

Isimba Dam and the Flooding of the Kalagala Offset Area: Ongoing and Future Public Health Impacts



Fisherman David above Itanda Falls © Eli Reichman, 2017

November 2018 saw the flooding of the protected Kalagala Offset Area by Isimba Dam's reservoir. This was traumatic for all life integrally connected with the Nile in this area. The uniquely biodiverse environment of the Kalagala Offset cannot be replicated anywhere else on Earth, or on the Nile for that matter, especially since the area was home to endangered species as well as many other plants, animals and humans cohabiting peacefully.

The so-called development projects that large hydro dams claim to be are the opposite: They force impacted people, animals and plants into conflict for limited resources, and ultimately deeper into poverty! The majority of people displaced have no way to advocate for themselves. Their main day-to-day focus is survival, and without the land to farm

that is critical to their survival,

life may not be possible for them. Likewise, displaced animals and people will compete for the same resources, and this sets up a situation that ultimately favors human survival at the expense of endangered and irreplaceable animal life. At the moment, we are watching all of this unfold in front of our eyes in Uganda.

In addition, with the creation of a massive dam reservoir, there is an increased breeding ground for mosquitoes, which means malaria rates will go up. Similarly, with an upsurge in lake shore surface area and human contact there, schistosomiasis rates will also escalate. Finally, with less land to cultivate food, there will be more food insecurity and malnutrition. All of these factors are exacerbated by climate change, which has been shown to accelerate from the construction of large hydro dams as well. In the irony of ironies, none of the power generated by Isimba will be



An open bill stork below Nile Special

affordable by those who need it most: that is, those directly impacted by this dam. The power produced will be sold to clients outside Uganda!

The only tiny bright spot we can hope for in all this is the Inspection Panel of the World Bank, which came to investigate the harm done by flooding the Kalagala Offset. Let's hold on to hope they can do something for the people and environment devastatingly impacted by this damn dam!

Read the latest update on the flooding of the KOA and the inspection Panel's follow up **here** or go to https://bit. ly/2GgDCkf



Mattia, his grandmother, and his cousin Lucas with Godfrey outside their home while a chicken roosts inside

Mattia's Story

In July, Mattia, a frail fifteen-year-old boy, was discovered in the community and brought to the Clinic. He was diagnosed with rheumatic heart disease and was started on medical management. He was also severely malnourished. Rheumatic heart disease destroys certain heart valves, and in Uganda, it is common to see young people in congestive heart failure as a result of this condition—one that we rarely see in the West, thanks to early diagnosis and treatment of diseases like strep throat in kids.

Mattia has been living with his grandmother and younger cousin Lucas, as his parents are both dead. Because of his physical condition, he has been limited in what he could do. Even with good medical management, the damage to Mattia's heart is severe and he cannot do any lifting or garden work. However, being an industrious boy, he came up with a chicken-rearing project and made it happen on his own! This has a double benefit: he can sell the chickens' eggs for income generation and he can consume some eggs to better his own health. Rheumatic heart disease patients who eat eggs, and therefore get more albumin into their systems, can help minimize the symptoms of congestive heart failure. This has been a great help for Mattia. It has been amazing to watch his progress since July. Keep up the good work, Mattia!



Mattia with his chickens under a recycled mosquito net

Family Planning Outreach: The Secret to Success = Simplicity



Nurses Sarah and Margaret teaching family planning

Thirteen years ago our family planning outreach was started as an experiment to determine whether people in rural communities were interested in family planning. The overwhelming answer was YES! This has remained true up to the present time. Now, we have three family planning teams, comprised of Ugandan nurses and trained educators, that go out to thirty-eight villages every three

months to provide intermediate and long term family planning. We also hold quarterly family planning days at the Clinic in collaboration with Marie Stopes. The uptake of family



Nurse Sarah administers DepoProvera injectable birth control

planning is wanted, needed, and happening, and the model is simple: We bring the education and the various methods to the communities and allow people to choose what they want. These education sessions only require people to show up. The classrooms are often under a mango tree with no chairs, blackboard, or even tables. The common theme is the communities' willingness and interest, and the dedication and excellent teaching by the Soft Power Health outreach teams.

