LUUKA WASH IN SCHOOLS ASSESSMENT REPORT

ROTARY CLUB OF BWEYOGERERE NAMBOLE In Partnership with Miisa Foundation

May 2017

Table of Contents

0 EXECUTIVE SUMMARY
1 INTRODUCTION
2 METHODOLOGY
2.1 Overall Design
2.1.1 Methods of Data Collection
2.1.2 Data Processing and Analysis
3 WASH IN SCHOOLS FINDINGS
3.1 Sanitation
3.1.1 Pupil-Stance Ratio
3.1.2 Teachers' Latrines
3.1.3 Inclusiveness of Latrine Design
3.2 School Health Clubs
3.3 Hand Washing Facilities
3.4 Safe Water Coverage
3.4.1 Time Taken to Collect Water
3.4.2 Water Related Diseases
4 APPROPRIATE TECHNOLOGY OPTIONS
4.1 Specifics from Schools
4.1.1 St. Jude Nantawawula
4.1.2 Kimasa Primary School
4.1.3 Magoola Primary School
4.1.4 Butumba Muslim Primary School
4.1.5 Busoga Primary School
5 DETAILED ASSESSMENT OF RECOMMENDED INTERVATION TECHNOLOGIES
5.1 Detailed Hydro-Geological Surveys for Schools Considered for Borehole Drilling
5.2 Technical Assessment of Schools Recommended for Rainwater Harvesting
5.2.1 Results Obtained
5.2.2 Sample Design for Rain Water Harvesting Tank
6 MENSTRUAL HYGIENE MANAGEMENT
7 BUGIRI DISTRICT O&M PLAN
7.1 Hardware Maintenance
7.2 Software Maintenance

ACRONYMS

FGDs	Focused Group Discussions
KII	Key Informant In-depth Interviews
HWF	Hand Washing Facilities
MHM	Menstrual Hygiene Management
RWHT	Rain Water Harvesting Tanks
O&M	Operation and Maintenance
P/S	Primary School
SMC	School Management Committee
WASH	Water Sanitation and Hygiene 0-1

EXECUTIVE SUMMARY

This report presents the findings of an assessment that was conducted in primary schools in Luuka District. The purpose of the study was to assess WASH and school infrastructures in the four primary schools. It was important to undertake the survey in order to assess what has been done on water, sanitation and hygiene which are among the development priorities globally. Field Survey was divided into three components: field observation, focused group discussions and interviews. Field observation was done in order to observe the adequacy of WASH facilities and infrastructure facilities in selected Primary Schools while interviews were done to head teachers, teachers and pupils of selected schools in order to collect information on WASH facilities in schools.

The need for clean drinking water. The school communities suffers the typical health and social effects of not having a sufficient local source of clean drinking water. Women and (primarily female) children must walk long distances each day to fetch water for their families from questionable sources. Muddy springs, small ponds, and other sources of unclean water result in high incidences of stomach ailments and diarrhea and contribute to an increased mortality rate, especially among children under the age of five years. Women lose the ability to contribute to the economic well-being of their families children lose their opportunity to attend school on a regular basis. Families are unable to practice proper hygiene due to the limited amounts of water that can be collected and carried back to the households.

In terms of hygiene, none of the schools had soap or ash for hand washing. None had sanitation clubs, the assessment found out that little is being done on hygiene promotion so that hygiene messages are relayed to pupils although some schools remind pupils about personal hygiene during morning assembly time.

Menstrual hygiene management (MHM), which isn't sufficiently acknowledged as important, is poor and results in girls missing several days of schooling each month, leading to the girls falling behind in their studies and then dropping out. Pitiful sanitation facilities combined with a long time spent in search for water further exasperates this MHM problem.

Most schools visited did not include Water, Sanitation and Hygiene operation and maintenance requirements in their school development plans. This probably explains the low functionality rates for school based WASH facilities within the District.

1 INTRODUCTION

In conducting this assessment, Miisa Foundation/Rotary Club of Bweyogerere Nambole had to meet the following objectives:

- To establish safe water access in the schools.
- To investigate the sanitation status of the schools.
- To identify current health and hygiene practices in the schools.
- To determine the level of awareness among st pupils on menstrual hygiene management, especially the girl child.
- To determine the infrastructure situation in the school if they meet the conducive learning environment.
- To engage members of school management committee in choosing appropriate WASH technologies, infrastructure improvement and developing work plan and budgets.

