Village Health Partnership

Safer Motherhood in Rural Ethiopia

VILLAGE HEALTH PARTNERSHIP

TRIP REPORT 2021

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OVERVIEW

This year's trip to Ethiopia was a big one, with many moving parts and lots of complexity.

We made the journey in the midst of an international COVID-19 pandemic with war and security issues threatening to tear Ethiopia apart. Traveling from the United States were Margaret "Migs" Muldrow, MD and Cindy Nichol, MA, MPP from the Village Health Partnership (VHP) Board of Directors, Carsen Jenkins, MA pre-med student and part-time VHP employee, Scott McKitrick, Emily Parker, and Stephen Parker, engineers from Water Engineers for the Americas and Africa (WEFTA) and Margo Harrison, MD from the University of Colorado. In the West Omo and Bench Sheko Zones (WOZ and BSZ) of southwestern Ethiopia, we were joined by Shimeta Ezezew, CEO, and his team from Afro Ethiopia Integrated Development (AEID). AEID is our implementing partner on the ground in the WOZ and the BSZ. In the southwest, we also worked with Teklemariam Ergat Yarinbab, MPH, PhD Fellow, and CEO of the Mizan Tepi University Teaching Hospital (MTUTH), Nahom Solomon, MPH, and Dean of the Mizan Tepi University (MTU) School of Public Health, Ephrem Alemayehu, MD, Abraham Tadesse, MD, Hailemariam Bekele, MD, and Yared Deyas, BSC, MPH from the MTUTH. Together we assessed eleven healthcare facilities and did research in five communities.

Back in Addis Ababa, we networked with multiple NGOs and then spent time with VHP partners from western Ethiopia who traveled to the capital to meet us. Braving the journey from the Kellem Wollega and West Wollega Zones (KWZ and WWZ) were Dugasa Beyene, Director of the Western Wollega Bethel Synod Development and Social Service Committee (WWBS DASSC), Rev. Chali Waqayo, Chair of the WWBS DASSC, Megersa Argaw, CEO of Aira Hospital, Tesgera Dinka, MD, Medical Director of Aira Hospital and Takele Digafe, MD fistula surgeon. We arrived back in the United States on Saturday, October 30th. Three days later, with opposition forces closing in on the capital, the Ethiopian government issued a national State of Emergency.

The trip took us six months to set up. Shimeta was instrumental in securing community support and connections with key stakeholders. Teklemariam hand-picked the Ethiopians that traveled with us into the WOZ. Akalu Zewge, with Agree Ethiopia Land Cruiser Co., and our drivers facilitated the trip and were instrumental in keeping us safe. Cindy dealt with trip financials, day-to-day logistics, and acclimatizing those who

had never been to Ethiopia to the culture and realities on the ground. Laury Bowman, Chair of the VHP Board of Directors, and Tim Wellman, Executive Director of WEFTA, reviewed security plans and held multiple Zoom meetings with the group before we left for Ethiopia. Tim stayed in daily contact with us via an InReach unit while we were overseas. What follows is a journal of our activities. The report is long and written from my lens. I felt compelled to document what we did each day so that all of you would understand what VHP has accomplished to date, the challenges we faced, and how very much work we did to define and implement programs for safer motherhood in some of the most remote areas of rural Ethiopia.

FRIDAY - SUNDAY,

OCTOBER 8, 9, AND 10

We flew into Washington Dulles, spent the night, and then flew on Ethiopian Airlines from Dulles to Addis Ababa. Once in Addis, we made our way to the domestic terminal and then flew Ethiopian Airlines to Jimma. We ate a quick lunch at the Central Jimma Hotel and then drove four hours to Mizan. At the Salayash Hotel we were greeted by Shimeta, Teklemariam, Ari Bui Barkari Moya, Chief Suri Judge and others that would be traveling with us the next day. Teklemariam had pressing business in Mizan. He would spend only one day on the road with us. He had hand-picked the research team. Bleary-eyed, we ate dinner and headed to bed.

MONDAY,

OCTOBER 11

Up early. We took off from Mizan in a caravan of five land cruisers and headed for the Suri Woreda on the west side of the Omo River. We drove west and then south and east off the escarpment, past lush coffee plantations and on through small towns where a mix of settlers from the north had made their homes. The landscape changed to rolling hills with acacia trees. The view was expansive. South Sudan was just over the horizon. We stopped in Dima for tea and coffee and to pick up two heavily armed regional police officers and one Suri policeman. We felt safe traveling with Ari Bui. He

was a well-respected Suri judge. Two years ago he encouraged us to come and work in Kibbish and Tulegit where the need was great. After Dima, we turned off the paved road and headed into the "bush". The rains were coming to an end. The road was a sea of mud with heavy elephant grass towering beside us and over the road in front of us. We came to a clearing. A gunman appeared from behind a tree. He pointed an automatic rifle at the first land cruiser. Things happened so fast it was hard to be afraid. Our security guards jumped out of the land cruisers with weapons drawn. Asamnew, our lead driver, yelled "don't shoot". Air Bui jumped out of his land cruiser. With his automatic pistol pointed at the gunman he began yelling at the gunman in Suri, his native language. The man must have recognized him, as he covered his face and fled into the tall grass. Nobody was hurt. We were lucky! Teklemariam said that we were almost killed.

We drove on past the town of Tulegit to Kibbish. The Ethiopians stayed in a small hotel on the other side of the soccer field from the health center. The rest of the group camped on the health center compound. It rained that night. The last of the rains. I could hear the pounding of the drops on the tin rooves of the buildings and in the background the crying of a newborn baby.

TUESDAY,
OCTOBER 12

Up early. We ate breakfast in the little restaurant at the hotel. Buna (coffee) and tea were a must. Eggs with bread and injera. Then we met with community leaders and government officials. Ari Bui and Barkoy Olechagi, Chief Administrator of the Suri Woreda, welcomed us with open arms! "Anchali, anchali".

I explained that we knew that many women in the rural areas gave birth at home. In this setting, far too many women and babies died. To mitigate the problem, the Ethiopian government was encouraging women to come in and deliver in health centers where they could access skilled assistance at the time of delivery. However, when VHP reviewed the rural health facilities in the WOZ, we found that without water, measures for sanitation and hygiene, or infrastructure for maternal health, these facilities were actually deadly places to deliver. VHP was now working to capacitate a network of district hospitals and health centers in the Zone with year-round access to water, measures for sanitation and hygiene, and infrastructure for maternal health. In the Suri Woreda, we hoped to continue to work at the grassroots level to assess the Kibbish and Tulegit Health Centers.

Did we have their permission to proceed? Would the community work side by side with us on the assessments? “Yes, you are welcome.” The door was open.