New Educators Added to Malaria Team

The malaria team added two new educators this year: Ivan and Zahara. They were expertly trained by Sarah, the head of our malaria program, and both now assist in all areas of malaria education, prevention, and follow up. The Uganda government's mass free net distribution of 2017 has kept net sales down again this year, but nets are still sold at the Clinic and in outreach. In fact, despite suppressing net sales, the mass distribution has not dampened people's desire to understand how they get malaria and how to protect themselves from getting



Malaria education session with Mt. Sinai global health students in attendance

it in the future. With Ivan and Zahara's help, Sarah and the team have been reaching more communities in remote areas, as well as places nearby. Also, as we've seen over the years, in areas that received nets for free, net misuse is commonly observed. On one hand, the idea of recycling old nets (for fencing, covering roofs, etc.) is great. On the other hand, new nets that are misused from the beginning indicate a serious knowledge and communication breakdown with those receiving the intervention. Just owning a net does not prevent malaria! However, as the last fifteen years have demonstrated, persistent grassroots education and community buy-in, both major parts of Soft Power Health's approach, can result in positive behavioral change!

The second secon

Inspection Panel meets with the women's cooperative to hear how their lives have been impacted by the flooding of the KOA



Sarah displaying some of the crafts of the cerebral palsy mother's group

The Ladies Cooperative Branches Out

Nearly two and a half years ago, the Ladies Cooperative in Super Hole village was formed to help local women with income generation. The ladies were trained to make excellent crafts with locally available material. Sarah, the head of our malaria program, and Florence, the head of our domestic violence program, came together to help these ladies form their cooperative. Now, two years later, the ladies of Super Hole are still very active and have learned to make terrific products.

In addition to this, Sarah decided to help mothers of children with cerebral palsy who attend the Clinic every Saturday morning with their children. While the children receive physical therapy from our PT team, Stephen Kato and Flavia, Sarah helps counsel the mothers while they wait. Sarah has also introduced these ladies to a teacher who is helping them develop their skills in craft making. These skills will provide additional methods of income generation for the ladies and their families, who are heavily discriminated against in Uganda because of the children's disability. Education and counseling are key to helping these women and children do better and have a decent life!

Rose Rooms Up and Running

Soft Power Health's newest building, the Rose Rooms, has improved the flow of patients and staff at the Clinic, and what a difference this has made! In addition to the new larger kitchen and eating area for the Soft Power Health staff, the Rose Rooms provides more storage, a much needed outreach room, and a room for volunteers and meetings. The expanded kitchen also allows Esther and Irene to have more room to make the high energy milk (HEM) used to treat malnutrition. It also provides space to counsel the mothers of those young patients. As Soft Power Health is busier than ever treating malnutrition, it is a huge benefit for the busy kitchen ladies to have more room in which to do their work.



Esther, one of SPH's cooks, counsels mothers of malnourished children on HEM use



Dr. Milly with Olivia and her Dad

Olivia Needs Help to Afford Her Surgery!

Please meet Olivia, a six-year-old girl from deep in Kamuli district, one of our neighboring districts. Olivia's father is a fisherman who lives below the poverty line in Uganda, surviving on less than \$1 per day. He cannot afford a phone and had to borrow money to come to the Clinic. Like many illnesses that arrive at our doorstep, Olivia's tumor is large and advanced, and her surgery is vital to her survival. The cost of her surgery with follow up care will be five million Uganda shillings, which

is approximately US\$1,350. The good news is that we have a referral network in place to send her to have the surgery done. If you are interested in helping Olivia with this surgery, please let us know! You will give Olivia a fighting chance!