This report is prepared as a guiding document for the Rotary Club of Bweyogerere Nambole and other potential partners. It outlines the general infrastructure, water, sanitation and hygiene situation in the four schools highlighting the areas where developments are earmarked as possibilities. It gives an indication of the current situation regarding water and sanitation facilities for each assessed school and also proposes the most suitable technology in the different schools. This assignment attempted to answer questions such as:

• What is the current safe water situation in the schools?

- What is the condition of sanitation facilities in the schools?
- What are the hygiene practices amongst pupils?
- How MHM is currently mainstreamed in the routine school programme?
- What are the potential technological options for water and sanitation improvement in the selected schools?
- What are the existing operation and maintenance strategies being used by the schools?
- Renovation of schools that need re-roofing, windows, doors and painting of schools

2 METHODOLOGY

2.1 Overall Design

The assessment was a cross-sectional study using a combination of quantitative and qualitative methods. Both random sampling and non-random sampling techniques were used to ensure that the results were representative of the study area.

2.1.1 Methods of Data Collection

I. *Institutional Questionnaire Interviews*: Interviews were conducted with heads of institutions on infrastructure and WASH related issues. The type of data captured included; school enrolment, WASH facilities, and sanitation and hygiene practices.

II. *Key Informant In-depth Interviews (KIII):* KIII were conducted with the Parents and Teachers Association (PTA) and the School Management Committee leaders on Infrastructure and WASH issues. A semi-structured interview guide was used to conduct the KIII.

III. *Observations:* This method was used to capture data on infrastructure, water and sanitation facilities. Observational checklist was developed and used during assessments.

IV. *Focus Group Discussions (FGDs):* These were conducted in each of the four schools and were composed of ten female and ten male pupils ranging from Primary Four to Seven.

V. *SMC/PTA members also participated in FGDs.* This group consisted of 10-15 members who also contributed to the study in the respective schools.

3 WASH IN SCHOOLS FINDINGS

3.1 Sanitation

All the four schools covered during the assessment had permanent latrines although many were in a poor state of use, maintenance and repair. In some schools, such a state was either due to poor workmanship or age.

In all the schools, the latrine type was the Ventilated Improved Pit (VIP) latrine but not drainable. It was also identified that issues to do with sanitation were also related to adequacy of the existing latrine facilities considering the pupil/student ratio. In the subsection below, the pupilstance ratio is discussed.

3.1.1 Pupil-Stance Ratio

- 1. Inadequate infrastructure especially in the primary schools as here under by ratio:
- Classroom/ pupil ratio 1:196 national is 1: 54
- Latrine/ pupil ratio
 1:119 national is 1:40
- Desk/ pupil ratio
 1:08 national is 1:03
- Text book/ pupil ratio
 1:23 national is 1:03
- Staff house/ teacher ratio 1:30 national is 1:1

A make shift urinal at Budhabangula ps



Table. Fupils stance ratio per school

Sub	Parish	School	Enrolment of pupils			Number of stances				
county										
			Male	Female	Total	Male	Female	Total	Male	Female
Luuka TC		Kiyunga PS	386	420	806	2	3	5	193:1	140:1
Bulongo		Mawembe ps								
Bukooma		Bukanha								
LuukaTC		Budhabangula	670	639	1,309	4	6	10	167:1	107:1

3.1.2 Teachers' Latrines

The findings show that two out of the four schools had separate stances for teachers. Three schools had no stances for teachers. The teachers were either sharing with pupils or using their latrines at home (if near). The two schools without teacher stances were; Kiyunga ps and Budhabangula ps . The schools with teachers' latrines had no separate stances for male and female teachers. This arrangement is not gender sensitive.



Figure 3-1: Latrines at Budhabangula P/S

Figure 3-2: Girls' Latrines at Kiyunga P/S



3.1.3 Inclusiveness of Latrine Design

3.1.3 Inclusiveness of Latrine Design

Only Kiyunga Primary Schools had inclusive latrine designs that catered for children with physical disability.

3.2 School Health Clubs

None of the schools had a school sanitation committee which is a working committee of the school management committee. No school had health clubs yet these are meant to work in conjunction with the health prefect to promote and maintain behavioral change towards good hygiene practices and proper use and maintenance of hygiene and sanitation facilities in schools.

