

# Reflections

Volume 10

Winter Travel Team

Post-Trip

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*Playing soccer with the youth of Ullo reminds us why investing in the education and health of the next generation is so important to break the vicious cycle of poverty.*

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*This picture captures our collaborative project work well. A metal worker in the community made the sign, we hand-painted it, brought it to the site and got the digging started, soon children showed up to watch and community members to help, and Zack, Paul and Justin mixed the cement and made sure the sign was there to stay.*

# Reflections from George-Obeng Akrofi

## George Obeng-Akrofi

Graduate Student, Agricultural and Biological Systems Engineering

After two years of not being in Ullo, we finally prepared a team, came to Ullo and accomplished all 20+ specific goals we had for this 2021-2022 winter trip. It gives great joy to see such a sweet accomplishment by everyone in this well-informed and cohesive team.

After the student team were prepared to leave for the US, Dr. Maier and I were in Kumasi for debriefing and reflection on our trip with our EWB-KNUST and SHI collaborators whom we have had the pleasure of working with in Ullo. Words cannot explain how fulfilling our progress in making Ullo a better place has been considering the fact that the core of our workforce is selfless and high-motivated students. It is not surprising as the representatives of the Public Affairs Section of the US Embassy in Ghana were amazed by the progress we have made over the past year.

“Talking about the problems of the world without talking about some accessible solutions is the way to paralysis rather than progress.”

As quoted from Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty by Abhijit V. Banerjee and Esther Duflo, we are always focused on making progress by accomplishing little projects as simple as capping an open borehole to prevent possible contamination of groundwater, to bigger projects such as the rainwater catchment and irrigation project for dry-season gardening.

To provide a little bit of context to my message and the progress we are making,

... as an organization, we have progressed in projects that involved hitting pickaxes in the ground to lay pipes that supply water to over 1000 students in the Ullo Senior High School, and we are now looking forward to hitting a pickaxe in the ground to start the construction of a community clinic for Ullo.

Just as Mahatma Gandhi said, “My life is my message.” so it is that we feel our impact in the hearts of the incredible people of Ullo as they are always appreciative and happy to be working with us in the community.

With three great organizations (Self Help International, EWB – ISU, and KNUST) working in tandem in Ullo, we remain hopeful for a better future for the kids and youth in Ullo.

To everyone who has, directly and indirectly, worked with us throughout our trip to Ullo, we say thank you. We appreciate you for following us through in our newsletters. Please stick with us because there are more success stories to share with you this year!



*George with Dr. Maier after their farewell meeting with the chiefs, leaders, and community members in Ullo.*



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# Reflections From Dr. Maier

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## Dr. Maier

Professor, Agricultural and Biological Systems Engineering

Leaving Ullo is always bittersweet. This is my third time in four years. Two years ago we left in full confidence that we would return with another team at the end of the Spring 2020 semester. As a matter of fact, the Maymester EWB-ISU Study Abroad travel team had already been selected and we were planning to meet weekly as a ME 401 travel preparation class. Little did we know that two years would pass and two more travel teams would be selected and prepared before we could return.

At the start of the Fall 2021 semester I challenged our students that this travel team would be the best informed and best prepared of any prior travel team, and that our entire student organization is expected to help us live up to this high expectation. The fact that we succeeded – as evidenced in the previous newsletter editions – is a reflection of the commitment and dedication of our EWB-ISU students to persist and get the job done despite the pandemic.

The basis of our success is partnership. Not only do ISU students from a number of engineering and non-engineering majors join hands but we partner with EWB-USA, EWB-KNUST, Self-Help International, U.S. Embassy in Ghana, Municipal Council and Assembly of Jirapa, Ghana Health Service via the Jirapa Municipal Health Services, Catholic Archdiocese of Wa, and most importantly the people and leadership of the Ullo Traditional Area (i.e., Ullo paramountcy presided over by the Ullo Naa or Chief). According to the most recent data reported by the Jirapa Municipal Health Services, the Ullo sub municipal area has a total population of 11,945 including 2,867 children under 5 years of age (or 24%); the Jirapa district has a total population of 111,385 including 26,732 children under 5 years of age (or 24%). This is where we have committed to focus our efforts!

As you read in the earlier editions, we were joined in Ullo by students, staff and faculty from the EWB chapter at Kwame Nkrumah University of Science and Technology (KNUST) located in Kumasi, Ghana's second largest city but 350 miles south of Ullo.



*Dinner with faculty and students from the EWB-KNUST chapter - most were with us in Ullo and several will be coming to ISU in February as a faculty-led Study Abroad under the direction of Dr. Fred Owusu-Nimo.*

They traveled to Ullo seven times during the past two years in part to remotely implement the first phase of the Rainwater Catchment and Micro Irrigation teaching and demonstration project, and to assess what projects they would like to take leadership on and which ones to partner with ISU. They took time between Christmas and New Year's to make the 10+hour trip, and for three days helped to achieve more together than either team could have on their own. As professors and advisors we could not have been more pleased to watch the bilateral teams in action.

