ZAMBIA COUNTRY BASELINE REPORT

Sustainable Sanitation & Hygiene for All Results Programme

OCTOBER 30, 2014

Compiled by Country Project Team SNV ZAMBIA

EXECUTIVE SUMMARY

Background

SNV Zambia is one of the 9 countries[1] implementing the Department for International Development (DFID) funded Sustainable Sanitation and Hygiene For All (SS4HA) Results Programme as from April 2014. The programme's goal is to improve access to sanitation and promote good hygiene practices especially Hand Washing With Soap. The key results that will be achieved through the SSH4A Programme in Zambia are:

- 230 000 people will be reached through sanitation and hygiene promotion activities by end 2015
- 115,000 people will further improve their sanitation facilities to the JMP benchmark for improved sanitation by end 2017
- 80,000 people will practice hand washing with soap at critical times by end 2017

The programme has four Outcome and ten Sustainability indicators. Outcome indicators were measured through a representative household survey reported for different wealth quintiles according to the Demographic Health Survey (DHS) wealth index.

The Sustainability indicators are mostly measured against score cards in dialogue with different stakeholders.

Method

A baseline activity was undertaken between August and September 2014 with the aim of establishing current status regarding to sanitation and hygiene practices in the four project districts of Kasama, Luwingu, Mporokoso and Mungwi against which progress in the course of the programme will be measured upon. The baseline was carried out by selected members of the respective D-WASHEs.

A sample size of 1065 Households was agreed upon and apportioned to the districts according to population size. The enumerators collected data from 1096 Households. Data collection was done using smart phones in which the master questionnaire with 145 questions was uploaded on three Outcome Indicators and one sustainability indicator. The fourth indicator (Hygiene Promotion) will report on the target group of the hygiene promotion activities hence therefore is dependent upon the nature of the activity. Part of the questionnaire, the Household characteristics was extracted from the Zambia DHS 2007 Questionnaire (asset based wealth index). In the DHS, wealth of families is calculated through household assets collected from DHS surveys—i.e., type of flooring; source of water; availability of electricity; possession of durable consumer goods. These are combined into a single wealth index. They are then divided into five groups of equal size, or quintiles, based on individuals' relative standing on the household index. In addition three Zambia specific questions were added to the questionnaire to meet the aspect of Total Sanitation as follows: existence of dish rack, rubbish pit and bath shelter. The collected data was submitted to a central database.

Of the ten indicators, only two i.e. sustainability indicators i.e. *Capacity of local governments or line agencies to steer sanitation demand creation at scale in their area* and *Improved sector alignment at local level*, were scored in each district. The sustainability indicator 10 is also included in this report, but data was collected in the household survey. As defined in the tender proposal, the rest of the sustainability indicators will be scored later as the relevant activities become due.

Results

<u>Access to sanitary facilities</u>

The sanitation coverage across the 4 districts was established as 35%. Mungwi district has the highest number of households practicing OD at 38.9% followed by Kasama 29.3%; Luwingu 16.6% and Mporokoso 15.3%. Within Mungwi district the OD level constitutes 83.6% whilst in Mporokoso it is 44.7%; Luwingu 39.4% and Kasama 38.3%.

It is noted that whilst sharing of latrines is not common, it is more prevalent in cases of unimproved toilets and sharply declines up the sanitation ladder. It is noted that following the introductory sessions on CLTS in all provinces by MLGH in 2012, some of the chiefs have been asking their subjects to construct traditional latrines, mainly unimproved. Secondly some wards in Kasama and Luwingu and Mporokoso have or receive support on sanitation programmes from organisations such as World Vision and Self Help.

[1] Ethiopia, Ghana, Kenya, Mozambique, Nepal, South Sudan, Tanzania, Uganda, Zambia

Hygienic use and maintenance of sanitation facilities

In the 4 districts, 2% of the HHs have a toilet but do not use it. The cleanliness and privacy of latrines is an issue in all the districts although Kasama district HHs seem to be better in using and keeping toilets clean. This could be contributing to some of the people not wanting to use the toilets even if available.

Access to hand washing with soap

Using a proxy indicator on hand washing with soap of the presence of a hand washing station rather than the behaviour of hand washing itself, the findings show that the practice is non-existent in all wealth quintiles, across all the districts and in all HHs whether male or female headed with at least 99% not doing so. The reason for using a proxy indicator was to eliminate getting socially desirable answers, and not the actual reality since knowledge about hand washing doesn't necessarily translate in behaviour. Observing hand washing behaviour in households would have been very difficult (and expensive) to do hence the use of the proxy indicator.

Capacity of local Governments to steer sanitation demand creation at scale in their area

The capacity to steer sanitation demand creation is very weak in all the districts. There are no plan to roll out Sanitation demand creation, consequently local authorities have not provided resources for this and there is a high dependency on partners. The local authorities do not provide guidance to partners on compliance to standards. There is no sanitation data for the district hence there is no monitoring or evaluation of sanitation activities.

Improved sector alignment at local level

A multi stakeholder platform for water and sanitation, the D-WASHE exists in all the districts as it is a requirement by MLGH. In Mungwi district the participants have only been Government officials. The private sectors is conspicuous by its absence in all the districts. The D-WASHE meetings are irregular and attendance not always regular with a lot of delegation to junior officers. The main agenda for D-WASHE meetings has been on water supply and very little if nothing on sanitation and hygiene promotion.