Meet Catherine: Non-Hodgkin's Lymphoma Survivor and Member of the Super Hole Ladies Cooperative

Catherine is one of those unique people you meet in life whose circumstances don't stop her from participating in life and working hard. There were times when Catherine could not get up off her mat but she would still be working on her crafts, determined to make them and improve. And improve she has! Not only that, Catherine has taught members of her family to make the purses and mats that she does so beautifully. Even the healthy ladies in her group don't work as hard as she does. It just goes to show that hard work and determination pay off. Well done Catherine!



Catherine and her daughter with her crafts



Nurse James, the two sickle cell children, and their mom before the blood transfusion

Shortage of Blood: An Ongoing Problem

Not a week goes by at the Clinic in which we do not see a patient that needs blood. Between malaria, various chronic diseases, and birth-related complications, people need blood and transfusions. Often patients come in with hemoglobins so low that it is impossible to understand how they are conscious, let alone walking and talking! Recently, two children came to the Clinic who were severely anemic. This brother and sister pair had sickle cell anemia, malnutrition, and malaria. (Malaria is quite rare in sickle cell patients, as sickle cell and sickle trait tend to thwart the malaria parasite's penetration of the red blood cell.) When the children arrived at the Clinic they did not look desperately sick, but when their blood work came back, the little girl had an HB of 2.7 and the boy had an HB of 4.6! (For perspective: the level below which we transfuse is 5.0.) At first, we could not find blood for these children but finally, through the persistent efforts of Nurse James and

Dr. Henry, blood was found at a clinic in Jinja. The children received the blood, their malaria was treated, and a week later, they both look miraculously better! Often, we are not this lucky and have to send patients home when we cannot locate blood. In the US, this would be considered a medical emergency, but in Uganda it is just an everyday occurrence.

For Malnutrition Outreaches, More is Definitely Better!

Malnutrition outreaches that started with very good attendance in 2013 have grown way beyond expectation to include entire villages in attendance in 2018! At a recent malnutrition education session, every agegroup in the community was there, from old to young and everything in between. These education sessions demonstrate "soft power" in action: education, community participation, and follow up! The keys to our malnutrition education's success is great mobilization of the communities ahead of time to let people know what is happening and when, excellent teaching with audience participation, and good old fashioned follow up:



Malnutrition Outreach

that is, do people remember what they learned at the session? Do they implement any of it? So far, based on our follow ups, the answer is a resounding YES!

Mt Sinai Global Health Volunteers: Tish and Malnutrition



Mt. Sinai Global Health volunteers Dr. Emily, Tish, and Whitney

Malnutrition outreaches that started with very good attendance in 2013 have expanded way beyond expectation. This past June, Soft Power Health hosted several Mt Sinai Global Health volunteers to work on various projects. Tish Li, a medical student, worked closely with the malnutrition team focusing on malnutrition follow up. It is always important to see if what we do is effective, worthwhile, and actually benefits the people it is meant to help. Based on Tish's results, we learned that prior to attending an education session, only 2% of people could identify the causes of malnutrition. Upon follow-up with the same people one year later, 26% could now identify the causes of malnutrition. In addition, nearly 100% of people surveyed after one year could identify the symptoms of malnutrition, and 89% of people

could match at least three foods with their correct grouping—up from only 38% at baseline. These results are very encouraging and suggest that our education sessions and follow ups are truly benefitting people.

A Volunteer's Perspective: Tish Li

Thanks to Soft Power Health's partnership with Mount Sinai, I was given the incredible opportunity to spend the summer after my first year of medical school working on a quality improvement project for SPH's malnutrition outreaches. I spent hours learning one-on-one from Clinic staff in the field and conversing with Ugandans who welcomed me graciously into their homes to meet their families and to talk about what nutrition meant to them. As a result of this collaboration, we were able to conclude that these nutrition outreaches are effective in educating villagers about proper nutrition and that this knowledge is retained long term.

In addition to this project, and to joining my fellow volunteers on various malaria, gardening, and family planning outreaches, I had the privilege of shadowing in the community clinic and witnessing how everyone came together each day to provide excellent holistic patient care to all who showed up. From Dr. Charles patiently instructing me in how to feel for liver enlargement, to the lab staff teaching me how to diagnose malaria on blood smears, to the kitchen staff who consistently made sure I was well-fed with local Ugandan cuisine, I'm so thankful to all the SPH staff who made me feel so welcome at the Clinic and shared with me their contagious passion for this work. As I continue in my medical education, I will never forget all the lessons I learned and memories I've made while at Soft Power Health.

