Engineers Without Borders at Iowa State University

# **Ending the Year in Ullo**

Volume 5

Winter Travel Team

December 29th-31st



### **Issue V Updates**

- Producing Shea Butter
- Saying goodbye to KNUST students
- Puppies!



Notable "Jack Trice" field of Ullo where the travel team faces off against nearby kids playing soccer.

## Wednesday, December 29th

#### Rebecca Crawford Global Resource Systems

Today started like all days here in Ullo - I woke up around 6:30 AM, and went to enjoy some coffee and read a couple chapters of Dune by Frank Herbert. This particular morning, we had the students from KNUST join us for breakfast before the teams headed out into the field.

The past couple of days, I have joined Jen and Mary on the Shea Nut team to learn how to process shea nuts into shea butter. We started yesterday (December 28) with the pounding and roasting of the nuts. At the end of the afternoon, the Shea nuts went through a grinder to become a thick liquid. This cooled overnight.

Today, one of the students from KNUST - Phyliss - joined us! When we were back at Immaculate's house, we immediately went to work by adding some water to the shea puree. Then we kneaded. and kneaded. and kneaded some more. Please do not ask how long it takes, because it does take quite a while.

The purpose of all of the kneading was to separate the fat from everything else. As the process continues, more water is added to draw everything out.

Eventually, it all separates and the fat can be taken out and boiled to draw out the remaining residue. As I write this newsletter, the fat is cooling and tomorrow morning, we will have our own shea butter!

We are so grateful to Immaculate for taking the time out of her busy week to show us this process. Everything we take back to the team back at Iowa State is beneficial to the project.

As we finished with the shea processing for the day, Jen joined the students from KNUST who were working on cooking stoves at the school. Over the past two days, they have been implementing one stove and worked on some testing today. Jen is now able to serve as a great resource for everyone back on campus working on this project.

Our clinic team walked with some students from KNUST to show them the site and answer any questions they may have about the project.

Our favorite rainwater catchment team had a busy day of testing the Irrigation system. After determining they were leak free, they buried the pipe. This is a near completion of the original project planned! Tomorrow, they will be reinforcing the Garden fence and working on education for the Agriculture education instructors.

We are now down to less than a week here in Ullo, and we cannot believe how fast the time has flown. Everyday is a new adventure and all of us are so excited to come back home and share our stories and pictures with our friends, family, and the entire Engineers Without Borders chapter.

Having the students from KNUST has invited us into a space where we are able to work with students from another culture. Our communication skills have drastically changed even within a couple of days, it has opened our minds and eyes in ways we did not expect before coming on this trip. We are so grateful for the opportunity to be able to work with them while we are here in Ullo.



## Thursday, December 30th

#### Libby Mullican Civil Engineering

After a night of dancing, singing, and attempting to watch lowa State in the Cheez-lt Bowl game, it was a little harder to get up this morning than the previous days we have been here. Nevertheless, our day started off with excitement and growth. This morning, we were joined by our KNUST counterparts and Self Help International. This was significant as all three of the respective groups were physically present within Ullo working hand in hand to support the community. As KNUST packed into their van to go back home, our team split up once again to finish up work on the Rainwater Catchment project and Shea Nut project. The morning was pretty laid back since a lot of the physical field work for the projects was coming to a close. We only got a couple hours of work in before it was time for lunch (rice, chicken, beans, and sweet potato fries).

Following lunch, we prepared for our favorite weekly activity: going to the market.

At the market, we ran into many community members we've come to know over the past days. Aside from casual conversations, Joe bought a sleeping mat to use as a rug and Matt B. bought some fabric. Our group then stopped by the seamstress to check in on our orders from last week. Everyone was very excited to receive their personally tailored pieces. We were able to rest a little before dinner after coming back from the seamstress. Finally, we ended the evening with a debrief meeting and some team bonding activities.



## Friday, December 31st

#### Matthew Dunning Environmental Engineering

When I went to bed on the 30th, I knew the doorman had adopted a newborn puppy. Upon waking on the 31st, I was shocked to see two puppies in the front yard. Both are being raised to be guard dogs. The breed is unknown but it is the same breed as every dog in the area.

Joe, Elizabeth, Matt Butler, and I went to Hain Polyclinic (45 minutes east of Ullo-Dantie) today to take notes on the structure and operation of the facility. A notable problem was a lack of space. There were occasional detention beds in the hallways and improvised storage in shower stalls. The structure of the building itself was in good shape because it was built a couple years ago by Austrian engineers. We are borrowing the construction plans of the site to show our architects an example of how the drawings should look.

Matt Butler, Rebecca, and I went to the "Jack Trice" field of Ullo in the late afternoon for some soccer with kids from the area.

A notable moment happened during the penalty shootout. I was the goalie and stopped all penalties except for Matt Butlers. Naturally, I had to show him that I could do the same against him. I set the ball on the spot, took a couple steps back, and wiped the sweat off my forehead. Everyone was watching me, the only blonde haired left footed soccer player around, as I shot and scored a beautiful bar-in shot. What followed was exactly like the end of a stereotypical sports movie. The kids roared with excitement and were jumping all around me. It was one of the greatest moments imaginable. Later that night, the travel team went to a local community member's house for new years festivities. There was plenty of wine to go around and even a bottle of Hennessy. An hour before the new year, a platter of porkchop bites were served with "very spicy" sauce and "not AS spicy" sauce. Surprisingly, the pork was just as good if not better than lowa pork. Not surprisingly, the very spicy sauce lived up to its name.

Happy new year to everyone!