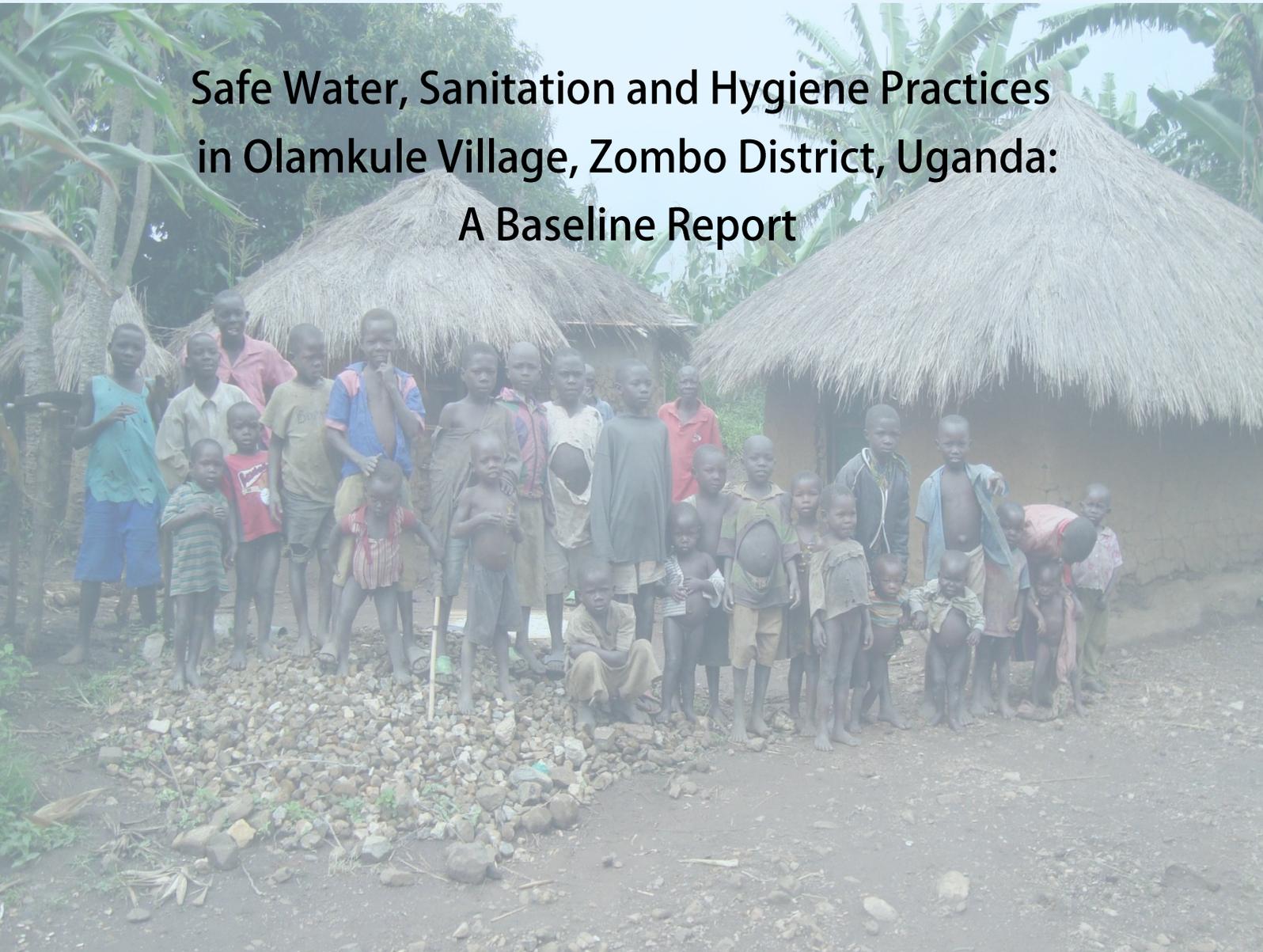


# Building A Healthy Olamkule Community

## Safe Water, Sanitation and Hygiene Practices in Olamkule Village, Zombo District, Uganda: A Baseline Report



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We strongly believe that the efforts we and others not mentioned here have collectively invested herein will bear fruits for 'Building a Healthy Olamkule Community.'