3.3 Hand Washing Facilities

Sub county	Parish	School	Availability of HWF	Soap /Ash		Evidence of hand washing facility usage		
				present	Absent	In use	Not in	
							use	
Luuka TC		Kiyunga ps						
Luuka TC		Budhabangula						
		ps						
Bulongo		Mawembe ps						
Bukooma		Bukanha ps						

None of the four schools had hand washing facilities next to the latrines

3.4 Safe Water Coverage

An assessment on school access to safe water sources within 500 meters was also carried out. Overall, two out of the four schools had rainwater harvesting tanks. However, these tanks were either in a sorry state or non-functional at the time of visit. This means all schools did not have safe water points and were using boreholes within the community. The boreholes had long lines and there is a lot of time wasting for school going children if they are to use them hence loosing valuable class time.

3.4.1 Time Taken to Collect Water

None of the schools collects water in less than 30 minutes and fetching water is done by pupils. The assessment team established that the main cause of such time wastage was the unavailability of water points within the schools, thus the long distances and queuing at the water points. Further assessment was done to find out if water was stored for children while at school. The results indicated that three schools didn't store any water, and the two schools which store water have insufficient storage facilities. This has a negative impact on the performance of the school children since valuable school time is lost in search for drinking water.

3.4.2 Water Related Diseases

All the four schools reported incidence of water related diseases amongst pupils. The reported diseases include; diarrhoea, typhoid, and others like jiggers. These have also contributed to the loss of school time by children.

Figure 3-3: Broken Down Tank and dilapidated classroom block at Kiyunga P/S



Figure 3-4: Budhabangula P/S pupils line up for meals at the Kitchen facility





4 APPROPRIATE TECHNOLOGY OPTIONS

The appropriate technology options were assessed using the following criteria:

- Capital cost of the technology
- Service level
- O&M cost
- Sustainability
- Water resources potential

The findings show that the available water technology options included boreholes, rainwater harvesting tanks and piped water. However, piped water schemes are not fully operational compared to boreholes and rainwater harvesting tanks. In summary, the existing water technologies were appropriate to the extent that the users made a choice.

Four schools preferred water harvesting technology because of the populations to be served, and the low operation and maintenance costs involved.

Budhabangula Primary School and Kiyunga Primary School preferred a piped water scheme due to its accessibility and the population to benefit, i.e. they are with in the town Council which is served by NWSC under small town project and a rural growth center.

4.1 Specifics from Schools 4.1.1 Budhabangula ps





Some of the book stores at Budhabangula ps.

The main water source is a community borehole which is about 500 m away from the school. The pupils have difficulty in collecting water due to the presence of many people at the borehole. **School Preference**

The school management committee (SMC) and parents preferred a piped water from NWSC.

Recommendation

In regard to the above, the best option would be providing piped water from NWSC and water harvesting tanks to supplement the community borehole.

4.1.2 Kiyunga Primary School

The main water sources for the pupils here is a community borehole which is far away from the school.





Dilapidated classrooms at Kiyunga ps School Preference

The SMC preferred a piped water from NWSC and water harvesting tanks to supplement the community borehole. But the challenge is paying national water fees and levying it to parents with little or no income looks unsustainable hence the supply of harvested water seems to be a better solution.

Figure 4-1: Participation in Describing the School's Needs



Recommendation:

Providing piped water and rainwater harvesting tanks for the school to cater for the pupils' needs since its O&M is rather manageable.

4.1.3 Bukanha Primary School

The primary water sources are community boreholes which are far away from the school. The pupils interviewed reported that the closest borehole always has a lot of people because it's within the community. They normally fetch from the furthest borehole which is not as congested. The school also has a rainwater harvesting tank which was constructed many years ago. However, the tank is non-functional and the school management claims it was vandalized by the community who wanted to fetch water during the school holiday. By the time we visited, the tank hadn't been repaired.

Recommendation

Provide a borehole in the school premises to help the pupils' access safe water. Sustainabililty for the bore hole could be expensive for the time being hence we recommend rain water harvesting.

4.1.4 Mawembe Primary School

The main water sources for the pupils here is a borehole located about 225 m at nearby. This is no longer functional because of being a shallow well and cost of repairs a re high in the community. **Recommendation**

The recommendation would be providing a water rain harvesting system in the school premises.

