

# Matfuntini WASH Project: Every drop makes a difference



The WASH project was piloted by the Cornell University Student Team this year at the Matfuntini Primary School in the Kingdom of Eswatini. As the project was brand new, the team had to figure out the design and construction process along the way. Although we were presented with many challenges, the smiles that greeted us at the Matfuntini Primary School made it all worth it!





The construction process began with trench excavations, pipe laying, and installing the solar panels for the borehole. Upon arrival, the community members expertly taught us how to use the pick axes and together we bonded over the grueling labor of swinging and shoveling. Regardless of how tired we all grew, the community proved to us every day how eager they were to learn about the design, as the students were excited for them to teach us about their genius methods! For example, Babe Alex showed us how to use the two different sides of the pick axe.



Once the trenches were all excavated, we began work on laying the pipe around the site and backfilling quickly to ensure that there was a safe place for the children to walk around the school. At the same time, the highly anticipated tank lift occurred! From then on, we worked on creating and quality controlling the formwork and concrete base for the tankstand with our powerhouse of a community. Above ground, the team worked to attach all the necessary parts on the tank. Although we encountered challenges as we worked with the tank, the sheer motivation and dedication of the student team helped us to overcome these obstacles successfully! With the tremendous help from our WASH corps who has a background in engineering, the team also tested the solar panels and borehole pump.







As our project neared completion, testing began. From electrical tests on the pump and solar panels, to bacteria sampling the water, we could feel the excitement growing from the community and school children. They could almost taste the delicious water! Aside from that, final tasks were being completed throughout the site, such as building a new tapstand, finishing the last of the pipe laying, and attaching all fittings to the pipes.

# Siyabonga kakhulu, Matfuntini!

Leading a pilot project is tough, but accepting foreign strangers into your community is tougher. Our student team would not have been able to do it without the amazing, welcoming community of Matfuntini. Each day, every make, babe, sisi, and bhuti would show up beaming with laughter and light to fuel us through the day. From the daily lunch, to the construction knowledge and advice, to sharing their language and culture with us (especially on Ariana's birthday), the Cornell University team cannot be more thankful and grateful to have worked with such a precious group of community members.









The WASH project was made to improve the quality of life for the students at the Matfuntini Primary School. Little did we know that the students of Matfuntini Primary would return the favor and improve *our* quality of life. They became our favorite part of the work day. The students shared their contagious joy for life by teaching us traditional Swazi dances, cooking alongside us at a braai, and waving through the classroom window while we worked. Part of our project included creating an educational WASH manual to present to the students. We educated them about good hygiene and water habits. The students were overjoyed to have us in the classroom, and they even exchanged WASH related words with us in Siswati!





Although we were a small student team of only six members, we worked together seamlessly as a group. Each student gained the confidence to lead their role and excelled in working together with everyone around them. Not only that, but our team of experts contributed largely to the success of the project. With our WASH corps specializing in electrical engineering, to our builder specializing in masonry, everyone's diverse backgrounds came together to share the common purpose of improving the quality of the project. The student team of Cornell University is extremely grateful for the valuable knowledge gained from our team of experts. We were truly a unique team that worked together with dedication, passion, and a sense of family.