Progress in FSM – emptying and collection

Toilets found in the area are direct pits which are usually abandoned when they fill up and new latrine is constructed. Emptying is a very new concept in the four districts. In the programme area, the vast majority of toilets are located in villages with clay or clay/silt soils hence the environmental health risk is low.

Recommendations and Conclusion

The SSH4A programme should focus on the following:

- Implement sanitation demand creation interventions to ensure the 4 districts at least meet the national target of 60% sanitation coverage. It would be essential to work with the traditional leaders to promote improvement if the sanitation situation in their chiefdoms.
- Focus of support in the programme should be directed at the women headed HHs, those with special needs and the poor as these have higher proportions of OD as compared to other categories. The programme should also work on raising the voice of women in discussion about sanitation issues and options.
- Focus on hygiene promotion to encourage use of toilets as well as ensuring they are cleaned and provide privacy.
- Focus on promoting hand washing with soap / other suitable media through hygiene promotion. It is also important to note that the standards defined by MLGH for an adequate latrine include the presence of a hand washing station. There is need to create awareness of the 5 critical times for hand washing.

- Develop a District Total Sanitation Plan which will provide the required attention and focus on sanitation and hygiene promotion and develop a monitoring and evaluation system for sanitation and hygiene promotion
- Revive the D-WASHE forums with meetings held as mandated and with an agenda on sanitation and hygiene promotion with participation of the private sector and NGOs.
- The SSH4A programme should focus on ensuring that new toilets are constructed when the old ones fill up. As stipulated in the national standards, the toilets should be constructed at least 30m downhill of a water source to avoid / reduce contamination.

0 CONTENTS

0.1 List of Abbreviations and Acronyms

3MZSHP	3 million Zambia Sanitation and Hygiene Programme
CLTS	Community Led Total Sanitation
CS	Council Secretary
CSO	Central Statistics Office
DAPP	Development Aid from People to People
DC	District Commissioner
DDCC	District Development Coordinating Committee
DFID	Department For International Development
DHS	Demographic Health Survey
D-WASHE	District Water Sanitation and Hygiene Education
FGD	Focus Group Discussion
GRZ	Government of the Republic of Zambia
HH	Household
LCB	Local Capacity Builder
LSP	Local Service Provider
JMP	Joint Monitoring Programme
MLGH	Ministry of Local Government and Housing
NGO	Non Governmental Organisation
NRWSSP	National Rural Water Supply and Sanitation Programme
OD	Open defecation
PMU	Programme Management Unit
PS	Permanent Secretary
PPS	Probability Proportional to size
SSH4A	Sustainable Sanitation and Hygiene For All
SNV	Netherlands Development Organisation
UNICEF	United Nations Children's Fund
WHO	World Health Organisation

0.2 LIST OF TABLES

0.3 LIST OF FIGURES

0.4 OPERATIONAL DEFINITIONS

Adequate Toilet	The NRWSSP defines an adequate toilet as one that satisfies the following requirements: a) Hygienically separates human excreta from contact with humans, animals and insects (particularly flies); b) Does not pollute drinking water sources; c) Does not cause intolerable smells; d) Ensures privacy for those using the toilet; e) Is kept clean
Household	A household was considered to be a person or a set of persons who together occupy a housing unit or part of it and consume and/or make common provision for food or other goods.
Improved Sanitation	A facility that hygienically separates human excreta from human contact. This includes a flush/pour-flush toilet or latrine that flushes to a sewer, septic tank or pit; a ventilated improved pit (VIP) latrine, pit latrines with the pit well covered by a slab (concrete, mud, or logs), or composting toilets; and the facility is not shared with other households (NRWSSP Document, 2007).
Probability proportional to size	Is a sampling technique for use with surveys or mini-surveys in which the probability of selecting a sampling unit (e.g., village, zone, district etc.) is proportional to the size of its population to give a representative sample.

1 INTRODUCTION

1.1 COUNTRY CONTEXT

Zambia covers an area of 752,620 square kilometres, which is divided, for administrative purposes, into 92 districts in 10 provinces. The SSH4A Programme is being implemented in 4 districts of Northern Province (Kasama, Luwingu, Mporokoso and Mungwi). In 2005 only 13% of rural households in Zambia had access to proper household sanitation facilities. The limited data available on hand washing practices indicated that only around half of rural women and men wash hands after using the toilet, with hardly any of them using soap/ other medium[2]. A Household survey commissioned by the Ministry of Local Government and Housing (MLGH) in 2008 showed that 22% of rural households were practicing open defecation[3] whilst statistics from the Central Statistics Office (CSO) show a clear trend in the reduction of open defecation in rural areas, from 36% of rural households in 1996 to 19% in 2006. According to the survey 'The main reasons given for households to construct latrines were: to avoid going to the bush/ walking long distances, for privacy, for convenience, because of awareness campaigns or having been told to construct latrines, because of subsidies and/or to reduce diseases…….. sharing of latrines among two or several households did not appear common. Reasons given were that houses were far apart, the chief or headman had given a directive that every household should have its own latrine and there was too much bush around so it was easier to use this than ask a neighbour.'[4]