Alfred Lakwo and Franklyn J.B. Chonga  
**AFARD**

# Table of Contents

<b>ACKNOWLEDGEMENT .....</b>	<b>2</b>
<b>1.0 INTRODUCTION.....</b>	<b>5</b>
1.1 The Legal Framework: An Overview.....	5
1.2 About Ulamkule village.....	5
1.3 The Project.....	6
<b>2.0 THE BASELINE STUDY .....</b>	<b>7</b>
2.1 About the Baseline Survey.....	7
2.2 Objective of the study.....	7
2.3 Methodology.....	7
2.4 The Study Respondents .....	8
<b>3.0 STUDY FINDINGS.....</b>	<b>10</b>
3.1 Common water access and utilization practices.....	10
3.1.1 <i>Main source of water</i> .....	10
3.1.2 <i>Water handling</i> .....	10
3.2 Waste disposal practices .....	11
3.2.1 <i>Excreta disposal</i> .....	11
3.2.2 <i>Solid waste disposal</i> .....	12
3.2.3 <i>Liquid waste disposal</i> .....	13
3.3 Vector control practices.....	13
3.3.1 <i>Home Hygiene</i> .....	13
3.3.2 <i>Personal Hygiene</i> .....	14
3.3.3 <i>General hygiene practices</i> .....	14
<b>4.0 THE COMMUNITY STATE OF HEALTH.....</b>	<b>15</b>
4.1 Health status.....	15
4.2 Health services outlet .....	15
4.3 Disease burden.....	16
<b>5.0 THE CALL TO ACTION .....</b>	<b>17</b>
5.1 Summary of findings.....	17
5.2 Recommendations .....	17
5.3 Conclusion .....	18
<b>6.0 THE MONITORING AND EVALUATION FRAMEWORK .....</b>	<b>19</b>

## List of Tables

Table 1:	Household assets holding and capabilities .....	9
Table 2:	Water storage practices .....	11

## List of figures

Figure 1:	Community meeting in Ulamkule village.....	8
Figure 2:	Lara stream, the main water source .....	10
Figure 3:	Latrines in Ulamkule and their conditions .....	11
Figure 4:	Above: A latrine without a door .....	12
Figure 5:	A garbage pit in the home of LC 1 chairman.....	12
Figure 6:	A typical bath shelter .....	13
Figure 7:	People practicing safe personal hygiene.....	14
Figure 8:	Disease prevalence in Ulamkule village .....	15

## 1.0 INTRODUCTION

### 1.1 The Legal Framework: An Overview

Environmental health is an area of concern in rural development. Sanitation is legally recognized as a **must** for all the people of Uganda by the 1995 Constitution (Chapter 3 Article 17 (j)); the Local Governments Act 1997 (Part IV, article 7(a), 14 (a & b)); the Public Health Act, 1997; and the Kampala Declaration on sanitation (1998). The GoU has, through the ministry of health, local health sub districts, and NGOs/FBOs, enacted a sanitation statute that promotes safe water chain management.

The Agency for Accelerated Regional Development (AFARD) with the support of Friends of Fr. Alfred Mungujakisa initiated Olamkule Water, Sanitation and Hygiene Project in 2006. While the project looks at facilitating a process of “Building a Healthy Olamkule Community” through improving environmental health, it became inevitable for the project to chart a path within which it would remain accountable for its input-impact chain. It is this outlook that was the basis for this baseline study.

### 1.2 About Olamkule village

Olamkule village is located in Abira parish, Zombo Town Council, Zombo district. It is bordered by Angaba village to the north, Okongo village to the south, Cumu village to the west and Oguta village to the east.

The main source of livelihood is farming; an enterprise that is gendered. While women farm largely food crops, men primarily focus on cash crops. Due to the good climatic and soil conditions, many crops are grown namely cassava, beans, groundnuts, maize, potatoes, vegetables, bananas, and coffee. However, because of the heavy soils and hand-hoe technology, many households farm not more than an acre of land.