5 DETAILED ASSESSMENT OF RECOMMENDED INTERVATION TECHNOLOGIES 5.2 Technical Assessment of Schools Recommended for Rainwater Harvesting

After the field recommendations for the interventions to be made on the various schools, further technical considerations and investigations where made especially of rainwater harvesting to ascertain the appropriateness and level of service for the intervention.

Assumptions Considered

1. The current school population was used in calculating the water demand.

2. The unit water demand of five liters per pupil and staff per day was used because they are rural schools. Because of spaced rain seasons, adequate capacity of tanks is required so that water can take a period of time for at least 3 months of each academic term.

3. The roof area of the available buildings in the respective schools was calculated.

4. Average monthly rainfall data for the past five years was obtained from the meteorological department, which was used to estimate the harvestable water.

5. For purposes of this analysis, no factor of safety was added to the calculated water demand.

6 MENSTRUAL HYGIENE MANAGEMENT

MHM is an issue that is insufficiently acknowledged and has not received adequate attention in the reproductive health and WASH sector. Menstrual Hygiene is an issue that every girl and woman has to deal with once she enters adolescence around the age of 12 and until she reaches the menopause somewhere in her 40's. Menstruation is a monthly occurrence that requires access to appropriate materials and facilities, without which, females suffer from poor menstrual hygiene which restricts their movement and self-confidence. Good menstrual hygiene is therefore crucial for the health, education and dignity of girls and women. All the schools reported girls of menstruation age.

Menstrual management

According to the assessment, eight out of ten school girls skip school and some have been reported to have dropped out entirely due to a lack of adequate menstrual products and proper sanitation. This critical unavailability of cost-effective sanitary products in schools and the consequent reliance of girls on unhygienic substitutes (rags, pieces of foam mattress, toilet paper, banana fibers, etc.) for menstrual management is proven to cause considerable health risks, and to act as a barrier to primary education for female pupils. The assessment revealed that girls miss 4-5 school days monthly when in menstruation. Deliberate school absences of up to 4-5 days each month results in up to 20% of the academic school year skipped simply due to normal monthly menses. Enabling girls' education is a cornerstone of development and a gateway to the full participation of women in political, economic, and cultural spheres of life.

Figure 6-2: SMC Focused Group Discussion at Bukanga P/S





Figure 6-3: Focused Group Discussion on MHM at Budhabangula P/S 7-1

7 LUUKA DISTRICT OPERATIONS AND MAINTENENCE PLAN

The District has a minimal Operation and Maintenance (O & M) plan budget for water department. The District does not have a budget for repairs and maintenance of classrooms, staff houses and book stores.

7.2 Software Maintenance

The District has rather smaller funds for the dissemination of information among community members on behavioral practices related to WASH, therefore more emphasis on advocacy for community empowerment was enlighten as below:

- Training of head teachers on maintenance of Water and Sanitation investments in schools
- Sensitizing members of SMCs
- Formation of school health clubs
- Teaching girls how to make local sanitary towels at home.

Conclusion

The assessment findings indicate that there's little provision of WASH facilities. Schools do not have adequate access to safe water, latrines, no hand washing facilities, and little hygiene promotion. All these elements constitute WASH which have to be met.

The absence of water and adequate latrines is worrisome considering that this puts pupils' health at risk and also accounts for loss of valuable school time.

Improvement in WASH in primary schools will increase pupils' attendance as lack of proper WASH infrastructures affects school attendance for pupils for example during menstruation period girls opt to stay home.

The assessment findings also indicate that the infrastructures in schools i.e classrooms, staff houses, bookstores which were constructed in the 1930's like Kiyunga primary school are dilapidated and they put pupils' safety at risk. Renovation of classrooms, provision of book shelves, will give a better learning environment where by weather changes won't affect the concentration of the pupils and their teachers.

Case Study

Amina stands up to give an answer in class, suddenly the pupils seated behind her roar in laughter! Puzzled turning back, the pupils were pointing towards her uniform stained with blood. So confused she runs to the dirty latrines, no water not even materials to use to stop the blood. Her only option was to go home. Three days after the bleeding had stopped, she returned to school when she entered class, everybody laughed at her not even the boy she shared a seat with in class wanted to seat next to her. Amina says she felt humiliated and couldn't stand being in school anymore. She went back home and later changed the school. She is just one of the few who managed to change school others drop out completely.