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Water, Sanitation and Hygiene in Rwamwanja Refugee Settlement

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**INTERNSHIP REPORT: LUTHERAN WORLD FEDERATION
WATER, SANITATION AND HYGIENE IN RWAMWANJA
REFUGEE SETTLEMENT**

Written By Katelyn Bergl

*In Association with School for International Training (SIT) and University of Colorado at
Boulder*

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Introduction

Nearly 1.2 million refugees and internally displaced peoples (IDPs) reside within Uganda's borders as a result of conflict and instability in surrounding countries and the northern regions of Uganda (Robert Walugembe, Interview, March 2017). Worldwide, over 65 million people have been forced to flee their homes due to conflict (UNHCR, 2017).

The implications on general human welfare, including health, access to goods and services, and education, of being forced into refugee status are substantial. At a physical and material level, situations which refugees flee often leave them dependent on host communities and aid organizations (Bruijn, 2009). These populations are often settled in areas that are deficient in civil infrastructure (shelter, water and sanitation infrastructure, health and education facilities, agricultural systems, and transportation infrastructure) which in the best case scenario marginally pass the threshold of meeting basic human needs. Post-traumatic stress disorder (PTSD) is prevalent among this population due to the nature of the situations which force them to leave their homes (Karunakara, 2004); high prevalence of PTSD is a risk factor for many societal consequences including elevated rates of domestic violence and drug and alcohol dependencies (Kessler, 2000). Physical space and resources for shelter structures are often stressed, causing a high population density in refugee settlements. Overcrowding lends itself to rapid spread of communicable diseases, which compromises the health of refugee populations. The lack of proper water, sanitation and hygiene infrastructure compounds the health issues of overcrowding. Lack of education and work opportunities within the camps, and marginalization or lack of support systems in host communities which consequently restricts the rights of this population diminish opportunities to become self-sufficient, and breed dependency (Bruijn, 2009). Consequently, refugees are often entirely dependent on the generosity of host

communities and international and local aid agencies to support their livelihoods. Because refugee populations are often large (and increasing with the increasing outbreaks of violence worldwide), their impact on host communities and home countries can be substantial; thus, the development of refugee populations is imperative both to the well-being of refugee populations as well as the well-being and further development of their host communities.

Médecins Sans Frontières (MSF) cites water, sanitation, and hygiene (WASH) infrastructure as one of the top priorities in emergency response and in the maintenance of a settlement, along with food provisions and emergency vaccinations for highly contagious disease and other emergency medical treatment (MSF, 1997). Because WASH infrastructure is so critical to the operation of any community, I chose to intern with an organization that implements WASH activities to aid me in understanding the many components and effects of WASH in the context of Ugandan refugee settlements. Lutheran World Federation (LWF) is the main implementing partner in the WASH sector in multiple settlements throughout Uganda. Therefore, I reached out to LWF Uganda for a partnership with SIT, and was fortunate enough to be offered an opportunity to work with the organization in their Rwamwanja location.

The Organization

Lutheran World Federation, at its core, is a communion of lutheran churches in over 100 countries. According to their global website,

The LWF is a global communion of 145 churches in the Lutheran tradition, representing over 74 million Christians in 98 countries. We strive to put our faith into action within and beyond the communion, and seek God's

Word and Spirit to guide us. This action takes a variety of forms from theological reflection and dialogue with other churches and faiths, to deepening relationships, sharing about our faith, serving those in need and advocating for a more just, peaceful and reconciled world. We share a vision, purpose and values. We work to strengthen our relationships and build an inclusive, respectful communion. We are on a common journey of renewal shaped and enriched by the different contexts within which we live.

In the context of Uganda, LFW offers services through the Department for World Services, which acts as an international non-governmental organization that carries out a variety of activities targeting many different populations throughout Uganda. In Uganda, the organization's mission statement is to uphold the rights of the poor and oppressed. LWF Uganda offers services in thematic areas including internally displaced peoples, returnee integration, sustainable livelihoods, community empowerment, human rights, malaria and HIV and AIDS. The organization has eight regional offices, in areas including Adjumani Refugee Settlement as well as other refugee settlements in the northern region, the West Nile region, eastern Uganda, Kampala, and Western Uganda. Country projects include acting as an implementing partner in multiple refugee settlements, as well as supporting nutrition and livelihoods programs in eastern and northern regions of the country.