Inner City Kid Kayakers Get High Water!

Eric "EJ" Jackson, four-time World Champion whitewater kayaker and president of Jackson Kayak, came back to New York this August to help teach students and their teachers from the Graham Windham School to kayak. We had lots of rain before and during the camp, coupled with very warm weather. This made for ideal teaching conditions. This year we had a couple of returning students and a whole crew of new students. This particular group just loved being in the water and playing, which was especially rewarding for both the students and the instructors. For those who could not swim, or who were very afraid of swimming, EJ provided swim lessons. This helped everyone get even more comfortable in the water. With the good water conditions this year, we had



Inner City Kids Kayaking Camp on the Farmington River

opportunities to give the students more whitewater experience than in previous years, and the group really progressed fast. By the end of the week, we had a few students that had decided their future career path should be as kayakers. When that happens, we know we have accomplished our job as kayak instructors!

New Ultra Sound Machine Plus Cavilinear Probe



MIT Jessica using the new ultrasound machine to help a young patient

This year, Soft Power Health received a fantastic donation of an ultrasound machine from the Gould Family Foundation. This machine, along with a cavilinear probe donated by Mt. Sinai pediatric resident volunteers, has allowed Soft Power Health to provide essential testing in-house at the Clinic for those in need. This not only makes it easier and quicker for the patients and doctors to get a diagnosis, but is cost-saving as well. Patients spend less on transportation and the cost of ultrasounds when the tests are performed at the Clinic. Finally, we are also looking into future applications of the ultrasound machine, such as using ultrasound in place of x-ray within the setting of the Clinic. This would be an amazing alternative for our patients as well.

Dr. Oliver's Amazing Invention: The Best Use of Leftover Plastic Bottles in Uganda!

Dr. Oliver has found an ingenious way to recycle plastic in a place where recycling really does not happen. She discovered that, cut off, the tops of plastic bottles can be used as spacers for inhalers. This is totally brilliant, especially because there are two sizes of bottle that correspond to adults and children, so the spacers can be created to fit as needed. Once again, Ugandan ingenuity is remarkable!



Dr. Oliver with her water bottles recycled into inhaler spacers



Stephen Kato fits a child for a new beanbag chair as her mother looks on

Stephen Kato Makes His Own Physical Therapy Tools!

Stephen Kato, the head of Soft Power Health's physical therapy department, needed some new tools that he could not source in Uganda. Instead of waiting for a solution, or asking for something to be brought from abroad, Stephen went online and got the "recipe" for making these special bean-bag chairs. Then he had them produced in-country. The chairs have proven incredibly helpful for many of our young cerebral palsy patients. It is Stephen's dedication and resourcefulness that has allowed him to help so many patients!

Free vs. Purchased Nets - Free Nets are Often Misused

Global Health student volunteer Patricia Moscibrodcizki's article, "Free Versus Purchased Mosquito Net Ownership and Use in Budondo Sub-county, Uganda," was published in the Malaria Journal in 2018.

Fast Facts on SPH's Initiatives

Malaria

Over 3,200 people attended malaria education sessions in 2018. Also, despite the lingering effect of the 2017 mass free mosquito net distribution, Soft Power Health sold over 500 nets this year and made over 200 malaria follow up visits.



Sarah on a net follow-up visit

Family Planning

In 2018 Soft Power Health provided permanent, long-term, and intermediate-term methods of family planning to over 4,500 people.



Family planning with James and Margaret in Buwenda

Malnutrition Outreach

Over 2,000 people attended Soft Power Health's malnutrition outreaches in 2018, and over 5,500 kids were de-wormed. Vitamin A and prenatal vitamins were also distributed to people in need during the outreaches.