We divided into three teams. Scott, Emily, Stephen, Shimeta, and Abdissa, Program Manager for AEID, formed the Water, Sanitation and Hygiene (WASH) Team. They toured the health center compound and worked with Getachew Fekadu, Head of the Suri Worda Water Office to define needs and solutions. The health center had no water. This was the number one need. Rainwater was limited, hand-dug wells were brackish, the closest spring was far away, pumping water from the river was fraught with problems. The only viable solution was to get the town well up and running with either a generator or a solar-powered pump. This would provide both the town and the health center with water. The health center had a large UNICEF water storage tank. It needed minor repairs. They had no way to treat the water. The facility itself was in rough shape. Biohazard was dumped into open pits, the only patient latrine was full and overflowing and there were no handwashing stations. Workers from Dima had been hired by AEID, have started to dig a new latrine for the health center. The workers fled in fear for their lives. What was left was a large hole in the ground.

Carsen, Hailemariam, Yared and Abdissa formed the Clean and Safe Healthcare (CASH) Team. They worked with Elias Badeg, Head of the Suri Woreda Health Office, and Samuel Gitsadik, Head of the Health Center, to assess the health center infrastructure for maternal health, cleaning protocols, and provider skills. On the compound, there was a small tribal hut and a two-room stick and mud building used to house patients, including expectant mothers and their families. Inside one of the dark rooms, we found a man sitting on a makeshift bed under a mosquito net, his arms were bandaged. He had been shot multiple times but lived to tell his story. Labor and delivery consisted of a small room with three delivery “couches” and a desk. Two mothers with their new infants were recovering from delivering the night before. Without water, blood and urine soaked their clothes and drained off the delivery tables onto the floor. Elderly family members huddled nervously close by.

Yared assessed the skills of the two clinical nurses that assist with all of the deliveries. They failed to pass even the most basic skill check. There were no nurse midwives working in the Suri Woreda. Outsiders wouldn’t work here. The community sent five village women to train as nurse-midwives in Mizan but all five failed to pass their certification exams. They would need tutoring and yet another year of training. Ari Bui’s wife was a nurse-midwife in Mizan. She would help. Could VHP support the training? Would Yared mentor them?

Margo, Cindy, Nahom, and Abraham formed the Research Team. They interviewed community leaders, government officials, and village women and men to define what barriers pregnant women face when accessing healthcare and the viability of a model of intervention, an operating room in a mobile container that could possibly improve access to caesarian section in the rural areas. In the community, traditional birth attendants deliver babies at home. Less than 20% of the women deliver in the health center. If there were complications, it was at least a four-hour drive to Mizan. Travel was dangerous. Ari Bui saw the operating room in a container as only a "temporary solution". The problems were deeper. They needed to get the health center up and running, improve the road to Mizan, and get the security problems under control.

WEDNESDAY,
OCTOBER 13

Up early again. We drove to Tulegit to assess the clinic there. We were briefed on the water situation for the town and clinic before the trip. There is a large year-round spring high up on Maji Mountain above Tulegit that sits on Dizi tribal lands. That spring had been capped off and a line was run to a second spring lower down the mountain on Suri tribal lands. The water was piped from there to a cement holding tank in town. That tank had a line that connected it to the clinic. In times past the clinic had running water. The Dizi destroyed the cap on the upper spring and the Suri were afraid to rebuild given the conflict between the two tribes. Dr. Haile Tola, community veterinarian, worked with the WASH Team. Now there wasn't enough water, the clinic had no way to store water and what water they did have was untreated. The clinic itself was small but clean and in good repair. The compound had no functioning latrines. One latrine, a dark dilapidated tin shack, was full and overflowing. We didn't dare go inside or attempt to navigate the open defecation. A bull had gotten into a second latrine. It destroyed the latrine and fell into the pit. Now the walls of the latrine collapsed in over a broken cement pad that revealed raw sewage below. People were still using the latrine. Biohazard and medical waste were disposed of in an open burn pit while a metal barrel was used to

get rid of "sharps". People planted crops next to the burn pit.

Mengistu Beyene, Head of the Health Center, assisted the CASH Team. There was no maternity waiting area. Tribal women delivered on the floor of the clinic with the assistance of their family members and a clinical nurse. The nurses failed to

pass the obstetric and neonatal skill check. Women were afraid to come into the clinic to deliver but they were also afraid not to come.

Ari Bui walked me through the village to his mother's home. He was clearly proud of his heritage and his family. The tribe faced "genocide". The outside world didn't understand their ways. The Omo River was dammed. The land in the valley was being given away to be used by large international companies to grow sugar cane and palm oil. The tribal people were told to change their ways. The Suri decided to fight back. Now Ari Bui had to navigate the divide and lead his tribe into the future. The outside world was closing in and he knew it.

We drove back to Kibbish in silence. Another baby had been born in the Kibbish Health Center. The ambulance parked outside the door was shot up, the windshield and sides of the vehicle were covered with bullet holes. Somebody called for a doctor. Hailemariam responded. I followed him into the exam room. An old lady had been carried in. The smell was overwhelming. She was emaciated and severely anemic. Stool leaked continuously from her rectum into her vagina. She had a fistula. She was too old to have an obstetric fistula or had she lived in this condition for years? She must have cancer. No, she had tuberculosis. She stopped taking her medication. She was referred to the hospital in Mizan but wouldn't go. Now she would surely die. I saw Samuel, Head of the Health Center, one more time. His face was drawn. He had worked in the facility for seven years. The needs were overwhelming. He had few resources to work with. The stress weighed heavily on his shoulders. I shook his hand. We would find a way to work together. Hailemariam and Yared discussed what could be done. We needed one tangible intervention and then we needed to keep walking forward together one small step at a time.

That night, we met with community leaders and government officials after dinner to discuss the assessment. VHP, AEID, and Barkoy would work together to get the town well up and running. That would supply the Kibbish Health Center with water. The Woreda would share the cost. We would work with Ari Bui to support the five nurse-midwife students. "Anshale Gori". Thank you.

THURSDAY,
OCTOBER 14

The next morning we packed up our camp. Ari Bui's brother's wife, Ngabolokuro Bakare, waited for me with her children by the coffee stand on the health center compound. Her husband, Langjoy Bakare Boshobarke, had been a member of the Ethiopian National Parliament. She lived with him in Addis Ababa until he took a second wife. She pulled out a picture of her, my mother, and a small child. My mother, who met the family in Addis in 2008, had written a story about her. She had not forgotten the connection and we would not forget her.

We stopped to pick up security guards on the way out of town and then drove the back way to Tum and Maji. The four wheel drive dirt road was muddy. Elephant grass towered above the vehicles. We passed two military checkpoints. At each stop, we picked up heavily armed regional security police. By the time we reached the Tum River, we had an escort of at least eighteen people with automatic weapons. The community made sure that we were well protected.

In Tum, at the base of Maji Mountain, we met with government officials including Gashahesn Abebe, Vice Head of the Maji Woreda, and Mariame Sheria, Head of the Prosperity Party. Shimeta wasn't feeling well. Amoebic dysentery. He blamed the water in Kibbish. Febrile and weak from massive diarrhea, he introduced the group. The officials greeted us and welcomed us back to the community. "You have a footprint here."