The MLGH household survey conducted in 2008 showed that 33% of the surveyed households had adequate latrines[5]. The 2013 WHO/UNICEF Joint Monitoring Program (JMP) Report (which was based on 2011 data) found that in rural areas, only 33% of inhabitants have access to improved sanitation facilities[6] implying no changes in coverage between 2008 - 2011. The lack of access to improved sanitation and safe water, and inadequate hand hygiene all combine to contribute to the high prevalence of diarrhoea among children under five reported as 15.5% in the Zambia 2007 Demographic Health Survey (DHS) which established that diarrheal diseases were the 4th most common cause of mortality. The 2011 Northern Province Statistical Bulletin Report by the Provincial Medical Office shows that the incidence of Respiratory Infections (pneumonia) increased from 23 per 1000 population in 2009 to 38 per 1000 in 2011 with the incidence higher in under-fives. The provincial incidence of diarrhoea was about 7 times higher in the under-five age group than those aged five years and above.

To address these challenges, the Government of the Republic of Zambia (GRZ) through MLGH, launched the National Rural Water Supply and Sanitation Programme (NRWSSP) in November 2007. To emphasise the priority on Sanitation, which was lagging behind water supply, the Sanitation and Hygiene Component was further elaborated on in 2011. The outcomes/ results of the Sanitation and Hygiene Component are that by 2015:

i. 60% of the rural population have access to adequate toilets
ii. 60% of rural households have sufficient, adequate hand washing facilities within or next to toilets, with water and soap/ other hand washing medium available at the facilities.

SNV seeks to contribute to the attainment of the NRWSSP targets through its Sustainable Sanitation and Hygiene For All (SSH4A) Results Programme funded by the Department For International Development (DFID). Through the SSH4A Programme SNV Zambia seeks to achieve the following overall results in the 4 districts:

- An additional 230 000 people have access to improved sanitation by end 2015
- 250 000 people are reached through Hygiene promotion by end 2015
- 60 villages certified Open Defecation Free by end 2015
- 115,000 people with access to improved sanitation by end 2017 (JMP definition)
- 80,000 practice hand washing with soap by end 2017

[2] Ministry of Local Government and Housing, May 2009: National Rural Water Supply and Sanitation Programme – Sanitation and Hygiene Component

[3] Zulu Burrow, Grontmij, Carl Bro; December 2008: Assessment of Current Rural Sanitation and Hygiene Situation and Interventions

[4] Zulu Burrow, Grontmij, Carl Bro; December 2008: Assessment of Current Rural Sanitation and Hygiene Situation and Interventions

[5] Adequate latrine: a) Hygienically separates human excreta from contact with humans, animals and insects (particularly flies); b) Does not pollute drinking water sources; c) Does not cause intolerable smells; d) Ensures privacy for those using the toilet; e) Is kept clean

[6] ZCAHRD, Boston University CGHD, UNICEF: Impact Evaluation of the 3 Million Sanitation and Hygiene Program in Zambia Baseline Report, 30 April 2013

1.2 SSH4A Results Programme in Zambia

SNV Zambia is one of the 9 countries implementing the SSH4A Programme. In Zambia, the programme is implemented in the 4 districts of Kasama, Luwingu, Mungwi and Mporokoso all in Northern Province. Kasama district is the Provincial Administrative and Commercial centre of Northern Province and is located 852 km from Lusaka the capital city with an area of 10,788 km sq. (1,078,800 ha). Kasama District has a population of 238, 035 inhabitants; Luwingu District, 109,708; Mungwi, 151,058 and Mporokoso, 98,842 *(2010 Census of Population and Housing Preliminary Report)*. Zambia has an average population density of 17.2/km^2, and in rural areas such as Mporokoso, this drops to just eight people per square kilometre.

In each district, the District Commissioner (DC) is the head of administration and overall supervisor and coordinator of government programmes as well as harmonising council operations with those of central government. The DC reports directly to the Permanent Secretary who is the head of administration at the Province. The DC chairs the District Development Coordinating Committee (DDCC) meetings in which district developmental issues are discussed. The DDCC is a coordinating committee of the district whose membership is drawn from officers of the council, government heads of department at district level, civil society organisations, faith-based organisations, NGOs and cooperating partners operating in the district. Each district has a local authority i.e. District Council or Municipal council if the locality has a significant urban component, such as is with Kasama. The Council is comprised of elected ward councillors, chief's representatives and the members of parliament of the constituencies in the district. The administration of the Municipal Council is headed by the Town Clerk and that of District Council by the Council Secretary.

The 4 districts have received limited support towards improving sanitation in rural areas. Kasama District has partnered with World Vision in two wards, Luwingu also with World Vision in ten wards whilst Mporokoso and Mungwi have no partners.

On a national level, a major partner helping the GRZ to address the high burden of sanitation and hygiene related morbidity and mortality, in rural areas is UNICEF who, with funding from the Department for International Development and other cooperating partners, is implementing the 3 million Zambia Sanitation and Hygiene Project (3MZSHP). The purpose of the 3MZSHP is to support the achievement of the sanitation MDG in Zambia, with an additional 3 million people consistently using improved sanitation facilities and adopting related hygiene practices such as hand washing with soap or ash.

This is the operational environment within which SSH4A is implemented in Zambia.