In Rwamwanja refugee settlement, Lutheran World Federation acts as the largest implementing partner. In Rwamwanja, there are 69 staff members which cater to nearly 65,000 refugees. The refugees in the settlement are primarily from the Democratic Republic of Congo

(DRC), where an ongoing armed conflict in the eastern regions has forced thousands to flee. Within the five weeks I was working with LWF, the settlement received three convoys which brought nearly 1,000 refugees to be resettled. The staff in the settlement implement projects on behalf of major donors including the United Nations High Commissioner for Refugees (UNHCR), the United States Agency for International Development (USAID), and the Bureau of Population, Refugees and Migration (BPRM). Because LWF is the major implementing partner in Rwamwanja, they are responsible for an array of sectors including WASH, child protection, gender-based violence (GBV), legal, community services, psychosocial support, environment, and livelihoods. There are teams for each sector, however, it is common that the employees in the organization work in many sectors during project implementation, as many initiatives are multi-sectoral.

During my time with LWF, I primarily worked with the WASH team; accordingly, the rest of this report will focus on WASH and its importance in Rwamwanja Refugee Settlement as well as the broad conclusions that can be drawn from my experiences.

Background

The field of water, sanitation, and hygiene is composed, naturally, of the three fields in its title. The water component relates directly to the provision of water, and prioritizes the provision of sufficient quantities of water. Sanitation relates to the handling of human waste and the environment surrounding a community, and hygiene encompasses human behaviors relating to health. On a very basic level, water impacts human survival because it is necessary to sustain life. However, beyond just a means of survival, WASH impacts many facets of well-being. Water is necessary for cooking and can therefore impact consumption of food. Water is also necessary for

cleaning. This includes maintaining the cleanliness of a person's environment, as well as their own bodies. When the quantity of water available is compromised, hygiene is the first water consuming activity to be abandoned, because it is not a priority over drinking or cooking. The consequence of insufficient water for hygiene practices is an increase in communicable, hygienic and fecal related diseases. Lacking sufficient quantities of water also causes the population to stray further from their communities in search of water sources. Spending large amounts of time traveling to and collecting water reduces the amount of time available for other activities. Often, women and children are tasked with water collection in these circumstances. In many unfortunate cases, this means that women are unable to participate in any income generating activities, and children are forced to miss lessons or forego school entirely to carry out this responsibility. The resulting consequences of these direct effects are nearly immeasurable, but surely significant.

Once an acceptable quantity of water can be secured, it then becomes important to consider quality, as poor quality water can cause water-borne illnesses and epidemics. This may include formally treating the water through a physical or chemical treatment process. Additionally, this might include source protection, where human and agricultural activities are moved away from the watershed to prevent contamination by fecal matter. This also includes the treatment or disposal of human waste, as it is necessary to avoid cross-contamination between sources of untreated human waste and sources of drinking water. In settlements and throughout Uganda, human waste is usually contained in pit latrines to avoid exposure to humans and water sources. Occasionally, human waste is treated directly (as in the case of Kampala), where human waste is passed through natural wetlands to take advantage of the natural treatment processes that take place in these environments. However, the majority of waste is left untreated. Interventions

to prevent and eliminate water contamination can range from digging a simple pit latrine with local materials and using the three pot technique for water filtration, to interventions that are more technical in nature and might involve water treatment using chlorine or a sedimentation process.

However, it is important to note that merely providing an acceptable quantity and quality of water is not sufficient to prevent hygiene related illnesses, and that the hygiene component of WASH must be well integrated to achieve acceptable WASH conditions. In order to successfully prevent poor health outcomes related to WASH, the population must also be sensitized about the results of poor hygiene. This, ideally, will insure the proper use of any clean water that is provided, and prevent practices such as open defecation that might compromise the health of a community.