That night, the Ethiopians traveling with us all elected to stay in a hotel in Tum while the rest of us drove on to Maji where we camped on the old mission compound outside of town. The views were breathtakingly beautiful. The compound itself sits high on a hill above the rift valley. The buildings were constructed by the Italians during their occupation. The old clinic and school have long been closed. The compound now belongs to the Ethiopian Evangelical Church Mekane Yesus (EECMY). Members were in the process of renovating one of the houses and had constructed a small bathroom with a pit latrine and shower out back of that house. They had installed a small solar system on the house. That system produced hot water for much-needed showers. We all slept well that night!

FRIDAY,
OCTOBER 15

We were welcomed at the Maji District Hospital by Yirgalem Melise, MD, Medical Director of the hospital. The facility was new, immaculate and full of patients. Somebody had planted beautiful "green areas" full of flowers between all of the buildings. In spite of the appearance, the hospital was struggling to come online as an obstetric referral center that was capable of providing emergency obstetric care i.e. caesarian sections to high-risk pregnant women. Their catchment area was ballooning from 28,000 to an expected 100,000 residents. The hospital now had solar power but

water was in short supply. The facility depends on the town well for water but demand is high and the supply is severely limited. VHP was in the process of drilling a borehole well on the compound. Water from that well would be dedicated to the hospital. There were plans to put in a solar pump. The hospital had an adequate amount of water storage but the water wasn't being treated.

The biohazard area consisted of an open burn pit and barrel for "sharps" and there were no functioning handwashing stations to be found.

The CASH Team also found big gaps. The nurse-midwives who ran labor and delivery did not pass their skill check. The Integrated Emergency Surgical Officers (IESO), who were slated to perform the caesarian sections, had not operated in five years. They requested training. There was no blood bank, functioning lab and medications were in short supply. At the back of the compound, expectant mothers were housed in a four-room stick and mud building. The structure was in poor shape. The facility clearly needed a larger, more permanent maternity waiting area if it is to become a referral center for the Zone.

At the end of the morning, I slipped into labor and delivery to take photographs. "Cleaners" were busy scrubbing the floors of the delivery room. In the post-partum room, a woman lay on a bed in the corner, her head on her arm that was hooked up to an IV. Her face echoed an eternity of sadness. I knew that she had just lost her baby. "Stillborn," they said. In my limited Amharic I tried to reassure her but I had few words. The nurse-midwives did not have the equipment or skills necessary to resuscitate her child. What do you say in that setting? "I'm sorry" didn't seem to be enough.

Medical providers were actively referring high-risk pregnant women to the regional hospital in Mizan, but the facility was more than six hours away by ambulance, even in the dry season. Without a blood bank and medications, two mothers were recently lost in transit to post-partum hemorrhage. It's imperative that the hospital be fully capacitated to provide obstetric care. Administrators admitted that they had made progress but were not quite there. An operating room in a container didn't appear to be the right solution with the hospital so close to coming online. "The community would take it if it was paid for" but the priority was water, training, a blood bank, and a maternity waiting area for the hospital.

Everyone felt a little overwhelmed that night. The Ethiopians huddled amongst themselves. Many had never been to the rural areas outside Mizan. They talked about the importance of having a commitment to serving others and how they could be of help. They debated next steps and what tangible solutions they might have to offer. The Americans were quiet and introspective. For some, the tears flowed freely.

SATURDAY,
OCTOBER 16

We ate breakfast in Tum and then set out to assess the Tum Health Center with Kassahun Getahun, Head of the Health Center. VHP had been working with AEID and the government to improve the facility. Tum was a success story! The health center now had year-round access to water with an adequate amount of water storage (thanks to Rotary clubs in Denver). The compound was clean. The facility had a dedicated, fenced biohazard area and a new concrete pit latrine for patients.

The latrines were all clean and there was no open defecation. The maternity waiting area consisted of a large three-room concrete and cinder block building with a dedicated concrete pit latrine and shower, its own water storage, a laundry stand, and a kitchen. Now awareness was high. Pregnant women were coming in for care. The waiting area was full and overflowing. At the time of our visit, we counted thirty pregnant women waiting there for delivery.

Kassahun asked us to build an additional building to house expectant mothers. The health center compound had minor drainage issues and an old latrine that needed to be buried. Equipment and medications were in short supply. The nurse-midwives failed their skill checks and asked for more training. They still had expired medications to dispose of but promised to get this done. We now needed to define how we would continue to support and interface with this facility over the long term so progress would not be lost.

We asked to see the source of the water for the health center. The WASH Team joined Derejaw Eneyew, Vice Head of the Maji Health Office, and Solomon Kebede, Head of the Maji Woreda Water Office. We were taken to a 50,000-liter concrete holding tank above the government offices and then we were driven up the hill to a small stream. From there we walked to the main spring. The Higit Spring, which serves 7,800 people in Tum along with the health center, had a large cement cap covered with brush. The officials reported that

the spring produces 10 liters of water per minute but that it was leaking so that they were only able to capture 4 liters of water per minute. Would we work to repair the spring? It would be a big job and the spring was functioning for now. We would have to find another group to do the work. I asked about the Dizi spring near Tulegit. They were well aware of the spring and the fact that the Dizi had destroyed the cap on it. They said that they were working to make peace with the Suri and that by the end of the year we could rebuild the cap.

In the afternoon, the teams discussed their findings. The demand for obstetric care was high. Officials estimated that 63% of pregnant women in the area were coming in for care. Once the Maji District Hospital was online, patients could be referred there for caesarian sections and emergency obstetric care. If the Maji District Hospital had a large maternity waiting area, that would decompress the situation in Tum. The hospital was only forty-five minutes away. Yared suggested that the MTUTH and VHP start a "mentorship program" for nurse-midwives. Rather than holding multiple classroom-style training sessions per year, he and another nurse-midwife could travel to the rural health facilities that we were targeting in the WOZ to assess skills and to teach. They could visit each facility four times per year. They would build relationships with medical providers and collect outcome data to track progress. We could reevaluate the program in one year. Brilliant!

SUNDAY,
OCTOBER 17

Everyone needed a day off. There had been more tears the night before. We ate breakfast in Maji and then a group of us set out to walk to Nefas Bir (Door of the Wind). The Italians build a road between two peaks outside of Maji town on the way to Washa Wuha in the Omo valley. I couldn't remember how far it was, but I did remember traveling across the narrow stone bridge as a child. The views were stunning. Steep volcanic cliffs covered with acacia trees, then rolling hills and the Omo River Valley below. It was possible to see Kibbish in the distance. The group charged ahead. I lagged behind, walking and talking with Abdissa and our security guards. When I apologized for being slow, Abdissa said "those who walk far, walk slowly". The metaphor fit our experience on this trip. VHP had been working in Mizan and the WOZ since 2014. Progress had been slow but steady. Certainly, we had more to do but the Tum Health Center and the Maji District Hospital were now shining examples of what was possible.

MONDAY,
OCTOBER 18

Monday was a Muslim holiday. Government offices were closed but Bedilu Meaza, Head of the Maji Woreda, wanted to meet with us to discuss what we had found. We formally presented our findings. For the rest of the afternoon, Hailemariam educated me on the Ethiopian Government's efforts with healthcare. We should review these efforts in detail. The Quality Assurance Committee at the MTUTH had been working with the Bachuma and Maji District Hospitals. He suggested that VHP and the MTUTH collaborate. He promised to lead that effort and encourage the MTUTH to get more involved in the WOZ.