1.3 Objectives of the baseline

SNV Zambia undertook a baseline survey in the 4 project districts using smart phones in which the master questionnaire developed with the assistance of the PMU was uploaded. The Baseline is twofold and gathers quantitative data through. Household survey for the Outcome Indicators and qualitative data through Focus Group Discussions (FGDs) and dialogue etc., for the Sustainability Indicators. The SSH4A performance monitoring framework has 10 sustainability indicators, linking to the objectives of the different components most of which are measured against score cards in dialogue with different stakeholders. SNV Zambia engaged a local service provider (LSP) for data collection for the Household (HH) survey. The selected LSP was required to achieve the following objectives:

i. To develop a clear cost effective plan on the process of data collection with a clear sampling methodology
ii. To identify and train suitable enumerators in each district to collect the required data
iii. To ensure the collected data is submitted to a central data base
iv. To produce a report

Despite initial positive moves and an inception report that clearly outlined a work plan that would meet the objectives, the LSP engaged ultimately failed to deliver as agreed and the contract was terminated. The LSP did not comply with the survey protocol i.e. collecting data as planned. They concentrated on peri urban areas when

they had been instructed through the ToR, the start-up meeting and the inception report debrief to focus on rural areas. SNV reorganised and mobilised and trained D-WASHE members from each district to undertake the data collection. This proved to be a major learning point for the respective officers as none had done a similar exercise before and it exposed them to the realities on the ground in relation to sanitation status and hygiene practices. The positive impact of those responsible for developing and implementing the District Sanitation Plans being part of the data collection and seeing the situation in the districts first hand has been significant. The Baseline survey data collection was completed by 4 August 2014.

1.4 REPORT STRUCTURE

The ensuing report is structured into the following sections: Introduction, spells out the country context, the SSH4A programme and objectives of the baseline

- Methodology of the baseline, giving details of the indicators used, data collection tools used, sampling, training and supervision of enumerators, data processing and analysis and the work plan outline
- Results and findings on outcome indicators: this section presents the findings from the survey for the outcome indicators viz access to sanitary facilities, hygienic use and maintenance of sanitation facilities and access to hand washing with soap
- Results and findings on sustainability indicators: this gives the findings from 2 sustainability indicators viz Capacity of local governments to steer sanitation demand creation at scale in their area and Improved sector alignment at local level.
- Conclusion and recommendations
- Annexes

2 METHODOLOGY OF THE BASELINE

2.1 INDICATORS MEASURED IN THE BASELINE

The SSH4A Programme has four Outcome Indicators and ten Sustainability Indicators. The Outcome indicators are:

- Progress in access to an improved sanitation facility
- Progress in access to a sanitation facility that is hygienically used and maintained
- Progress in hand washing with soap at critical times
- Number of people reached through hygiene promotion

Outcome indicators were measured through a representative household survey reported for different wealth quintiles. Wealth disaggregated reporting was done using the Demographic Health Survey (DHS) wealth index, which is commonly used in multi-indicator cluster surveys. After 2015, the outcome indicators will be measured annually to verify that achieved access is sustainable. The fourth indicator (Hygiene Promotion) will report on the target group of the hygiene promotion activities hence therefore is dependent upon the nature of the activity.

The SSH4A performance monitoring framework has ten sustainability indicators, linking to the objectives of the different components most of which are measured against score cards in dialogue with different stakeholders. The Sustainability Indicators are grouped in four categories, aligned with the components, as follows:

- Strengthening capacity for steering and implementation of sanitation demand creation whose objective is to assess if Local organisations are capable to implement and steer sanitation demand creation at scale.
- Strengthening capacity for sanitation supply chains and finance whose objective is that appropriate affordable market-based solutions for a variety of sanitation consumer needs are implemented at scale.
- Strengthening capacity for behavioural change communication (bcc) for hygiene promotion with the objective of enhancing effective hygiene behavioural change communication in local practice.
- Strengthening capacity for WASH governance with the objective of Improving local WASH governance terms for alignment of stakeholders, sector planning and monitoring, transparency and social inclusion.

The full list of the Indicators is shown as Annex 1.

2.2 USE OF QIS SCALES (QUALITATIVE INFORMATION SYSTEM)

The performance monitoring framework uses the so called ladders, very similar to the ones used in the JMP programme. The method is called Qualitative Information System (QIS) and was developed by IRC and WSP at the end of the 1990s as a means to quantify qualitative data used in process indicators and outcome indicators. Qualitative information is quantified with the help of progressive scales called 'ladders'. Each step on the 'ladder' has a short description, called "mini-scenario", which are factual statements that describe the situation for a particular score. Each scale ranges from the absence of the particular indicator at the lowest level (score 0) to the optimal mini-scenario at the highest level (score 4). Levels 1, 2 and 3 describe the scenarios in-between levels 0 and 4 for each specific indicator. Where there is a benchmark it is usually indicated at level 2. A typical scale looks like this:

Description	Level
None of the characteristics are present (Condition or practice is not present)	0
One characteristic is present	1
BENCHMARK: Two characteristics are present	2
Three characteristics are present	3
IDEAL: All four (key) characteristics are present	4

2.3 DATA COLLECTION TOOLS USED IN THE BASELINE

2.3.1 HOUSEHOLD QUESTIONNAIRE

A Household master questionnaire comprising of 145 questions was uploaded onto smart phones to measure the Outcome indicators. The questionnaire was developed centrally by the PMU and discussed several times with the country teams before it was finalised. The questionnaire was structured in the following modules:-
The questions were structured into the following eight modules:

- Household information (HH),
- Household members (HM),
- Household assets /wealth index (W),
- Access to Sanitation coverage (SAN),
- Use of hygiene and sanitation maintenance (USAN),
- Knowledge and practice of hand washing (HW),
- country-specific questions (C), and
- observations.