Nurse Mary with malnourished adopted baby and mother

DIG Garden Program

In 2018, the DIG garden program included forty outreach gardens plus the Clinic's home garden, which serves as a demonstration garden and helps to provide the lunchtime meal for the Soft Power Health staff. Ten gardens were initiated this year and ten gardens graduated. The most successful



The DIG home garden

crops grown in DIG gardens were kale, cabbage, peanuts, and maize.

Allan Stone Community Health Clinic



A happy patient and mother at the Clinic

The Clinic treated over 35,000 patients in 2018—a new record! 800+ patients were referred elsewhere for surgeries, chemotherapy, and other

procedures. Seventy percent of the patients were new and thirty percent were returning. The top three diseases treated were hypertension, peptic ulcer disease, and urinary tract infections. With over 2,000 cases treated, malaria held steady in the #7 slot. Notably, no infectious diseases made it into the top five places.

Also at the Clinic, 409 ultrasound scans, using our new ultrasound machine and probe, were done in 2018. Providing scans in-house represents \$1,165 in cost savings to our patients. For people who live on less than \$2 USD per day, this is a huge amount!

Mother and Child Wellness Center

Over 1,300 vaccinations and over 1,350 rounds of life-saving High Energy Milk (HEM) were administered at the Mother and Child Wellness Center in 2018.

Domestic Violence Counseling

Over 1,800 people were assisted with domestic violence counseling in 2018. The top three issues addressed were economic violence, emotional violence, and sexual violence.

Physical Therapy

In 2018, 3,800+ physical therapy patients were treated by Stephen Kato and Flavia, our physical therapy team. 120 of these patients were seen in outreach. The top three conditions treated were lower back pain, cerebral palsy, and lower limb pain.



New Corsu patient and patient for Stephen Kato

Dental Care

his year, 606 patients sought the help of Dr. Paul, our dentist.

What your money buys:

\$1.50 pays for one patient's laboratory tests.

\$3.00 pays for the medicines for one patient's visit to the Clinic.

\$ 7.50 buys one mosquito net to cover an average of three children and prevent life threatening malaria for up to five years!

\$10.50 pays for one patient's visit to the Clinic to see a doctor, get lab work done, and receive necessary medicine.

\$20 per month buys a malnourished patient one full-course of treatment with life-saving High Energy Milk.

\$40 pays for a domestic violence counselor's salary for one month.

\$50 per month can help a patient access chemotherapy or life-changing surgery.

\$160 pays for a laboratory assistant's salary for one month.

\$170 will pay for six life-saving dialysis treatments for a patient in need.

\$190 pays for a physical therapist's salary for one month.

\$250 pays for a nurse's salary for one month.

\$280 pays for the salary of a full-time driver for one month.

\$300 pays for the salary of a nurse practitioner for one month.

\$400 pays for the salary of our ultrasonongrapher for one month.

\$800 pays for the salary of a medical doctor for one month.

\$850 pays for life-changing orthopedic surgery to repair a tibial malunion.

\$1,200 pays for the head malaria outreach educator for one year.

\$1,400 will buy 300 individual solar lamps to sell to people in need of light at home.

\$3,300 pays for a life-changing hip replacement surgery for a patient in need.

\$4,000 is the cost for the new necessary pit latrines for the Clinic.

\$10,000 pays for the DIG Organic garden program for one year, which includes maintenance of 40 outreach gardens plus Soft Power Health's home garden.

\$40,000 pays for a one-year supply of hypertension medicine which will treat 6,700 cases of life-threatening high blood pressure for the year.

On behalf of the 75 Soft Power Health staff members, the 35,000+ clinic patients, and the close to 20,000 people educated and reached through outreach programs: Thank you so much for your support!



Partner With Us! Two Ways to Give:

Send check payable to: Soft Power Health, 2887 Purchase Street, Purchase, NY 10577, USA **Online at:** softpowerhealth.org

Soft Power Health is a registered 501(c)(3) and all contributions are tax deductible. Tax ID # 20-5195776 jessie@softpowerhealth.org | www.softpowerhealth.org