Problem Statement

Unfortunately, in the case of a refugee settlement, resources are often strained due to the vulnerable and dependent population. As a result, it becomes difficult to simultaneously ensure acceptable quantities and quality of water while also effectively educating the population on the necessity of proper hygiene. Despite its importance and despite the large amount of aid given towards refugee settlements, WASH still remains one of the main challenges faced amongst refugee populations. Interestingly, the same is likely true for the host communities surrounding refugee settlements in Uganda. As a result, another challenge arises when considering how to provide WASH services to a settlement in an area where WASH services in the host community are not meeting international standards. It is imperative to focus resources on the refugee population because of the vulnerability and marginalization of the community. However, it is

also necessary to do so in a way that does not incite local resentment towards refugees, which might lead to conflict. This is usually done through resource sharing between the host and refugee communities.

Because the provision of WASH remains a major obstacle to quality of life amongst many populations in the world, and because helping refugee populations to develop is critical to global development, I find it of crucial importance to continue to develop WASH initiatives. It is for this reason that I interned with LWF to understand the many facets of WASH provision and its outcomes.

Justification of Research

Nakivale Refugee Settlement has housed refugees since the 1940's, when it was first opened to take in Polish refugees from World War II (Walugembe, 2017). Since then, it has taken in refugees from many neighboring countries during times of conflict, including the frequent conflicts in Rwanda, Burundi, and the Democratic Republic of Congo (DRC). Currently, over 120,000 refugees reside in Nakivale, and all resources except for food donations are shared with the surrounding host communities. These resources include water, health, and educational services. Despite having been opened almost 80 years ago, which should be more than enough time to set up and secure a proper WASH system, UNHCR and the residents of the settlement still report deficiencies in the WASH sector. Similarly, Rwamwanja refugee settlement has been open since 2012, yet still reports WASH conditions that do not meet national or international standards.

In Uganda's northern refugee settlements, some settlements are receiving approximately 3,000 new arrivals per day fleeing conflict in South Sudan, and new settlements are being built to

accommodate the massive influx (Walugembe, 2017). As part of the construction and response plan, boreholes are currently being dug to provide water, and plans for water treatment methods are being developed (UNHCR, 2017).

The WASH situations in the three examples above are very different from each other, in terms of both regional water availability as well as demand, and may shed light on the reasons the WASH sector is still struggling in refugee settlements, as well as globally; namely, because each response is circumstantial and must be tailored to the local conditions. Water security and safety will likely remain a development issue into the foreseeable future, and I would like to play a part in the effort to ensure safe, sufficient water as a human right. To be more effective in my efforts, I studied WASH with LWF in a region of the world where it is arguably more pertinent and also in a more critical state, so that we can, as a society, slowly work towards equality in the provision of public goods which need to be de-commodified.

Internship Objectives

I hoped to come out of the internship understanding the WASH sector from many perspectives. I acknowledge that I am still a novice in this field, and therefore because there were many aspects of the job I could not have foreseen, my objectives during the internship period were generally open-ended. However, there were three main facets which I wanted to observe. The first facet was the technical aspect of WASH. This includes understanding how water sources are secured, the standards which are followed, and how quality is catered for. The second facet of WASH I wanted to understand are the effects of WASH on the community, specifically relating to health, security, and education outcomes. Lastly, I wanted to investigate the

relationship between the refugee community and the host community as it relates to natural resources and the provision of WASH services and infrastructure.

Through studying these three facets, I hoped to come to further appreciate the importance of WASH, and understand how to implement/provide WASH services not only as a technical skill but also in a way that is socially responsible and culturally acceptable as well as effective. In the internship experience section of this report, I will elaborate on the knowledge that I gained and the ways in which I met my objectives. The next section outlines the responsibilities expected of an intern in LWF Rwamwanja.