In order to disaggregate the target population, the module on household assets was used to collect wealth information at household level using the DHS wealth index as used in JMP. Wealth Index is also used in multi-indicator cluster surveys (MICS). Therefore part of the questionnaire, the Household characteristics was extracted from the Zambia DHS 2007 Questionnaire (asset based wealth index). In the DHS, wealth of families is calculated through household assets collected from DHS surveys—i.e., type of flooring; source of water; availability of electricity; possession of durable consumer goods. These are combined into a single wealth index. They are then divided into five groups of equal size, or quintiles, based on individuals' relative standing on the household index. In addition three Zambia specific questions were added to the questionnaire to meet the aspect of total sanitation as follows: existence of dish rack, rubbish pit and bath shelter.
See Annex 2 for the Master Questionnaire.

2.3.2 FOCUS GROUP DISCUSSIONS AND GUIDED SELF-ASSESSMENT

Of the ten indicators, only two i.e. sustainability indicators 1 and 6, were scored in each district. Data on Indicator 10 was collected during the household survey. As defined in the tender proposal, the rest of the indicators will be scored later in the year as the relevant activities become due – for instance, training of CLTS facilitators which will be done when the facilitators are trained and the capacity of private sector when the supply chain study is undertaken.
Data collection for the sustainability indicators was done using the "Guided Self-assessment Approach" which uses group discussions to build consensus among the participants over the various sustainability issues and scores the responses using a scorecard. Focus Group Discussions (FGD) on sustainability indicator 1 and 6 were convened in each of the 4 districts. The participants were the respective D-WASHE members comprising of officers from the Council, representatives from line ministries and non-governmental organisations working in water and sanitation. The aim of the FGD was:

- To ascertain the capacity of the Council in steering demand creation at scale in their area (sustainability indicator1) and
- To assess sector alignment at local level (Sustainability Indicator 6)
- SNV Advisors facilitated the process, emphasising to the participants that the aim of the sustainability indicators is to help identify the areas for capacity development on which the programme should focus. The session started with the SNV Advisors giving an overview of the sustainability indicators. The indicators discussed during the FGDs address two types of capacity, namely: Organisational capacity (indicator 1) and Inter-institutional/ multi-stakeholder capacity (indicator 6).

In the discussions, participants were asked to be cautious of the following pitfalls:

- Influence of the *social desirability effect* - where the respondents say what is socially desired or expected rather than the reality on the ground and
- Respondents overrating their capacities

It was discussed and appreciated that if participants fall into the above traps the results would not be helpful in establishing a capacity development agenda for the D-WASHE or Council. In two of the Councils - Kasama Municipality and Mungwi District Council - participants preferred that assessment for indicator 1 be done by Council officers and their scores bounced against those done by the other members of the D-WASHE. In Mporokoso and Luwingu, preference was for a mixed group (i.e. both Council and non- Council officials) for both indicators. Following the group work, presentations were made highlighting the scores by each group and their justification. This was followed by intensive discussions in the plenary session to reach a consensus on the final score which was supported by a mutual justification. The following observations were noted:

- Generally District Councils and their D-WASHE committees were modest in their scores. They noted that they had concentrated their efforts in water supply at the expense of sanitation and hygiene promotion. The D-WASHE meetings were mainly convened for the water supply component as districts were receiving a lot of support in this area.
- It was also observed that participants were not even aware of the existence of the Sanitation and Hygiene Component Document which was developed by the Ministry of Local Government to enhance the efforts towards the improvement of the Sanitation status and promotion of hygiene.
- The discussions during the dialogue sessions were robust, with several instances of overrating taking place. However through the intensive discussions, with evidence cited such as absence of a Sanitation Plan, budget and that D-WASHE meetings when held focussed only on water supply, finally led to a consensus on the scores.

2.4 SAMPLING

2.4.1 Scope/coverage

This survey was conducted in the rural areas of the four districts of Northern Province of Zambia namely Kasama, Mporokoso, Luwingu and Mungwi. The extent of the geographical area was guided by the administrative political boundaries of the wards. The sampling methodology that was applied was the systematic sampling with a random start. The use of a scientific sampling procedure was informed by the need to limit biases aand ensure representation. A multi-stage sampling process was used to select the wards / cluster and village.

Determination of the sample size

The sample size for the survey was 1,065 households. This sample was computed with the following in mind: first, that the project increases the coverage by 7% at 95% level of confidence assuming a 0.05 margin of error; second, a design effect of 1.7 was chosen to make an adjustment for the clustering effect owing to the fact that the sample was not based on a simple random sample. The actual sample size of 1065 was then calculated based on the following sampling formulae which is widely used for determining absolute percentage change.

$$n = \frac{deff \times \left[Z_{1-\alpha}\sqrt{2P(1-P)} + Z_{1-\beta}\sqrt{P_1(1-P_1)+P_2(1-P_2)} \right]^2}{(P_2 - P_1)^2}$$

Where:

- P_1 is the hypothesised value of Sanitation prevalence (100-%practising OD) at year X (This is set at 50%. Setting at 50% yields the maximum sample size since the percentage of the population practising some form of sanitation is not clearly known at the program site).