That night, over dinner with teg and arake (local "fire" water), government officials made their priorities clear. They said I was a "child of Maji who had come back". Bedilu and Mitiku were friends. Mitiku Tamiru was born on our mission compound in Goma outside of Chebera. Now he had a "big" position in the Regional Government. Where did my loyalties lie? Of course, I was committed to the WOZ. I was a child of both Maji and Chebera. Bedilu's brother, a water engineer, had worked

with us in 2018. He knew of our activities in the Zone and that we "kept our promises". Bedilu was clear that Maji was working to become their own Zone. The new Zone would include the Maji, Suri, and Bero Woredas. Would we still work with them? He had been meeting with Barkoy, Head of the Suri Woreda, and together they were crafting a strategy for peace. Yes, security was an issue but they "would deal with it" and the "problem would

be solved". Bringing the Maji District Hospital online as a referral hospital with a functioning operating room was a priority. They thanked us for putting in a well. Would we build a maternity waiting area? Would we help with training? Yes. I would discuss the situation with the VHP Board of Directors when I got home. Kassahun, Head of the Tum Health Center, said that there was more to do in Tum. The maternity waiting area was not enough. They needed another building and equipment for labor and delivery. They would clean out the drainage ditches on the compound and get rid of the expired medications. Training was critical. We would consider what to do in Tum. In the meantime, our priorities were aligned. I thanked Bedilu and others for their leadership and for their partnership.

TUESDAY,
OCTOBER 19

Up early. We drove to Jemu, the capital of the WOZ in the Me'enite Shasha Woreda in the Me'en tribal area. At the government offices we were welcomed by Fajiyo Sappi, Chief Administrator of the Zone, Addisu Gebremariam, Head of the Health Department for the Zone, and Tsegaye Gelta Sela, Chief Judge for Peace and Security in the Zone, and son of Sela a prominent Me'en chief in the "60s. Fajiyo welcomed us with open arms. "Ashum, ashum". He thanked us for our work in the Zone and asked that we look at putting in a solar system for the Bachuma Hospital. Would we also assess the Jemu, Chruharoot, and Kuju Health Centers?

With the door open, the assessment teams and the research team that now included Ephrem, proceeded to the Jemu Health Center. VHP and AEID had been working in the facility for several years. The health center now had year-round access to water with adequate storage. Emily and Stephen visited the main spring that supplied the town and the health center with water. The main storage tank was being chlorinated on a daily basis. Was that enough?

VHP and AEID had constructed a maternity waiting area and compound.

The buildings were empty. Addisu explained that the waiting area had been closed due to a high rate of COVID-19 infection in the community. The building was now open for use, but women had "little awareness" and were slow to come back in for care. The health center compound was "fairly" clean. The biohazard area was fenced but the facility was still using a burn pit outside the fence to dispose of medical waste. VHP and AEID had constructed a new concrete pit latrine for patients. The old latrine nearby needed to be buried but there was no evidence of open defecation. There was a handwashing station at the entrance to the health center but none to be found by the latrines or in patient care areas. Inside the facility, the CASH Team worked with Birhan Ayalew, Head of the Health Center, on their assessment. Labor and delivery was clean and they were sterilizing medical instruments but the staff wasn't appropriately disposing of biohazard. Again, the nurse-midwives failed to pass their skill check.

Addisu, Scott, and I drove out to the Chiruharoot Health Center, south off the road to Tum, 35 kilometers from Jemu. We passed Me'en villages and fields of corn. The population was clearly expanding. Two bulls fought in the middle of the road. Another cow, tied to the edge of the road to graze, got its rope tangled up in the wheels of the land cruiser. The cow, pregnant and choking from the rope around her neck, fell to the ground. Everyone jumped out of the land cruiser and untied the rope. The owner demanded reparations. The cow recovered and we drove on.

We toured the health center with Abenezer Aklilu, Head of the facility. Abenezer reported that the catchment area was around 20,000 and that 50% of the pregnant women in the community come in for assistance with delivery.

They had no water, handwashing stations, biohazard area, or maternity waiting area.

In spite of that, the compound, facility, and cinder block latrines were clean. Somebody had drilled a borehole well and run a line to a 100,000-liter storage tank on the hill above the health center. Another line connected the tank to a cattle watering trough nearby. It would be an easy fix to run a line to the health center. We never saw labor and delivery. The door was tightly closed while nurse-midwives assisted a Me'en woman with delivery. It was clear she needed privacy.

Back in Jemu, the officials treated us to dinner. It was a celebration! They thanked us for working with them to "lift up the community".

WEDNESDAY,
OCTOBER 20

Margo, Nahom, Abraham, and Ephrem left for Mizan early in the morning. VHP would facilitate the rest of the research interviews at Shey Bench and in the Bero Woreda. After the trip, the Research Team would work to analyze the data and publish the results. Cindy and the CASH Team headed for Bachuma to assess the hospital and identify a camping spot for the night. Tesfaye Bekele, Head of Disease Prevention under Addisu, the WASH Team and I headed for the Kuju Health Center, 57 kilometers outside of Jemu, to the north of the main road on the way back to Tum.

We were greeted by Dawit Alemu, Head of the Kuju Health Center, and Kifle Oynky, Vice Head of the Woreda Health Office. Together we toured the facility. The health center had a hand-dug well with a bucket on a rope. The supply of water was limited. We were told that the well dried up in the dry season. The compound and the facility were fairly clean but the latrines were tragically filthy. Medical providers were disposing of biohazard in open pits and there were no hand washing stations to be found. 41% of the pregnant women in the community were coming into the facility for assistance with delivery but the facility had little in the way of viable infrastructure to assist them. The maternity waiting area consisted of a stick and mud building with mattresses on the floor. Rats scrambled to avoid us when we stepped inside to photograph the rooms. To get to the latrine, pregnant women had to climb over a fence and then walk through a field. The latrine itself consisted of an open pit in the ground with a shredded tarp for walls. Open defecation was visible all around the structure. Labor and delivery was clean but they needed equipment

It was clear that the most pressing need was for water.

WEFTA paid Tilahun Azagegn, hydrogeologist from Addis Ababa University, to review the situation. He had concluded that the only solution was to drill a borehole well for the clinic. He identified two possible locations for a well. We walked to each site, looked at a capped off seasonal spring down the hill from the health center and made our way to a small river over the hill from the facility. In our search for water we stumbled upon the Gesha Village Coffee Estate. We talked our way into the farm and had coffee with Workeneh Yaya Rasu.

Adam Overton and Rahel Solomon, who own the coffee estate, were in the process of building a school for the community. Perhaps they would be willing to help with getting water to the community. Workeneh gave us the name and number of Akalu Wobeshet, Manager of the farm. We could meet him in Mizan. We headed to the Woreda Water Office in search of more information. Officials there confirmed that their number one priority for the community was access to clean water. They talked of drilling a borehole well and of UNICEF capping off a spring. Nothing was clear. It was getting late. We headed back to Jemu.