Access to public services is limited. The nearest school and a health unit are over 3 kilometres away. As a result, many children delay enrolment to the age when they can walk to and from schools (besides being able to withstand hunger). Likewise, the utilization of modern health facilities is limited. People prefer local medicines and over the counter self-prescribed medicines (of course with devastating effects).

### 1.3 The Project

It was noted by Fr. Alfred Mungujakisa that people in Olamkule village use unsafe water source – Lara stream – for drinking, cooking, laundry and bathing. This water source is shared with domestic and wild animals both upstream and downstream. People also bath in the same stream. Besides, many people don't have pit latrines. They instead use the bushes when nature calls. Human wastes are therefore washed by rain to the same water source which in turn is used for domestic use; including drinking. As a result, waterborne diseases are very common. To this end, this project was initiated to help avert this challenge.

The project intends to build a healthy Olamkule Community by positively changing health related knowledge, attitude and practices of the community in order to reduce the incidences of preventable diseases. By so doing, the community will enjoy positive benefits such as savings on health costs, more time for gainful activities and a cleaner environment.

## 2.0 THE BASELINE STUDY

### 2.1 About the Baseline Survey

Important to point out is that while Olamkule Water, Sanitation and Hygiene Project evolved out of the local need in the community, it lacked baseline information with which it could be tracked and evaluated. Besides, the baseline was requisite in helping AFARD (the implementing agency) to understand the local dynamics (of why and how certain aspects of the project are the way they are) in order to craft together with the community a village-sensitive and village-owned strategies for positive change. This approach is important because community knowledge informs their attitudes and practices towards a given perceived healthy living. Inadequacies or misconceptions about such knowledge, attitudes and practices (KAP) are likely to put the health status of the people in jeopardy.

### 2.2 Objective of the study

The broad aim of this study was to gain an understanding of the existing KAP in relations to water, sanitation and hygiene practices in Olamkule village in order to:(i) establish a clear baseline information to be used for designing a participatory impact monitoring (PIM) tool with the community; and (ii) identifying clear intervention strategies that suit the gaps and strengths so identified.

Thus, the study specifically set to explore: (i) access to and utilization of safe water; (ii) waste (excreta, solid and liquid) disposal practices; and (iii) vector control practices. These parameters are where safe water, sanitation and hygiene – personal and environmental – revolve. Unpacking these facts would, therefore, increase the understanding of how disease vector spread from faeces through flies, fluids, fingers, field/floors, into foods/water where they are passed on to the people (new host).<sup>1</sup>

### 2.3 Methodology

To collect data in regards to the above three facets the following methods were used.

- **Household survey** was conducted in July by locally trained data collectors under the supervision of the District Health Educator and the in-charge health

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<sup>1</sup> See Water and Sanitation Collaboration Council and WHO (2005). Sanitation and Hygiene Promotion: Programming Guidelines. Geneva.

component of AFARD programme. Data collectors covered all the households in Ulamkule village.

- **Focus group discussions** were held with various social groups on water, sanitation and hygiene practices. Priority was given to men, women, and children simply because they face the huge brunt of household disease burden.
- **Direct observations** of facilities and practices at various points were conducted. This was complemented with photo taking of key aspects of safe water, waste, and vector management.



Figure 1: Community meeting in Ulamkule village

- **Community meeting** was held to provide a feedback on the findings for further analysis, reflection and plausible intervention analysis.

## 2.4 The Study Respondents

The study covered all the 89 households in Ulamkule village (local council 1). These households had the following demographic characteristics:

- They had a total of 413 people composed of 48% females and 52% males.
- The household sizes were largely composed of an average of 4.6 people.
- Of the total population, 12% are orphans, and 9% are persons living with disabilities.
- Majority (63%) are married as compared to those who were single (20%) and widow(er) constituting 13% of the household heads.
- Many household heads were engaged in farming (94.5%) and a few live on business (3%) and salaried employment (2%) as their primary activities. On average, every household have 2.2 acres of land for farming.
- With regards to formal education, 28% had no education, 64% had only primary education and a dismal 8% with (post) secondary education.
- The predominant type of housing was the temporary housed (94%) of grass thatched roof with mud and wattle walls as compared to semi-permanent units (5%) and permanent houses (1%).