This week George Obeng-Akrofi, an ISU ABE Ph.D. student and the EWB-ISU liaison to the EWB-KNUST chapter, and I had the opportunity to spend a few days on the KNUST campus. A key focus was to review what we accomplished in Ullo and what we will be working on going forward; finalizing progress reports for the University Partnership Initiative grant from the U.S. Department of State via the U.S. Embassy in Ghana; travel plans by EWB-KNUST and EWB-ISU teams to Ullo in the coming months; preparing for the February visit of a faculty-led Study Abroad KNUST team to ISU under the guidance of Dr. Fred Owusu-Nimo, Associate Professor of Civil Engineering; preparing for the visit and project work of two EWB-ISU student interns hosted by KNUST this summer; and ideas for deepening the intentionality of our partnership such as collaborating on the shared offering of our new Introduction to Global Engineering course (ENGR 375X). On our last day in Accra, George and I had the opportunity to visit the U.S. Embassy and joined virtually by members from both teams had the opportunity to update public affairs staff on our project activities which was enthusiastically received.

We also cannot overstate the significance of Self-Help International (SHI), an Iowa-based international development organization, for opening an office in Jirapa and hiring a local staff member to initiate programs that will benefit the people of the Ullo Traditional Area to start with and the Jirapa District long-term. SHI is dedicated to alleviating hunger in rural communities in Ghana by prioritizing local staff and community leadership, and programs that improve agriculture, end malnutrition, empower women and girls, and train local youth in agro-enterprises. All of these address unmet needs that are outside of our EWB wheelhouse. We express our appreciation to Nora Tobin, SHI Executive Director, who joined us for Gathering for Ghana last October; Jessica Crawford, SHI Ghana Program Manager, who came to campus to speak to our ME 401 class and at our weekly student chapter meeting after returning from Ghana in late November; Benjamin Kusi, SHI Ghana Country Director, who was instrumental in making the case for opening the second in-country SHI office in Jirapa; and Constantine Nanguo, SHI Program Manager for the Upper West Region, who met with us several times while we were in Ullo. We look forward to the impact SHI will have to making a difference in the lives of the people of Ullo!

Our work in Ullo could not proceed successfully without key members and leaders of the Ullo community. The paramount chief of Ullo passed away in February of last year at the age of 104. He was the one who first welcomed EWB-ISU students and faculty into the community in 2014. His right-hand person was Chief Hassan who currently serves as Ullos Acting Chief. He has been instrumental in making the community aware of and engaged with our project work. Together with Ernest, Ullos municipal assemblyman, they make sure we maintain good communication with municipal and district leaders and that local politics does not get in the way of our projects. But it is the individuals whose names have been mentioned frequently by the students, especially Zack, Paul and Justin, who make sure our teams have what they need for project work and that implementation happens whether we are there or not. They bring the tools, they know where to obtain the construction materials, they recruit community members (and especially local youth) to help, they start certain projects that we would otherwise not be able to complete given the limited time we spend in the community, and they take time away from their families and jobs to work alongside us. Most importantly, they are wonderful friends committed to serving their community by example. We could not be more privileged working with all of them.

You have heard mention of the new house and some may be wondering whether we now live in “too much comfort” compared to past travel teams. The reality is that Ina and Brandon are in the process of moving from Dayton, Ohio back home to Ullo. They built a beautiful home for their family and designed it to accommodate lots of guests including our teams. The new house has already been nicknamed the “Ullo EWB House”, and yes, we will hoist an ISU flag next time we are there. This is extremely generous of Ina and Brandon who met in Ullo while Brandon was a peace corps volunteer. Our partnership with Ullo started because of them connecting with ISUs Dan and Tammi Martin who were fellow peace corps volunteers in Ghana. We are excited to deepen our partnership with them as they return home. The new house makes it easier to undertake our project work. It also makes it so much more convenient for the team of cooks and housekeepers because they now have better working and sleeping conditions than the previous place we stayed at. There, we displaced family members from their living and sleeping quarters.



*Had a productive meeting about follow up activities in Ullo with Benjamin Kusi, director of Ghana programs for Self-Help International together with KNUST colleagues Joseph Akowuah and Fred Owusu-Nimo and George Obeng-Akrofi who serves as EWB-ISU liaison to the EWB-KNUST chapter.*

When will we travel next? We will select another travel team for Maymester 22 at the start of this spring semester then begin to meet as a ME 401 travel preparation class. We have already selected two EWB-ISU interns who will be hosted by KNUST and spend this summer in Ghana. We will work with both of them to prepare their internship projects during the Spring 2022 semester. If construction planning and contractor negotiations for the clinic project continue to progress, we plan to return with a select group as early as spring break in March for groundbreaking.