- P_2 is the expected value of the indicator at year X+1 (This is set at 7% for a maximum sample of 1065).
- $P= (P_1+P_2)/2$
- Z_a is the standard normal deviate value for an a type I error (set at 1.96)
- Z_{1-b} is the standard normal deviate value for a c type II error
- Deff is the design effect in case of multi-stage cluster sample design (set at 1.7% in this survey)

The apportioning of the sample to the respective districts and wards was done using a technique known as Probability Proportional to Size (PPS) which is most useful when the distribution of the target population vary. This procedure assigns a larger sample for regions with a higher population/households and vice versa. In other words, it ensures that the sample size to be taken in any geographical region is proportionate to the population size. This method also facilitated planning for field work because a pre-determined number of respondents is interviewed in each unit selected, and enumerators were allocated accordingly. Below is table 1 showing how the sample was distributed and allocated to the districts and enumeration areas.

TABLE 1 SAMPLE SIZE ALLOCATION TO DISTRICTS AND HOUSEHOLD NUMBERS BY CLUSTERS

Primary sampling Units (Districts)	Total population of households	Calculation for Total Households to be sampled	Number of households to sample	Number of clusters (wards)	Clusters
Kasama	50610	=50610/128261*1065	420	420/50	8
Luwingu	25563	=25563/128261*1065	212	212/50	4
Mungwi	31189	=31189/128261*1065	259	259/50	5
Mporokoso	20899	=20899/128261*1065	174	174/50	4
Total Households	**128261**		1065		21

2.4.2 Selection of work areas

The sample was selected in two stages. The first stage involved the selection of cluster from the identified districts. A list of all the rural wards (clusters) in each district was made. The required number of Clusters was selected systematically with a pre-determined interval after they were all listed. For example all the rural wards/clusters in Kasama were listed with the population of households in each. Required samples of 8 clusters from Kasama out of a total of 16 clusters were selected using the random method. This was done by simply dividing the total clusters in Kasama by the desired number of clusters for that region of Kasama i.e. 16/8=2. The first cluster that was picked was between clusters 1 to 2 because 2 was the sampling interval. Randomly pick any of the first four names. This meant that picking the remaining 7 clusters; we simply added 2 to the first cluster, the random start. The same procedure was followed in picking clusters in the rest of the districts. Once the wards/clusters within the districts were identified, the enumeration areas had to be selected from within. The selection of enumeration areas in selected clusters was done using the random selection procedure from which about 50 households were randomly selected and enumerated. Table 2 shows the selected enumeration areas by district and by cluster name.

TABLE 2 DISTRIBUTION OF SELECTED AREAS BY DISTRICT AND NUMBER OF HOUSEHOLDS

District	Constituency	Ward / Cluster	No of HH interviewed
Kasama	Lukasha	Chumba	51
Kasama	Lukasha	Chibundu	56
Kasama	Lukasha	Mukonga	57
Kasama	Lukasha	Kapongolo	56
Kasama	Kasama Central	Kasenga	55
Kasama	Kasama Central	Chilunga	53
Kasama	Kasama Central	Lukulu	52
Kasama	Kasama Central	Julia chikamoneka	48
			428
Mporokoso	Lunte	Lubushi	49
Mporokoso	Lunte	Lunte	41
Mporokoso	Lunte	Malaila	52
Mporokoso	Lunte	Nchelenge	53
			195
Luwingu	lupososhi	Mufili	50
Luwingu	lupososhi	Mulalashi	62
Luwingu	Lubanseshi	Ipusukilo	56
Luwingu	lupososhi	Kampemba	57
			225
Mungwi	Mungwi	Chambeshi	52
Mungwi	Mungwi	Ngulula	55
Mungwi	Mungwi	Fube	52
Mungwi	Mungwi	Kalunga	53
Mungwi	Mungwi	Iyanya	54
			266

2.4.3 Household selection

Once enumerators were at a selected cluster, they chose the centre or a landmark to start from. In the absence of listing of all households in the selected enumeration areas simple random selection procedure was used to select the required number of households. The choice of the first household was selected either by going to the left or right. Thereafter the selection of the second and subsequent households was selected by adding k (sampling interval) to the serial number of each selected household until the sample size n was achieved. The interval was determined by the total number of households in that cluster by the total number of required households.

The reporting unit was one or more members of a household. A household was considered to be a person or a set of persons who together occupy a housing unit or part of it and consume and/or make common provision for food or other goods. The respondent in the household was any knowledgeable persons. In terms of age, the respondents were aged 16 and above. An interview was administered, preferably to the head of household. In the absence of the head of the household, the spouse or any knowledgeable adult member of the household was interviewed.