- The main source of lighting in the homes was the paraffin lamp (94%). A sizeable number of households (6%) reported that they use firewood to light their houses at night.
- Meanwhile, the cooking technology was by the use of the traditional 3-leg stone or mud stove (89%). Few households use improved wood saving cook stove (10%) or charcoal stoves (1%).
- The people's main means of transport was by foot (81%) although a few homes have bicycles (16%) and motor cycles (2%).
- For communication, the people relied mainly on their neighbors (43%), local radios (32%), and community meetings (19%). A negligible proportion of the people had mobile phones (6%).
- In terms of asset holding capacity and capabilities, table 1 below shows that generally majority of the homesteads owned limited convertible assets; a situation that reflects how poor and vulnerable they were to livelihood shocks and stresses.

Table 1: Household assets holding and capabilities

<b>Assets</b>	<b>%</b>
Motor cycle	3
Bicycle	25
Radio	39
Mobile phone	18
Chairs with cushion	1
Bed with mattress	47
Good kitchen wares	58
Sunday best clothes	81
Able to buy non-produced food	46
Able to buy clothes	53
Able to pay medical bills	55
Able to pay school fees	35

*Source: Survey data*

## 3.0 STUDY FINDINGS

Below is the analysis of the study findings in relation to the three facets of safe sanitation, namely: safe water usage; disposal of human excreta and solid and liquid waste, and vector control.

### 3.1 Common water access and utilization practices

#### 3.1.1 Main source of water

It was found out, in confirmation of the situation stated by Fr. Alfred Mungujakisa, that all the households in the village use the unsafe stream as their source of water for drinking, cooking, bathing, washing utensils and laundry, etc.

This stream is  $\frac{3}{4}$  km from the village and it takes about half an hour to and from the water source (given the hilly terrain). This distance is in excess of the SPHERE standards for access to safe water within 0.05km. This distance compounds the inability of households to access adequate water (SPHERE standard of 15 liters per person per day). That fetching water is a gendered activity socially assigned to women who normally collect 20 liters in the morning and another 20 liters in the evening (and sometimes lesser quantity if they used molded pots), on average each person in the village consumes only 53% of the daily required volume.



Figure 2: Lara stream, the main water source

#### 3.1.2 Water handling

The processing and storage of water is important if it must be safe. In Ulamkule, drinking water was invariably stored in earthen water pots or big sauce pans. The porous pot surface allows for cooling through evaporation. Observations showed that the jerry cans used for fetching water were, more often than not, dirty both inside and outside. It was also common for women to cover the opening of the jerry can using their index fingers regardless of whether the fingers were clean or not. A few people who used sauce pans and basins for fetching water also put leaves in the water to prevent it from splashing out when carrying water home. That most of the leaves are not washed before immersion into the sauce pans or basin means the already unsafe water is further made unsafe for human consumption.

While only 9% reported processing the stream water (by boiling) before use, 54% covered the drinking water storage facilities.

Table 2: Water storage practices

Water use	Storage facility	Water processed before use
Drinking	Pot	Few cases
Cooking	Jerry cans/basins/sauce pans	No
Bathing	Jerry cans/basins/sauce pans	No
Washing utensils	Jerry cans/basins/sauce pans	No