Internship Responsibilities

Position:

In Rwamwanja Refugee Settlement, Lutheran World Federation's WASH sector is responsible for providing sufficient and safe water to the community, offering oversight of and materials for sanitation efforts, as well as creating public health initiatives that reduce the prevalence of hygiene related diseases. The WASH intern is responsible for supporting the WASH team in these efforts while maintaining professionalism and upholding organizational values. The intern may be expected to support any or all of the following tasks associated with the position, in addition to other relevant activities that may arise during the work period:

- water quality sampling and laboratory analysis
- supervision of construction efforts
- monitoring of borehole repairs
- monitoring of borehole maintenance

- initiation and follow-up of community hygiene and sanitation sensitization efforts
- report writing
- data collection, data entry and field activity logging
- maintenance and interaction with community based structures (VHTs, chairpersons, and hand pump mechanics)
- procurement requests and stock requisitions
- Produce budgets for yearly, quarterly, and monthly activities (small and large scale)
- identify gaps in WASH; address WASH needs of the community

Qualifications:

To be eligible for this position, the candidate must be in at least their third year of university.

Appropriate courses that will be considered include Water Engineering, Civil Engineering, Environmental Engineering, or Public Health. The ideal candidate will have proficiency in a word processor and excel, and must be comfortable with report writing. Additionally, preference will be given to candidates that can speak Swahili, French, or Lingala, as these are the languages spoken by the refugee community, and interaction will be easier with language proficiency.

Development work, water technician experience or work with refugee communities will also be considered in lieu of other qualifications, on a case by case basis.

Methods

During the internship, my methods of learning were observation, direct participation, and personal conversations with colleagues. I had very limited interactions with refugees due to the language barrier. Additionally, I conducted no personal or work-related research during my internship period, as all of the statistics that I observed relating to WASH conditions were collected by village health teams comprised of refugees in the various zones of the settlement.

Ethics

During the internship period, I strictly followed the ethics guidelines required by my host organization, as well as SIT and the international community as it pertains to working with refugee populations. There is no unauthorized information included in this report, and all of the information contained here is from my own personal, direct observation.

Internship Experience

Through the activities presented in the Internship Responsibilities section, I was able to achieve the objectives set forth during the proposal stage of this program. I was able to oversee many repairs and assessments of boreholes, water storage tanks, and latrines. I learned how to assess a borehole and diagnose the causes of borehole failure, as well as how to assess the spare parts that were needed for repair. I also learned the proper approach for latrine construction, including the proper depth of at least four meters, and a super structure that provides for a private door or enclosed opening. In some circumstances, water was chlorinated if it was being provided to vulnerable populations such as schools or hospitals. Otherwise, the water provided in the settlement is groundwater, which was protected from contamination through prohibiting construction of a latrine within 10 meters downhill or 30 meters uphill from the source. No

treatment was applied to this water due both to cost and the fact that the water was considered clean enough to justify supplying raw water.

Concerning WASH effects on public health, I was primarily exposed to the effects of hygiene regarding jiggers and elephantitis, as well as diarrhea. Through encouragement of good hygiene practices by LWF, children are monitored at school and action is taken if they are considered to be at risk of hygiene related diseases. Additionally, fumigation is routinely carried out in schools to prevent hygiene related diseases. I am uncertain of diarrhea prevalence in the settlement, but I am aware that at least 15% of all waters sampled for fecal matter tested positive, suggesting that at least 15% of the refugee population is drinking contaminated water and likely experiencing frequent episodes of diarrhea. This number is probably higher, since risk of contamination of water increases after it is drawn from the borehole, including during storage and use.

In order to prevent conflict between the host communities and the refugee population, most resources are shared, and 30% of all activities are implemented in the host community. The only resources that are not shared are food provisions, and the one-time provision of non-food items to refugees upon arrival. Because of aid sharing, LWF has built boreholes in the host community, has carried out sanitation sensitizations, as well as conducts routine water quality analysis for the host community. To prevent environmental degradation, refugees are not allowed to cut down trees for timber, and are given a specific amount of land for which they are allowed to live and farm. This also helps to prevent resent amongst locals towards the refugee communities.

Personal Assessment

Overall, I consider the internship experience to have been very successful, as demonstrated by the fact that all objectives were met. And, once again, I am very grateful to LWF for providing me the opportunity to learn and share knowledge with them. It is my personal opinion that LWF is doing an incredible job supporting the refugee community, especially given the fact that there are four WASH staff and approximately 65,000 refugees. During my time with LWF, I learned a valuable lesson on the importance of creating and maintaining community structures to ensure sustainability of projects. Outside of technical skills gained, I also learned the process of proposing and implementing projects from international aid donations for development, including reporting for accountability.