I needed one more meeting with zonal officials to ensure that our findings on the trip aligned with what they felt were priorities for the WOZ. Back at the government offices, Shimeta and I met with Girma Polije, Fajiyo's right-hand man, and Addisu. I listed the potential projects we had identified in each community, talked about a Mentorship Program to meet training needs, and suggested that we would set up a Circuit Riding Program to assess WASH assets in each facility and ensure their continued operation, maintenance, and repair. I asked the Zone to prioritize cleaning compounds and consider implementing biohazard areas in all facilities. They agreed with the list of projects and priorities, promised to clean facilities and implement biohazard areas, and to work with AEID on circuit riding.

Their highest priority was getting the Bachuma and Maji District Hospitals up and running.

Would we share the cost of implementing a solar system at the Bachuma District Hospital? They would facilitate training of the IESOs and implement blood banks in each hospital. Girma thanked us for our work in the community, said "we opened the door", "we fully accept all your comments" and "we are ready and willing to work with you fully". We will "solve" the security problems. Please look at the Gachit Health Center and the two health centers in the Bero Woreda.

We drove back to Bachuma and camped under the stars between two buildings on the hospital compound. Yared and Hailemariam camped out with us for the first time in their lives.

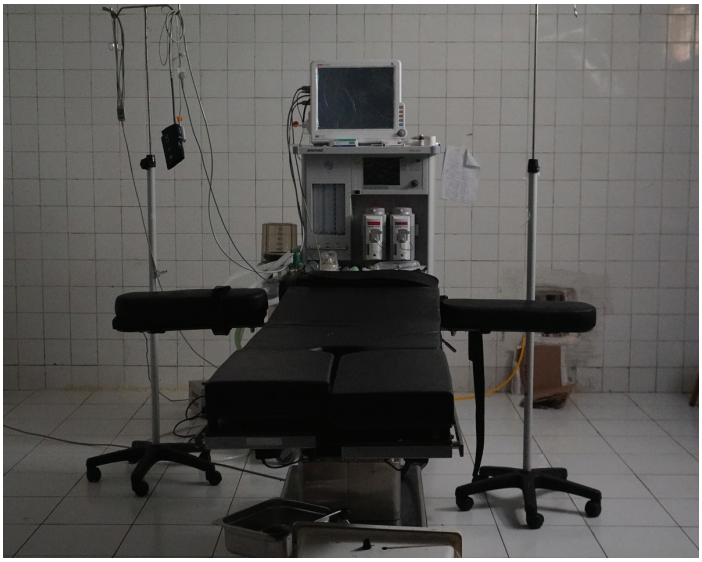
THURSDAY,
OCTOBER 21

I woke up early to birds singing and walked around the Bachuma District Hospital compound as the sun came up. The facility was immaculate. "Cleaners" were busy mopping floors. They nodded a greeting. Two years ago the hospital stood empty. VHP supported drilling a well on the compound. Year-round access to water, government leadership, and mentoring from the MTUTH had brought the hospital online. All the buildings were now in use. The latrines were clean. The biohazard area was in place and fenced although they still had an open burn pit behind the incinerator. The maternity waiting area was clean but empty. COVID-19 in the community had shut it down but now women were slowly coming in and using it again. The door to the operating room suite was locked.

I slipped into the maternity wards. Labor and delivery was clean and fully equipped. In the post-partum room, I found a mother and sick neonate. The father sat close by with a worried look on his face. It had been a home birth. Traditionally, cow dung is applied to the umbilical cord shortly after birth. The six-day-old baby was now septic. I pulled in Hailemariam. We examined the baby together with one of the nurse-midwives. The baby had presented the night before. It came in hypoxic, hypothermic, lethargic, and in shock. It had to be resuscitated twice. Now the little boy was breathing rapidly on oxygen from an oxygen concentrator. He was being given an IV solution of glucose along with IV antibiotics and expressed breast milk through a nasogastric tube. The electricity from the grid and generator was intermittent. Alarm bells sounded and the power went off as we stood there. The infant would have to be transferred to Mizan and manually ventilated on the way if it was to survive. Ephrem and Hailemariam gave the father money. The family had no food.

I joined the WASH Team, Shimeta and Addisu Fajiyo, CEO of the Bachuma Hospital, at the new borehole well that VHP and Rotary had funded. The pump wasn't working and the hospital now had a minimal amount of water. Scott assessed the situation. The fluctuating power from the grid blew out the control panel. The pump was then hooked directly to the grid. Now the pump was down. To further assess the situation, Shimeta would bring his crane to the hospital on the way to test the Maji

well. He would also enlist the help of an electrical technician he "trusted". The Zone would pay the per diem fee. In the meantime, the Bachuma City officials agreed to hook up the city water system to the hospital so the facility could once again have water to function. The effort represented the beginning of a circuit-riding program. Ethiopians took responsibility for investigating and fixing the problem.



I left the group and headed for the operating room. I had permission to go in. I took off my clothes and put on clean scrubs, slippers, and a hat. Adane Saefe, IESO at the hospital led the way. The operating room was now fully equipped. Cleaning protocols were in place and strictly enforced. Instruments were being sterilized. Adane performed 29 caesarian sections last year. The hospital had no blood bank. Pregnant women with a hematocrit < 21 were referred on to the MTUTH. With no blood bank, it was too dangerous to operate. What did they need? He was clear. Water, electricity, training, and a laparotomy set…in that order. They couldn't operate safely without reliable power. I promised I would work on his requests.

We picked up Aba Teka Mamo and his daughter Fantaye and drove to Chebera. Teka was my father's longtime friend. They had trekked across the Omo River Valley on multiple occasions. Since his wife died, he had become a priest. Chebera was home to both of us. At the Chebera Health Center, we toured the facility with Dawit Berguwa, Head of the Health Center.

The government was constructing a new building for patient care. The old building was small and in desperate shape.

Family planning, antenatal care, and labor and delivery all took place in one small room. I hated to see it. The equipment was dilapidated, the roof was leaking, paint peeled off the walls and the floors had certainly seen their share of abuse. Yared worked patiently to assess the skills of one of the nurse-midwives. She didn't pass. Outside an old hand-dug well, covered with barbed wire, remained a danger. A pit for a new latrine was left unprotected. The patient latrines were clean but the shower stall was full of dried-up feces. VHP and AEID had put in a rainwater catchment system. It was the end of the rainy season but the storage tank was only half full. Construction of the new building was using up the water. VHP and AEID had also built a maternity waiting area, pit latrine, and shower for the facility. These things were clean and in place but empty. COVID-19 had taken its toll.

My impulse was to use my own money to fund the renovation of the old building and fix the hazards on the compound, but we needed to wait. The community needed water. The health center needed more water. That was the priority. Perhaps the Mennonites, that had been working with Shimeta in the Amhara Region, could be talked into drilling a borehole well in Chebera. They would have to put an AFRIDEV pump on the well and then people would have to hand-carry the water to the clinic. I didn't think that the community couldn't

manage more than that. The circuit rider could work with officials to fill in the old well and fence the latrine pit. When we came back in a year we would have a better idea of how to proceed with the new and the old buildings.

