For Other Water Sources, Possible 2nd Borehole

We learned from the assistant water engineer in the District of two boreholes drilled and tested years ago near Kisangara Village, some distance away from Kiruru Village. We learned one borehole would have plenty of capacity, over 300 liters per minute. Unfortunately we were unable to turn it into a productive usable borehole, for these reasons: it is a long run and the additional cost was estimated by WMT to be about \$50,000, more than we could afford, even reallocating the budget; the ownership was unclear, and might still be tied up in World Bank hands and not feasible to clear within the time for this project; and after a ward leader inquired of villages in the path of the supply piping and they would want water provided, which would expand the scope and drive up the cost even more. The best we could do is increase output by operating the existing borehole longer, using solar during the day and electricity the rest of the time. With WMT help the increased cost was calculated, verified to still be affordable, and the village gave their permission, in meetings and in writing, to accept the lesser amount of water.

Prepare land for tank, build storage tank

The land was being prepared by both villagers and WMT staff, the poly water tanks were ordered and delivered, and the metal framework to support these tanks has been prepared and readied. The combination is now installed.

Construction of the water system.

The following is now nearly complete:

- Trenching for pipes by the village was completed
- Piping is mostly installed, still to be tested
- Domestic taps are constructed
- Tanks, structures & buildings are made & installed
- Controls and chlorine treatment is being readied, and
- Training of system Operators, tap operators, and the Safe Water Committee is being conducted by WMT, so operations can soon begin.

Train artisans on several Toilet styles including GSAP Microflush

A total of 20 Artisans (Among them 18 men & 2 women) were trained on four different styles of toilets for community to choose among: (a) UDDT Ecosan, (b) GSAP Microflush (vermi-composting), (c) two pour flush with Sink offset and (d) one pour flush with Sungura slab. The Microflush was the most interesting to the villagers as it does not use much precious water, it is smaller in size, and requires no emptying for 2 years, when the fecal matter is dry and ready to turn under soil; however it is a bit more technical to construct. The Microflush training was done by the best trainer we could find in Ghana, in conjunction with EEPKO's sanitation engineer and Rtn Stew Martin. In the training the villagers made a demonstration Microflush toilet at the Health Clinic, where there was previously no toilet for the staff of the clinic. This was greatly appreciated. The artisan training included toilet and sanitation theory, construction methods and activity, how to price toilets, marketing and basic business skills.

Training for Global Handwash Day

RC Mwanga club members, District Health Officer and EEPKO representative trained and formulated two SWASH clubs at the Kiruru and Lwami Primary Schools. We celebrated

Global Handwashing Day on 15 October, 2017 at Lwami Primary School where community from both village areas gathered. The school clubs demonstrated various methods for handwashing, Also, a campaign was conducted and we Rotarians talked on the importance of it. There were poems and songs as well as play art.

Training for World Toilet Day

We marked World Toilet Day on 19 November, 2017 in Kiruru Village where we (Rotarians from RC Mwanga and same partners) sensitized and encourage community to construct/renovate their toilets. We showed them various toilets constructed for them to learn and opt. we took the time also to talk and encourage them to start formulating groups and take loans.

School WaSH clubs and Adding another primary school

So far we have two School WaSH (SWASH) clubs at the Kiruru and Lwami Primary Schools. Kiruru village has only one primary school, but there was a request from the ward leader and villagers to add another school from nearby village Lwami Primary School because the two villages/schools intermingling - some of the pupils from one village go to school in another village. And most of the students at Lwami come from Kiruru village. So it was wise to add the Lwami Primary School to this project.

During Global Handwashing Day and World Toilet Day the SWASH clubs demonstrate to the community and other pupils how to make simple tools for hand washing. They also sensitized those using poems and songs.

We also build capacity to make toilets, using local materials and skills, so every household can have a safe toilet to use. EEPKO (sanitation NGO), Rotarians and village leaders identified 20 Artisans to be trained. In the training process they participated in construction of several example toilets: SanPlat, pour-flush and UDDT. They were in centrally located places so people could see, and learn and opt among them.

List the activities you plan to initiate during the next 12 months.

Install pipes, Test & Cover with earth

The villagers have been guided by WMT staff and are finishing digging more trenches, preparing the ground, for the installation of pipes. After pressure testing and meter installation, the villagers will cover with earth.

Form solidarity groups for toilet loans

Using various village meetings we are continue to sensitized and encourage community to formulate small group and access loan for constructing/renovating their toilets for those cannot afford the cost. However, we are meeting resistance or slow adoption of this. Right now everyone is focused on water system construction and installation. We will work with the village leaders, bank officers and perhaps others to promote this more in coming months.

Encourage artisans to sell & build toilets

Charity begins at home, so we encourage the artisans first to start construct/renovate their own household toilets, then offer to do this for other households. The artisans have been trained by Edmund of EEPCO, and also Ghana trainer Michael Anyekase and Rtn Stew Martin, in how to cost materials, figure their profit, prepare prices for village purchasers, how to market, provide contact information, and more. Again, the present rate of selling and toilet adoption has been slowed by the concern and excitement over the water system. So we will refocus on this in the coming months.

Activate Community on Sanitation & Handwashing

Behavioral change is a process and it will take some time. We continue to create awareness to the community for household habits to change and have a good practices on hand washing and using safe toilets.

Monitoring

When the water system is installed, there will begin monitoring of usage and payment of tariffs, gradually building a reserve. Also as more toilets and handwash facilities are made, there will be monitoring of those, and spot check usage. WMT beginning to set up and training the Safe Water Committee on record-keeping and monitoring; this will continue, and be in service during the next 12 months.

Signage

Temporary signage as the water begins to flow is being discussed and designed. Permanent signage – location, design, content, materials and how installed – is also being discussed. These will be installed during the coming 12 months.

We look forward to the visit of Cadre member Richard Onono, sometime in May 2018.

Sincerely,

Apolinary Seiya and Stew Martin, for
RC Moshi-Mwanga and RC Seaside