Although it was difficult at times, I believe that I eventually learned to successfully integrate into a workforce that is very culturally different than the one I was brought up in. This new work environment differed in communication practices, concepts of time, and the balance between work and personal relationships. These differences taught me important lessons in patience and acceptance, and in having an open mind when working with different cultures, especially when projects are being implemented for beneficiaries with similar cultural practices.

The internship experience was overwhelmingly positive. However, a few factors could have enhanced the experience. The first is the knowledge of at least basic words in any of the multiple languages spoken by the refugee community. Language was not a barrier most of the time in the office because the employees are from all regions of Uganda and consequently speak English to each other, although there were many times when a local language was spoken in the office during which someone would translate for me if they thought it to be relevant. The other suggestion I would make for future endeavors would be to communicate with the staff about internship expectations and responsibilities and agree upon a final output to make the experience

more fulfilling. Given the circumstances in which LWF took me on (very last minute!) the satellite staff in Rwamwanja was not prepared for me, and consequently took me on to shadow their activities until the last couple of weeks, when they started to request for my assistance with report writing and other activities such as water quality analysis. For future experiences, this should be integrated from the start to get a more substantial experience.

Internship Output

During my time as an intern with LWF in Rwamwanja, I was introduced to the community led total sanitation (CLTS) method for establishing open defecation free (ODF) communities during a literature review. LWF is implementing CLTS programs in the host communities surrounding Rwamwanja, but uses a different approach in the refugee communities. The justification for the CLTS approach is the fact that the host communities can afford (relatively) to conduct the CLTS initiatives, primarily including latrine construction, without outsider support. According to many studies, it is preferable to let the community lead their own sanitation initiatives so that there is a sense of ownership and pride, rather than an outsider demanding behavior change. In this way, sanitation initiatives are more sustainable.

In the settlement, LWF offers much more support for the community sanitation efforts. This is justified because the refugee communities simply do not have the resources to construct latrines or produce hand-washing stations once behavior change is desired. However, I have observed that because of this support, there is a dependency amongst the community through which the community seems to want to be rewarded for achieving favorable sanitation conditions, and does not follow through unless promised a reward, which is not feasible through the funding that is provided by donor organizations. Therefore, if I were to stay with LWF longer, I would

work to create more community ownership of initiatives and projects, through trainings by refugee community members which can be natural leaders, and through the managing of funds by refugee community members as well.

Additionally, I believe this program should fully integrate a health and WASH program so that there is a direct tie between health outcomes and WASH. To further enhance this program, I believe that the reporting should not be exclusively to the donors, but to the beneficiaries as well, so that the community is better able to understand the importance of WASH. The program should include constant community feedback. During my time in Rwamwanja, I observed that there were many complaints relating to communication from LWF to the refugee community. Similar to the way in which implementing partners report to donors, the WASH sector should also report to communities so that they can understand the breadth and depth of the WASH activities, as well as how it is personally affecting their communities. If I could organize the WASH sector in Rwamwanja, I would delegate one person to disperse materials for latrine construction and borehole repair. Two people would be tasked with supporting community structures and sensitizations, although I would not task them with carrying out these activities, but rather providing technical and logistical support. This would leave the community responsible for the WASH messages and sensitizations that are being disseminated in the community. Of course, monitoring efforts would have to take place to ensure that information that is being spread is correct. However, ideally, this situation would allow for a sense of ownership of the WASH field amongst the community, and would also ensure that any initiatives are culturally appropriate for that specific community. The remaining WASH team member would be responsible for monitoring of WASH efforts, assessing gaps, and delegating work to address community needs. It is very possible that in the near future, there could be a cut in

funding to Rwamwanja. If that happens, the refugee community needs to be prepared to maintain the initiatives of LWF with minimal support. Therefore, beginning to implement systems that are largely refugee operated at the present time would prevent a decline in the WASH conditions of Rwamwanja in the case of decreased funding.

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