Source: Survey data

## 3.2 Waste disposal practices

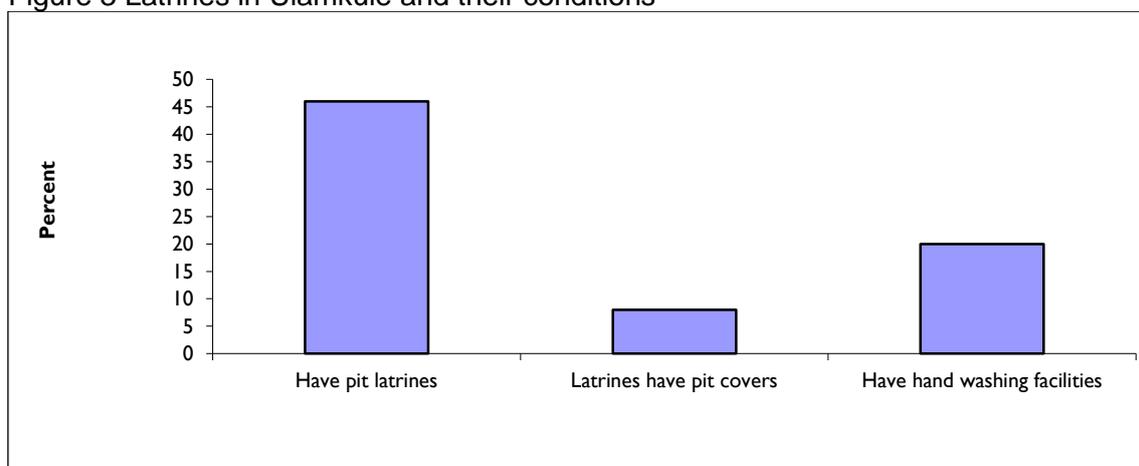
### 3.2.1 Excreta disposal

#### 3.2.1.1 Access to and use of pit latrines

For such a rural area like Olamkule the only safe way to dispose off faeces is in pit latrines. From the study, it was found out that only 46% of the households had own pit latrines. Majority of the households reported during the FGD that they shared latrines with other family members. A few cases of people who used the bushes (open defecation) were also highlighted.

However, for the latrines to ensure health safety of the people they must be well covered from flies. The figure below shows that only 8% covered their latrine pits. Asked why they did not cover their latrine pits the FGD chorused that they do not know why they should do so – a sign of inadequate awareness on the value of a safe latrine.

Figure 3 Latrines in Ulamkule and their conditions



Source: Survey data

### 3.2.1.2 The condition of the latrines

Further, the study reveals that of the latrines available, more than three quarters of the observed cases do not conform to the Ministry of Health standards. Apart from having poor structures – short and incomplete as many households dug out pits, erected poles on top and simply did not construct wall structures on the pits. As a result, the pit latrines only exist in structure. Hardly do they provide privacy. Besides, they do not block the vector spread of diseases.

Further, a look at some of the pit latrines revealed that there was hardly any material for anal cleaning. The few cases observed included materials such as fresh leaves. The FGD indicated that the common practice was also to pick pieces of compacted soil or stones as one nears the latrine.



Figure 4: Above: A latrine without a door  
Below: A latrine on coffee garden without structure



### 3.2.2 Solid waste disposal

The case for solid waste was also similar to excreta disposal given that only 21% of the households had garbage pits. More so, the FGD pointed out that many homes hardly manage their garbage well. They prefer to throw solid waste “anyhow, anywhere on the compound.” It was also noted that women throw feces of children into the open under the guise that “children’s feces are harmless”.



Figure 5: A garbage pit in the home of LC 1 chairman

For the few cases where the garbage pits were present, direct observation revealed that hardly are the waste burnt periodically or when the pits are full. It was a common sight to see garbage overflowing such pits. As a result, in many homes there was an ever growing mound of rubbish heap spilling right back into the compound. These are ideal breeding grounds for rats that host fleas that spread plague; a common disease in Zombo district.

### 3.2.3 Liquid waste disposal

Safe disposal of liquid waste was an area that was greatly ignored as a young lady asked, 'why bother about dirty water that can just be poured away, anywhere?' It was found out that only 23% of the households had constructed utensil drying rack. Interesting is that for all these racks the owners dug soak pits as is recommended by health department. Worse cases were for the 25% bathing shelters that were constructed without any soak pit.