With everybody gathered around, Aba Teka blessed the clinic and those who came to help. I couldn't help but cry. I hoped that Teka would still be alive when we came back and that, someday, he would be able to bless a renovated health center. We drove back to Bachuma, participated in a meeting with officials at the hospital, and then drove on to the Salayish Hotel in Mizan.

FRIDAY,
OCTOBER 22

Teklemariam assigned Neguse Zewede from the MTUTH Finance Office to take Emily and Stephen to the hospital to do an assessment of the water situation there. The rest of us, including the WASH, CASH, and research teams, spent the morning in Shey Bench, now called Siz, in the Bench Sheko Zone.

Wonde Cheru, Mayor of Siz, insisted that we assess the new Siz District Hospital just outside of town. After a coffee ceremony with fresh baked bread, we toured the facility with Aneteneh Tesfaye, Medical Director of the hospital. The buildings were brand new. The facility was fully staffed but they had no water, no power, and little in the way of equipment, medications, or supplies. In the last several months, nurse midwives delivered 9 babies with nothing but an exam table. It was shocking. The hospital cost 40 million birr to build. A well would cost 4 million birr. VHP couldn't jump in. Perhaps the Mennonites would consider drilling a borehole well here. It shouldn't be hard to hit water. The hospital sat on a plateau just above the river.

We drove to the Siz Health Center. On our

last visit, the facility had water and a thriving maternity waiting area. Labor and delivery was clean, organized, and busy. On this visit, the facility had only a limited supply of water. They had hooked up a line to the town's water system but that had been cut by the road construction crew. The maternity waiting area had been closed due to COVID-19. The lead nurse-midwife left for more training. Things were in a serious state of decline. It was becoming clear that the war in the north was

having an impact on funding for small rural health centers like this one. I had to take a step back and reevaluate things.

That afternoon, Hailemariam took Carsen, Stephen, and I to the MTUTH. We toured the new neonatal and maternity buildings. The wards, intensive care units, labor and delivery, and the operating rooms were clean and full and overflowing. MTUTH had indeed become a regional center for maternal and neonatal health. The generator that VHP and the government had purchased for the hospital 7 years ago was still functioning and providing critical power to the operating rooms and labor and delivery. Unfortunately, the maternity waiting area that VHP had constructed had been closed due to COVID-19. Part of the building was used to house contract physicians. “The MTU was building staff housing.” We were assured that, in the near future, the hospital would use the maternity waiting area to house expectant mothers.

Earlier that day, Emily and Stephen performed an assessment of the water situation at the hospital. As we finished our tour of the hospital compound, Stephen reported that the Health Sciences College and the MTUTH had separate water systems. Recently, the MTU drilled two wells near the hospital compound. One was actively functioning to supply the Health Sciences College with water. The pump was connected to the grid.

Frequent power outages limited its capacity. The second well needed a pump to bring water to the hospital. The hospital administration was working on getting that pump installed and the well up and running. That was supposed to happen soon. In the meantime, the hospital was trucking in 5,000 L of water five times per day from a reservoir outside of Mizan. The hospital had plenty of storage. The water was contaminated with bacteria. A limited supply of chlorine was used for cleaning but they did not have enough to disinfect the water. Teklemariam welcomed the idea of producing chlorine in the hospital for disinfecting the water and for cleaning. Emily wrote up a detailed report with recommendations.

That evening, the MTUTH hosted us to a coffee ceremony and dinner at the Salayash Hotel. Together with our Ethiopian colleagues from the trip, we laughed and talked about our experiences in the rural areas. We were joined by Yisak Nigusse, from the hospital administration, and Akalu Woubishet, Manager of the Gesha Village Coffee Estate. It was announced that Teklemariam, who was now in Addis, had resigned from his position at the hospital. The doctors also warned that Teklemariam felt that it was dangerous to travel to the Bero Woreda. After our experiences in the Suri Woreda, we decided to cancel our trip that had been planned for the next day.

SATURDAY,
OCTOBER 23

With an unplanned day off, the group decided to visit the Bebeke Coffee Plantation outside of Mizan. At the entrance to the plantation was a large sign bearing the Starbucks logo. After coffee, we were politely turned away. "Outsiders had been causing trouble." They weren't allowing anybody in.

We took the rest of the day to go over findings from the WASH assessment, tabulate data and work on the Survey123 App that was used to facilitate the assessments. It was felt that the WASH side of the app should focus on WASH assets on the outside of each facility while the CASH side of the app should focus on assets that related to maternal health, cleaning protocols, and training needs. It was important to interface the scoring of each facility with targets that the Ethiopian Government was setting for healthcare facilities. The data collected could be used to compare facilities with each other and measure progress over time. Should we keep it simple and just edit the Survey 1 2 3 App or should we engage somebody to build a new App? Emily suggested that we "keep it simple." What we had created was easy to use in the field. The circuit rider could easily assess each facility and score the WASH assets every four months. Yared's mentoring team could

easily test obstetric and neonatal skills and then score each facility every three months. The data could be tracked over time. We would perform full WASH and CASH assessments yearly. I would work with Carsen to edit the CASH side of the App when we got home. Yared joined us and gave us his suggestions for testing modules. We would incorporate these.

Andualem Henock was now the new CEO of the MTUTH. He graciously came to meet with me over tea at the Salayash Hotel that afternoon. We reviewed VHP programs at the hospital. He promised his continued support. We would develop a larger working relationship over time.

SUNDAY,
OCTOBER 24

Shimeta, Abdissa, Wondeifraw, Project Coordinator for AEID, Scott, and I poured over data and notes from the trip. We started working at 8:00 AM over tea in the courtyard of the Salayash Hotel and didn't finish until that evening at 6:00 PM. Through the VHP WASH and Maternal Health Initiative (WASH MHI) we were working to create a network of medical facilities that would give pregnant women access to medical care. The Bachuma and Maji District Hospitals were launching to provide emergency obstetric care to high-risk pregnant women. These facilities were important links in the healthcare system that was emerging in the WOZ. Fajiyo, Chief Administrator of the Zone, had made it clear that a solar system for the Bachuma Hospital was his number one priority. The hospital

operating room could not function without a reliable source of power. In Mizan for the weekend, Fajiyo interrupted our conversation to reemphasize this priority and to say that the Zone would share the cost with us. The Zone would also work with Shimeta to get the well and pump at the Bachuma Hospital back online. The Zone would pay the cost of an assessment. It wasn't clear who would pay if they needed a new pump. The Maji District Hospital needed water and a maternity waiting area. Their catchment area was expanding and they would soon be fielding referrals from the southern part of the Zone. The well would be finished within the month and we would implement a solar pump. That would give them water and now they had a functioning solar system. Government officials promised to implement a small blood bank.