I want to personally thank all of our EWB-ISU student chapter members and faculty advisors – past and present – for volunteering their time and talents, and in particular our past travel team members for blazing the trail to Ullo which established a solid foundation for our current and future work. You have touched the hearts of the people of Ullo and made a difference in their lives. I am always amazed when people come up to me while in Ullo and mention names of students from past travel teams, always remembering you fondly, and asking how you are doing. While I only know a few of you personally, I am confident I speak for you in responding that the people of Ullo have touched each of your lives and changed your personal and professional trajectory forever.

As far as I am concerned, I stand by what I have said before (adapted from Dr. Bernard Amadei, Founder of EWB-USA and member of the National Academy of Engineering), our work in Ullo has made me realize that “I would better serve humanity by working on projects that improve people's lives rather than writing a steady stream of academic publications that few people read.” Thus, I remain grateful for my faculty position at Iowa State University, my department chairs (Drs. Steven Mickelson and Amy Kaleita), COA and COE administrators, and my colleagues as I have been given the freedom and privilege to work with undergraduate and graduate students as an Engineer Without Borders. The people of Ullo have taught me that I can live with much less stuff than I used to, and that I need to leave a much smaller carbon footprint in my daily life because they are faced with the consequences of climate change more so than we are. So as we have once more returned from Ullo where we began this New Year, my hope and wish for all of us is to utilize our talents, skills, knowledge and resources more intentionally, to be more mindful of our relationships, and to commit to living more with less!



*Picture of Dr. Maier meeting with the Dean of the College of Engineering at KNUST who was well informed about our EWB ISU+KNUST student collaboration in Ullo. He was also excited to hear that a KNUST faculty-led Study Abroad student team will be visiting ISU next month.*



*Chiefs and elders of the Ullo community together with the headmaster and teachers of the Ullo Senior High boarding school are key partners for projects to proceed successfully.*

# Funding Additional Needs:

Speaking of our projects, there are numerous needs that could use your financial support. Some fall outside our focus on engineering projects such as buying tools and education materials for the agriculture and food program of the Ullo Senior High School, paying for uniforms and shoes for elementary and middle school students in the Ullo Traditional Area, or paying for tuition and living expenses of academically qualified students from Ullo to attend KNUST or another institution of higher learning or practical training. If you feel led to help with any of these, please contact me as we now have ways to get funds directly to those whom you wish to help. As the winners of the 2019 Nobel Prize in Economics, Drs. Abhijit Banerjee and Esther Duflo have aptly stated, “to the extent that we know how to remedy poverty, there is no reason to tolerate the waste of lives and talent that poverty brings with it.” Their research has clearly shown that investing in the education and health of the next generation so they “qualify for good jobs” is one of the most effective poverty mitigation strategies.

## Further Acknowledgements:

There are numerous people to thank at Iowa State University for making this trip possible. It is thanks to the foresight and guidance of Dr. Sriram Sundararajan, Associate Dean for Academic Affairs, College of Engineering, that we are traveling as a faculty-led Study Abroad class (ME 402) and no longer as a student organization. Thus, travel team members earn three academic credits, qualify for Study Abroad scholarships, are supported by COE Study Abroad program staff, and are covered under ISU's travel insurance program. We thank Shannon Miner for her help in preparing and facilitating our Study Abroad proposal, and Shaun Jamieson for his help in addressing ISU's risk management and contingency planning questions.

We thank all of our supporters and donors for their generosity. We emphasize with the Ullo community that we are not the World Bank nor the Gates Foundation nor USAID. Instead, every dollar for project work is the result of students volunteering to raise funds and donors giving generously. We now have a designated EWB-ISU Student Chapter account set up with the ISU Foundation which has the following permanent fund number: 2706167



*Two dedicated young men, Ferdinand and Agape, who will be finishing high school soon and are aiming for university admission. They worked alongside our students on project implementation, and wore their Cyclone shirts with pride!*

We also thank our students' academic advisors, course instructors, and department chairs for fitting this Study Abroad course into plans of study, adjusting final exam schedules to allow for an early departure during exam week, and providing financial support to students and projects. We also thank ISU COE alumna Mette Lundsgaard for establishing her generous travel scholarship fund with the ISU Foundation which reduces trip costs for each student traveler substantially. Last but certainly not least, a BIG thank you to Owen Kolstad who served as faculty co-advisor to the EWB-ISU chapter for many years. He has been a wonderful mentor to our students and a gracious colleague to join efforts with. We wish him all the best in his retirement!