Figure 6: A typical bath shelter

Otherwise, direct observation confirmed that all other liquid wastes were poured in or at the edges of the compound. Asked why they did not have soak pits near their bathing shelters, the primary reason given during the FGD was that there was no need to worry about dirty water given that when it was poured it will dry off. While the discussion that ensued tried to point at the direct relationship between dirty water and (blue) houseflies crowding near homes, a majority of the participants seemed to ignore such concern.

## 3.3 Vector control practices

So far we have tackled the key elements of the survey. However there are many other aspects that complement these key elements in a significant manner. These elements include: the state of the household the people lives in; the hygiene of the person; and the way the person utilizes the sanitary facilities in the home that have a bearing on their health.

### 3.3.1 Home Hygiene

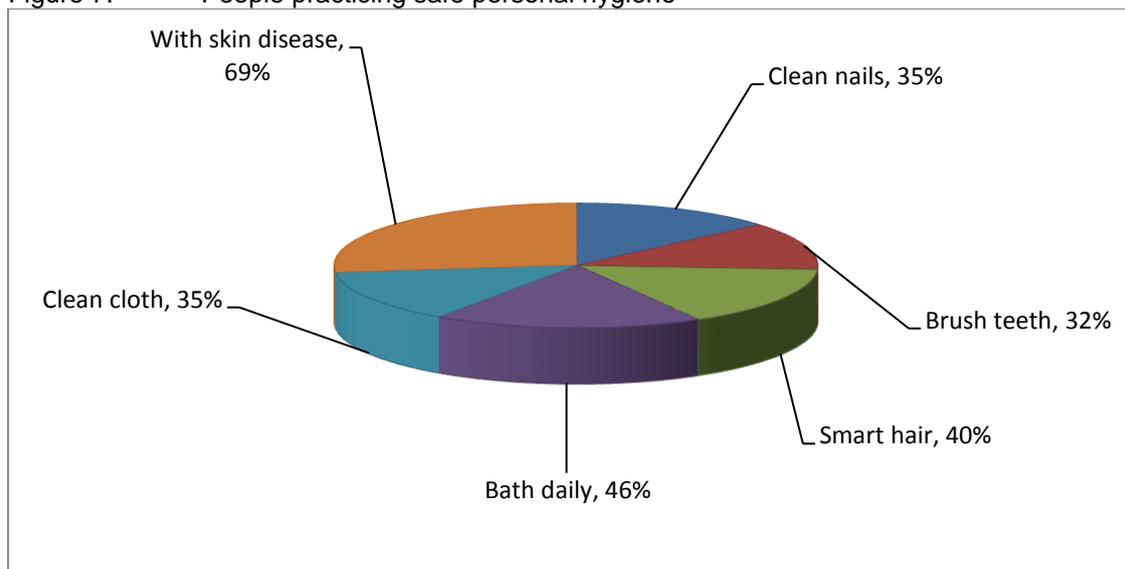
A majority of the people in Olamkule lives temporary houses (94%). These houses are made of grass thatched roofs, mud walls, and earthen floor. Unlike in many other places, at least 83% of the households had separate kitchens.

However, that the safety of such houses depends on the regularity of their smearing (with cow dung or black soils), the FGD pointed out that the women irregularly smeared their main houses (sometimes once a month). As a result, the floors accumulate dusts and wall cracks provided space for vectors like mosquito, cockroach, and fleas.

### 3.3.2 Personal Hygiene

In addition to the poor housing conditions described above, most of the people were found not practicing good personal hygiene right from their hair to their toes (see figure 7). This situation was worse off for children. Asked why in the FGD, it was disclosed that, the neglect of children was because women leave homes very early to go to the garden and when they returned they focus their attention on cooking food.

Figure 7: People practicing safe personal hygiene



Source: Survey data

### 3.3.3 General hygiene practices

On top of the above, the following unsafe sanitation and hygiene practices were also found disturbing:

- Hand washing with detergent before touching or eating food was low. Many people don't wash their hands even after visiting the latrines.
- Only 67% had separate sleeping houses while 17% had houses that doubles as both main sleeping house and kitchen
- Only 45% slept on raised beds and only 51% slept under mosquito nets.
- Uncooked food was largely left uncovered in the kitchen.
- Only 60% of the households used one separate cup for drawing water from the main pot and another for drinking.
- The practice whereby elders wash their hands first and leaves the dirty water for youths and children to wash their hands from before eating hastens the spread of diseases in the population.