2.5 TRAINING AND SUPERVISION OF ENUMERATORS

An SNV Advisor was trained by Akvo after which they trained the LSP Team Leader and 4 supervisors. On the following day, the LSP Team leader and his supervisors trained the 16 enumerators in the presence of SNV Advisors who provided back stopping support. The LSP team comprised of personnel who work / had worked under the Zambia Central Statistics Office. Data collection using smart phones through structured household questionnaires commenced in all districts by 24 June 2014 and was completed by 30 June. The structure of the questionnaire was simplified on the smart phone screen. The LSP enumerators reported that this made it easier and faster for them as they are usually exposed to more complex paper questionnaires.

As already outlined, the LSP engaged had its contract terminated after submitting the data. The termination was for the following reasons:

- Failure to collect most of the data from the rural population. The LSP concentrated on population areas of an urban or peri urban nature and this was confirmed by counter checking the physical position of the enumerators on the map using the GPS co-ordinates provided for the household surveyed.
- Composition of the household samples did not comply with the sampling design hence it was unacceptably skewed and risked not appropriately reflecting the different districts.
- The LSP failed to mobilise transport as planned and the LSP supervisors did not seem to have been in the field hence the enumerators were not provided guidance. This was raised by SNV Advisors to the team leader during the data collection exercise but corrective action was not taken by the LSP.

In redoing the survey, SNV Advisors selected D-WASHE members from each district. These were trained by SNV Advisors in one day. The district teams went in the field with SNV Advisors as supervisors. The D-WASHE members in two of the districts i.e. Kasama and Luwingu were very familiar with the smartphones following training by Akvo under another project on water point mapping. A district like Kasama with more clusters had more enumerators. There were a total of 21 enumerators equivalent to the number of clusters. This enabled the exercise to be completed within 8 days. On average each enumerator was expected to enumerate at least 50 households.

Teams moved in an enumeration area as a group and interviewed all the required number of households before they moved on to the next area. This was done for security and other field logistical issues such as transport. At the end of each day the teams reconvened to check on what data had been collected, saved and submitted.

2.6 METHODOLOGY OF DATA PROCESSING AND ANALYSIS

Data processing and analysis was done centrally by the Project Management Unit (PMU) under the leadership of the Monitoring and Evaluation Advisor for SSH4A project. The data processing and analysis entailed the following steps:

- Downloading Zambia data from the AKVOFLOW application and performing exploratory analysis to check for accuracy, completeness, relevance and consistency of the critical data elements;
- Converting the downloaded data from excel to the standard Stata format file using the StatTransfer program; creating a Stata "do file" command for Zambia with a view to computing indicators and other critical data elements as specified in the mutually agreed reporting template between SNV and the DFID MVE provider;
- Performing data cleaning using a set of Stata manipulation commands to ensure that data are aligned to the data analysis plan and the agreed reporting template;
- Creating a log file for Zambia and performing actual data analysis using descriptive statistics. Descriptive analysis entailed computing frequency distributions; means and cross tabulations with chi square statistics.

District level analysis was also done to provide further details that could otherwise be masked with provincial level analysis. The analysed results were shared with the Zambia project team for report writing. The PMU continued engaging the country level team for further technical support in analysis and interpretation of the results. The deliverables of the baseline analysis were as follows:

- A log file of the results of the analysis; a syntax or "do file" for Zambia and
- A cleaned copy of the baseline dataset for Zambia.

The results have also been shared with the 4 districts and Northern Provincial Office of the Department of Housing and Infrastructure Development (DHID) as the baseline survey was carried out by some of their staff.

2.7 WORK PLAN OF THE BASELINE

SNV staff were trained by Akvo on the use of smartphones in data collection. Initially a local service provider was engaged to carry out the data collection. Training of the LSP staff was done in two phases. First, the LSP Team Leader with four of their supervisors were trained by SNV advisors on 22 June 2014. On the following day, the training of enumerators was done by the LCB supervisors with the support of SNV Advisors. The main objective of the training was to orient the enumerators on the data collection assignment involving the smart phone and the master questionnaire. During this training both enumerators and supervisors had an opportunity to practice how to enumerate using smart phone and how to get GIS coordinates. Enumerators also practiced how to translate some specific questions from the master questionnaire into local language (Bemba). The LSP started the data collection on 24 June and was expected to complete the exercise in 12 days but they did it in six days. It was noted that contrary to instructions the LSP team confined themselves to peri urban areas when the Project required results from rural areas. On that basis the contract with the LSP was terminated after it refused to re-do the exercise as per instructions.

The baseline was re-done with SNV using selected D-WASHE members from each project district. These were trained on 26 July and data collection started the following day and was completed by 4 August 2014. The exercise proved to be an eye opener for the D-WASHE members who gathered first-hand experience of the sanitation situation on the ground. The D-WASHE members also participated in the interpretation of the results. The table 3 below shows the overall timeline for the baseline exercise.

BASELINE TIMELINE

	Activity	May 2014	June 2014				July 2014				August 2014				September 2014				October 2014			
		3 and 4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Training of SNV Advisors by Akvo																					
1	Prepare Terms of Reference (ToR) for the baseline survey																					
2	Procure the Local Capacity Builder(LCB)/consultant																					
3	Purchase smart mobile phones and accessories																					
4	Training of LCB																					
5	Data collection by LCB																					
6	Termination of LCB Contract																					
7	Engage and train D-WASHE members																					
8	Data collection by D-WASHE																					
9	Dialogue meetings for sustainability indicators 1 and 6																					
10	Editing of the raw data downloaded from Akvo Flow software																					
11	Analyse, interpret and write the draft baseline survey report																					
12	Submit the baseline survey report to PMU, comments and revisions																					

TABLE 3 OVERALL TIMELINE FOR THE BASELINE

3 RESULTS AND FINDINGS ON OUTCOME INDICATORS

3.1 CHARACTERISTICS OF RESPONDENTS

A total of 1,096 responses were collected for the Baseline survey of which 61.3% (672) of the respondents were female and 38.7% (424) were male. However for some questions not all respondents answered hence a response of 1062 in these instances. A total of 560 (53%) of the respondents were also the head of household.