The Suri Woreda had the greatest need but security there was an issue. We could not construct maternity waiting areas or pit latrines as planned. Shimeta feared that members of his team would be shot and killed while working in either Kibbish or Tulegit. What could we do, how could we work there without boots on the ground? The most pressing need was for water at the Kibbish Health Center and in the town. Shimeta said he could coordinate with Ari Bui and Barkoy to install a generator or, better yet, a solar-powered pump on the town well. There was already a line to the health center. AEID could repair the storage tank at the health center. The community would share the cost. Shimeta's team could come in and out with an armed escort. VHP could also work with Yared and Ari Bui to ensure that the five Suri nurse-midwife students received extra training and passed their certification exams.

Jebriel, a Suri community leader and restaurant owner in Tulegit, joined the conversation. Water was the most pressing need for Tulegit. Peace was coming but we could not cap the main spring and only run water to the Suri side. The Dizi and the Suri would fight over the water. Make it a "peace spring" he suggested. Cap the main spring, run a line with a distribution box and cattle watering trough to the Dizi side and run a second line to the smaller spring, cap that, and then run a line to the holding tank on the Suri side in Tulegit. The tank and distribution lines needed repair but there was already a line to the health center. The facility needed its own storage. The two tribes had to make peace for the project to work. This was in the works. Perhaps AEID could work through locals on the ground in Tulegit to implement the project. The project was a year off, but it would take that long to lay the groundwork and ensure peace and stability.

Water was always the priority.

The Kuju Health Center needed water and the Chebera Health Center needed more water. The surrounding towns also needed water. It was too expensive to drill borehole wells for health centers alone. The focus needed to be on drilling a well for each community. Then we could run a line from the town well to each of the health centers. The Siz Hospital needed its own well. With a catchment area of 175,000 people, we could justify that. Unfortunately, drilling these wells was beyond the scope and budget of VHP. Could we meet with the Mennonites in Addis and see if they would be interested in taking on these projects? Shimeta said he would set up an introduction. Scott said we could easily get water to the Chiruharoot Health Center by splicing a line into the one connected to the nearby cattle watering trough. We could put in more water storage and we could build a maternity waiting area at the health center. We could also build a maternity waiting area and patient latrines at the Kuju Health Center. The government would need to do its part. Addisu, Head of the Health Department for the Zone, said he was committed to cleaning facilities and putting in government

standard biohazard areas. We would hold him to his promise.

The Tum Health Center was a shining example of what was possible to achieve with the WASH and MHI when working collaboratively with the government. Maji Woreda officials had shown real leadership. However, the facility needed ongoing support and encouragement. The Jemu and Chebera Health Centers were moving forward at a slower pace. The Siz Health Center was struggling. We needed to implement a Circuit Riding Program. Shimeta could put together a team that would visit each of the facilities every four months. It would be the circuit rider's responsibility to assess the facility using the WASH App and then to work with the government to maintain and repair WASH assets. I had an additional list of things that needed to get done in each facility: The government would need to get the water up and running in the Siz Health Center, fix the hazards on the Chebera Health Center compound, bury the old latrine, fix the biohazard area and clean the Jemu compound, bury the hazard latrines in Tulegit and insure that biohazard areas were implemented in Maji, Chiruharoot, Kuju, Tulegit, and Kibbish. The circuit rider could also work with the government to get the pump on the well at the Bachuma Hospital up and running. That effort was already in the works. How much would a Circuit Rider Program cost? I pressed Shimeta. $4,000 per year.

Shimeta wanted a two-year list of projects with a budget. He needed to plan and the flexibility to work in different areas depending on the security situation. That shouldn't be hard to put together. We also needed to plan for the Circuit Riding Program and officials from the WOZ needed to do their part.

YEAR 1 AND 2 VHP PROJECT PLAN:

SITE	PROJECT
Bachuma District Hospital	Solar System (Split Cost With Government) Solar Pump For Well (Split Cost With Government)
Maji District Hospital	Borehole Well Solar Pump For Well 6 Room Maternity Waiting Compound
Kibbish Health Center	Solar Pump For Town Well And Repair Of Storage (Split Cost With Government)
Chiruharoot Health Center	Line From Spring With Storage 3 Room Maternity Waiting Compound
Kuju Health Center	Borehole Well For Town (Mennonite Central Committee) Solar Pump For Well (Gesha Village Coffee Estate) Line To Health Center (Gesha Village Coffee Estate) 3 Room Maternity Waiting Compound 4 Stall Concrete Pit Latrine

Year 1 and 2 VHP Project Plan, Cont.

Chebera Health Center	Borehole Well For Town (Mennonite Central Committee) AFREDIV Pump Or Solar Pump For Well Possible Line To Health Center
Siz District Hospital	Borehole Well (Mennonite Central Committee) Solar Pump For Well
Circuit Riding Program	11 Healthcare Facilities

YEAR 2 AND 3 VHP PROJECT PLAN DEPENDING ON SECURITY:

SITE	PROJECT
Kibbish Health Center	3 Room Maternity Waiting Compound 4 Stall Concrete Pit Latrine
Tuligit Health Center	Spring Protection System And Storage 3 Room Maternity Waiting Compound 4 Stall Concrete Pit Latrine

YEAR 1 AND 2 GOVERNMENT PROJECT PLAN:

SITE	PROJECT
Bachuma District Hospital	Solar System (Split Cost With VHP) Solar Pump For Well (Split Cost With VHP)
Maji District Hospital	Biohazard Area
Kibbish Health Center	Solar Pump For Town Well (Split Cost With VHP) Biohazard Area
Tulegit Health Center	Bury Hazard Latrines Biohazard Area
Tum Health Center	Fix Drainage, Bury Old Latrine, Dispose Of Expired Medications
Jemu Health Center	Clean Compound, Bury Old Latrine Fix Biohazard Area

Year 1 and 2 Government Project Plan, Cont.

Chiruharoot Health Center	Biohazard Area
Kuju Health Center	Clean Compound Biohazard Area
Chebera Health Center	Fix Compound Hazards
Siz Health Center	Restore Water Repair MWA Tap And Shower
Siz District Hospital	

The other glaring need was for chlorine to disinfect water and for cleaning. We could start by implementing chlorine production in the MTUTH and the Bachuma and Maji District Hospitals. Aqua Research was willing to donate the chlorine production units. Emily and Stephen had already looked at them and had given their nod of approval. The systems were simple and easy to use and maintain. WEFTA would need to be involved. They could hold trainings on the installation, operation, and maintenance of the equipment. We would have to review government standard cleaning protocols and ensure that these were implemented in each facility. We already had buy-in. Government and hospital officials were wildly supportive of the idea.

In addition, we needed to craft a new approach to educating and training medical providers in the field. We would continue to hold one three-week classroom-style BEMONC training for 20 nurse-midwives in Mizan each year. That course would include training on neonatal resuscitation. We would then work with Yared to develop a new Mentoring Program. Two nurse-midwife trainers from MTUTH would travel to each of the 11 healthcare facilities four times per year to assess obstetric and neonatal skills, train and then mentor the medical providers. We would need equipment and we should hold yearly training sessions for the trainers. Yared would also help set up a scholarship program for the 5 Suri nurse-midwives.