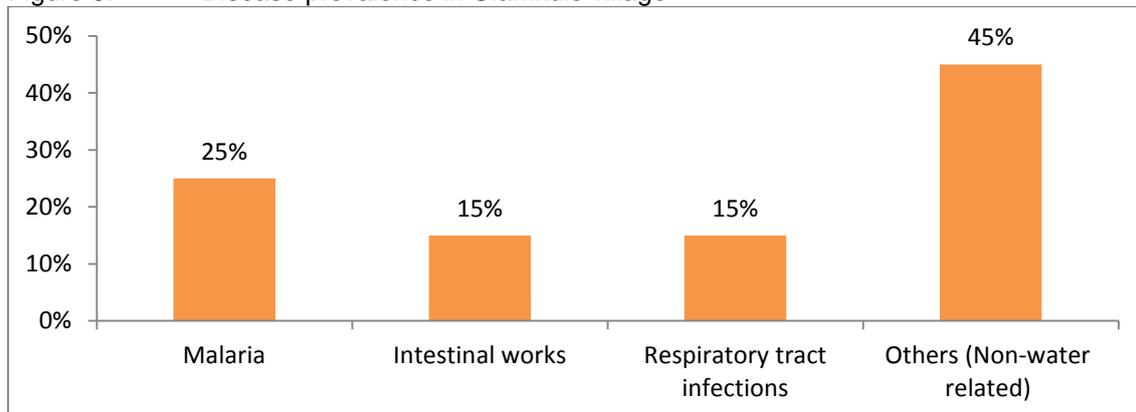
## 4.0 THE COMMUNITY STATE OF HEALTH

From the above findings it is evident that there is neither access to safe water nor safe sanitation and hygiene practices. This situation has a bearing on the general health of the people. Some analysis of the effects of such limited KAP is presented below.

### 4.1 Health status

The households were asked whether or not any of their members fell sick in the month that preceded the survey; and if so, what kind of sickness they suffered from. Overall, 19% were reported to have fallen sick. The main causes of these sicknesses as is shown in figure 8 below was malaria (25%) followed by Gastro-intestinal Infections (GIT) and Respiratory Tract Infection (RTI). A visit to the health unit that provides service to the community revealed that the other ailments were related to asthma, eye/ear infections, blood pressure, diabetes, and toothache.

Figure 8: Disease prevalence in Ulamkule village



Source: Survey data

### 4.2 Health services outlet

In response to the sicknesses of the family members household heads were asked where they sought for treatment. Many people (88%) responded that they received treatment at a health facility and only 12% were treated at home. However, from further discussions during the FGD and direct observation of the sick it came out that many households resorted to over-the-counter (self) medication using drugs bought from drug shops (locally called clinics) and without prescription and medical advice.

### **4.3 Disease burden**

For those who fell sick, the average duration of sickness was 3.6 days (min = 1 day and max = 30 days). This burden was reported to have affected mainly women (the social category charged as care givers) and children (who were reported to have been the most affected by sicknesses).

Apart from the days lost to sicknesses – actually being sick and the provision of care, households also incurred financial burden on seeking treatment as is noted under 4.1.2 above. The estimated total cost was UGX 1,024,600. This represents an average expense on medical bills of UGX 27,691 (min = UGX 1,400 and max = 500,000). In an economy where the daily labor rate is UGX 1,500 (for a long day hard work as a hired laborer), this medical cost represents about 19 productive days lost to health care.

## 5.0 THE CALL TO ACTION

### 5.1 Summary of findings

From the analysis presented in part 3 and 4 above, there is truly dire need for “Building a Healthy Ulamkule Community.” The findings reveal that:

- Finding 1:** All the households in the village use unsafe water point for their entire water needs. Yet, the water point is far and the per capita water consumption is very low. Further, hardly is the water processed before drinking. The poor water chain management further leads to contamination of the already risky water.
- Finding 2:** The available pit latrines are substandard. They lack privacy; are not covered; and are not well maintained thereby increasing vector spread. This is worsened by the concurrent use of open defecation.
- Finding 3:** Equally, home hygiene and personal hygiene are wanting. Solid and liquid wastes are poorly managed thereby increasing exposure to disease vectors.
- Finding 4:** The above noted situations generally emanates from limited knowledge about the dangers of using unsafe water, sanitation and hygiene practices.
- Finding 5:** As a result of the poor water, sanitation and hygiene management, 19% of the population fell sick from otherwise preventable causes. Such sicknesses impacted negatively on household productivity as about 4 days were lost to sickness and about 19 productive days’ worth UGX 27,000 (on average) spent on medical treatment.

### 5.2 Recommendations

A community meeting was held in which the baseline findings were presented and discussed. This was done in order to raise awareness about the impending bomb the people are exposed to (e.g. cholera outbreak). The meeting was also held in order to solicit community-led strategies that would enrich the initially proposed actions.

From the meeting it came out that: First, there is an urgent need for a safe water points within easy reach of the community members. This required that the hydrological survey for the water site should be conducted with the involvement of the beneficiary community members so as to foster ownership besides giving siting priority to any area in the village.

Arising from this observation was also the need for ensure that: (i) there is provision of free land by whoever on whose land the water point is sited; and (ii) there is sustainable access to safe water through community-based finance system. The community members agreed that after the training of the change agents they will collectively agree on the monthly charges to be levied on all users of the water point.

Further, there was the dire need to change the current sanitation and hygiene practices, again, through a community-led approach. Herein, it was agreed that there was need for: (i) adequate community education on the dangers of unsafe sanitation and hygiene; (ii) all households in the village to adhere to an acceptable Ulamkule Healthy Community standards as a few laggards would still endanger the whole village.

Last but not least, the participants in the discussions recommended that something should be done about the drinking habits of the men. They tend to drink anytime of the day and without reservation. The tendency to expect all meetings and activities to be monetized must also be replaced with the spirit of self-help and sacrifice for the common good.

### **5.3 Conclusion**

In all, people in Ulamkule village are highly susceptibility to otherwise preventable sicknesses and deaths. This situation is compounded by the lack of access to safe water and unsafe sanitation and hygiene practices; all due to the limited awareness of safe water, sanitation and hygiene practices. As a result, there is rampant ailment from malaria, gastro intestinal worm infections and respiratory tract infections; diseases that reduce economic productivity of already impoverished households.

Yet, the immediate urge generated from the discussions of the baseline findings stirred the urge for positive change. The community needs a water source and education so that on their part they enforce minimum standards that can make them live in a "health Ulamkule Community." They are committed to change; a key ingredient for local ownership and participation in making life dignified and worth living.

## 6.0 THE MONITORING AND EVALUATION FRAMEWORK

Hierarchy of results	Objectively verifiable indicators/performance indicators	Baseline	Target (Cumulative)	Means of verification	Frequency of data collection	Person responsible
Goal: Olamkule village in which the people are healthy	• Reduction in WASH diseases	55%	5%	End of project survey report	Once	Programmes Manager
	• Reduction in the number of people who fall sick	19%	2%			
	• Reduction in lost days to sicknesses	3.6%	1%			
	• Reduction in health costs (UGX)	27,691	10,000			
Outcome: Improved water, sanitation and hygiene chain management practices	• Use of safe water for drinking	0%	100%	Quarterly reports	Every 3 months	VHT, Field Officer (health) and Programmes Manager
	• Use of own pit latrines	46%	100%			
	• Covers latrine pits	8%	100%			
	• Use of garbage pits	21%	100%			
	• Use of utensil drying racks	23%	100%			
	• Use of bath shelters	25%	100%			
	• Use of separate kitchen houses	83%	100%			
	• Has separate sleeping houses	67%	100%			
	• Sleeps on raised bed	45%	100%			
• Sleeps under a mosquito net	51%	85%				