The Quality Team at MTUTH would continue to work to support the Bachuma and Maji District Hospitals and ensure that they were able to provide emergency obstetric care with ongoing instruction on government standards and protocols, training, and equipment. Hailemariam would help with this. When we returned in a year we could interface with the committee to discuss their perspective on needs and priorities.

MONDAY,
OCTOBER 25

On Monday we drove to Jimma and then flew back to Addis on Ethiopian Airlines. We stayed in the BSCO Guest House and had dinner with Teferi Dina and Desalegn Tasissa from Wollega that night.

TUESDAY AND WEDNESDAY,
OCTOBER 26 AND 27

We spent the next two days networking in Addis. We met with Paul and Rachel Mosely, Co Country Representatives for the Mennonite Central Committee. They graciously served us tea and chocolate cake while they listened carefully to our story and request to support AEID in drilling three borehole wells in the WOZ and the BSZ. They immediately crafted a way forward. Shimeta could amend his current project proposal and add the three wells. They saw the need and would work to fund the projects. Next, we met with Tedla Mulatu, In Country Director for the Millennium Water Alliance. He described the Clean Clinic Model that they were implementing in the Amhara Region and detailed the steps that we would need to take to get the Minister of Health to approve the importation and use of the Aqua Research chlorine production units. Shimeta was familiar with the process he outlined and knew what we would have to do to import the equipment. We thanked Tedla for his help and told him that we would definitely be in touch. We spent several hours with Rahel Belete, Deputy Country Director, and Zelalem Demeke, Senior Program Manager from the Clinton Health Access Initiative (CHAI). They outlined the initiatives that CHAI was supporting and we detailed the findings of our recent trip to the WOZ. They had no money to support projects but they would help us network. Rahel was a member of the Addis Ababa Rotary Club West. They were interested in working on WASH in healthcare facilities. Finally, we met with Adam Overton and Rachel Samuel, owners of the Gesha Village Coffee Estate outside of Kuju. They wanted to know what our connection to the area was. I told them the story. They agreed to look into the water situation in Kuju and then work with WEFTA to define a way to get water to the town and the clinic.

THURSDAY,
OCTOBER 28

The WEFTA engineers spent the day reviewing water projects with the Daughters of Charity. Cindy was sick. Carsen and I met with the EECMY DASSC team and our partners from the KWZ and WWZ at the head office near Sidist Kilo. Abeya Wakwoya, Commissioner and Head of the EECMY DASSC, led the meeting. He described the

conditions under which DASSC was working in the west. He said that while the Screen, Transport and Treat (STT) Program for women "looked like a small project it was actually a big project". The program was touching the lives of those who were "most in need" in the rural areas and it was producing tangible results. He felt that the project should become a stand-alone program.

It should serve as a model for other parts of Ethiopia.

He asked that we consider developing a rehabilitation program for those who had been treated. Apparently 25% of the women who had undergone surgery needed nutritional support, physical therapy, and counseling before being sent home to their village. Would we talk to Bread for the World out of Germany? What did we think of linking the rehabilitation program with the DASSC Livelihood Program, an income-generating project? I loved his ideas and thanked him for his leadership. Dugassa Beyene, Director of the WWBS DASSC, presented next. He said that the situation in the rural areas had gotten worse. Armed conflict prevented pregnant women from accessing medical care and getting assistance with delivery. As a result, the incidence of fistula was going up. In two weeks in October, they had facilitated the treatment of 148 women. Dr. Takele ran two operating rooms and worked for two weeks straight performing surgery on 24 women with fistula and 124 women with severe pelvic organ prolapse. Dr. Tariku was now back at work. He operated on 2 fistula patients. Dugasa reported that the women coming in were in desperate shape. Megersa Argaw, CEO of Aira Hospital, and Dr. Tesgera Dinka talked about the new gynecology ward and operating room that they had constructed with the help of VHP. The

building was already full and overflowing and they needed more equipment. The five students that we had sponsored to become nurse-midwives would graduate in December. Would we sponsor another five women? Dr. Takele then spoke about

his experience performing surgery on the women brought in and the need for a rehabilitation program. We heard more stories over lunch at the little café around the corner from the "Lucy Museum". In Wollega they faced constant danger in the rural areas. In spite of that danger, they were all highly committed to serving their community. It would be wonderful to be able to get back to Wollega and to interview the women that had been treated under the STT Program. The effort was changing lives! Unfortunately, a visit wouldn't be possible until the fighting stopped. We had a lovely dinner with Shimeta and his family that night.

FRIDAY,
OCTOBER 29

We had lunch with everybody from Wollega, met with Shimeta and his team at their new office, and then headed for the airport. Stephen was sick but we made it onto the plane and flew back on Ethiopian Airlines to Washington Dulles and then on to home.

SUMMARY

In the WOZ of southwestern Ethiopia, a health system of care is emerging where there had been none. VHP, WEFTA, AEID, and the government will now work together to further capacitate that system of care to give pregnant women access to the medical care they so desperately needed. We will start a Circuit Riding Program with AEID that will interface with local government officials to operate, maintain and repair the infrastructure that is being implemented. We will begin work to implement chlorine production along with cleaning protocols in the MTUTH and the Bachuma and Maji District Hospitals. This will facilitate disinfection of water and the cleaning of healthcare facilities. We will also revamp our education and training programs and begin a Mentoring Program through the MTUTH that will work directly with medical providers to improve their obstetric and neonatal skills. We will support five Suri nurse-midwife students with one more year of training so that they can become certified. The MTUTH will work to expand its support of the hospitals and health centers in the Zone. VHP will interface with the MTUTH in that effort.

In the KWZ and the WWZ of western Ethiopia, we will continue to work with DASSC to support the screening, transport, and treatment of women with gynecologic complications of childbirth. We will work to build a rehabilitation program for those women who need additional support and we will work with Bread for the World to connect the women that have been treated to the Livelihood Program that they support in the rural areas. We will fund scholarships for five more village women to become nurse-midwives through the Aira School of Nursing.

CONCLUSION

Working with our Ethiopian partners we accomplished a great deal on this trip. We will now build on success and work to implement and expand programs for safer motherhood. It is clear that VHP has developed deep, lasting relationships with individuals and even whole communities. Because we return to Ethiopia every year, we were able to celebrate success, solve problems, and gauge progress. On this trip, we worked with and through grassroots stakeholders. We kept assessing problems and talking about solutions until we had identified tangible projects that would have a positive impact. We found that people know what their problems are, and in the setting of limited resources, are able to prioritize interventions. Certainly, without leadership, nothing moves forward. We sought out community leadership, supported it, and even cultivated it. During the assessment process, we also tried to have a larger vision. It was important to understand how things fit together, to work to build systems of care, and to integrate programs. It was also important to consider how projects align with what the Ethiopian Government is trying to do and to understand what international organizations have defined as best practices for maternal and neonatal health. Now we have a list of projects that will further our mission to prevent pregnant women and neonates from dying in childbirth and allow us to treat women who, because they had no access to healthcare, suffer greatly from gynecologic complications of childbirth.