Of the HHs interviewed, 26.6% (292) of households were headed by females whilst 73.4% (804) were headed by males. This is typical of Zambia society in general which is patriarchal. The table 4 below gives an overview of the characteristics of respondents.

	Total interviewed	Percentage	Gender of Head of Households	Percentage
Female	672	61.31	292	26.64
Male	424	38.69	804	73.36
Total	1,096	100	1,096	100

TABLE 4 PROFILE OF RESPONDENTS

The reason why there were more females as respondents is attributable to the fact that a majority of males as bread winners would not be found at their homes at the time of the survey as some were at work in the farms or at nearby towns.

Of the 1096 Households interviewed, 1095 (99.9%) were classified as rural. The one (0.1%) Household captured as urban could have been a human error. This is in line with the project focus on rural areas. Figure 1 below shows the distribution of the respondents by districts. The number of respondents was in line with the sample design which took into account the population size.

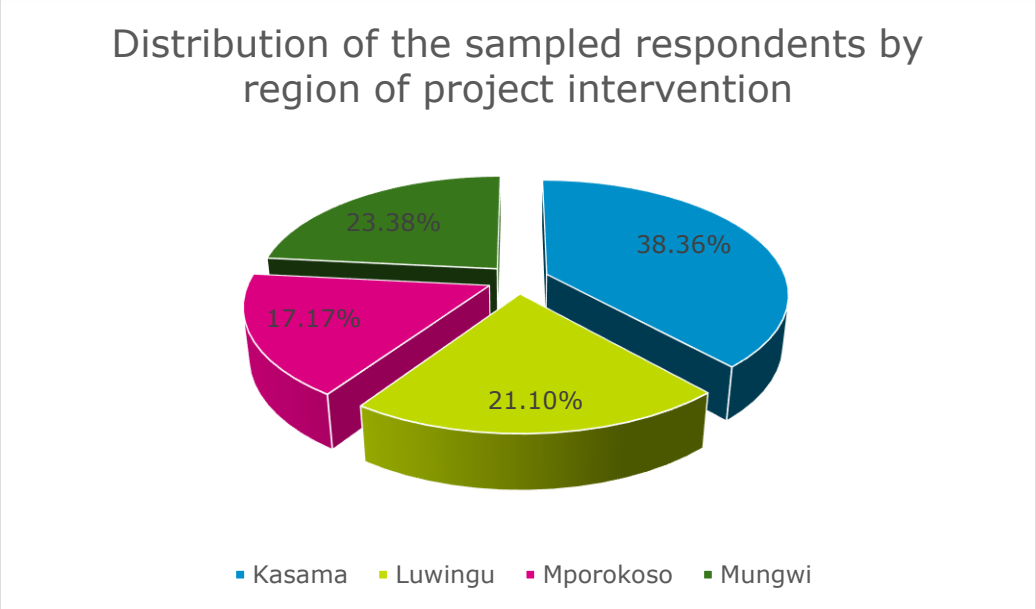

FIGURE 1 DISTRIBUTION OF RESPONDENTS BY DISTRICTS

3.2 HOUSEHOLD CHARACTERISTICS

3.2.1 HOUSEHOLD CHARACTERISTICS

Of the 1.096 households interviewed, 26.6% (292) were headed by females and 73.4% (804) by males. Generally Zambia is a patriarchal society and it is the norm to have more male headed households as the survey results show.

The average household size was established as 5.4. This tallies with the national Central Statistics findings of 6 (2010) and the DHS 2007 of 4.9. 43.5% (476) of the households have children under 2 years whilst 68.5% (750) have children under the age of 5.

84.68% (927) of the households had women / girls in the reproductive age group whilst 40.1% (439) of the households have people above 50 years.

17.1% (187) of the HHs have people with disabilities of which 19.1% (128) of the female respondents had special needs compared to 13.9% (59) for males. Within each of the districts, Kasama has the least number 9.5% (40) of people with special needs and Mungwi has the largest 27.3% (70); Luwingu and Mporokoso districts have 17.3% (40) and 19.7% (37) respectively. Across the 4 districts, the Mporokoso proportion of disabled is 19.8%, with Kasama and Luwingu at 21.4% each and Mungwi at 37.4%. The findings show that more females than makes have special needs and that across the districts Mungwi has a significantly higher proportion of the disabled. It is noted that among the 4 districts, Mungwi has the biggest institution for taking care of the disabled.

3.2.2 HOUSEHOLD CHARACTERISTICS FOR WEALTH INDEX

Due to the method used, the households in the programme area was evenly distributed across five wealth quintiles. Figure 2 below shows the distribution of household along wealth quintiles by districts. Kasama has the highest in terms of those falling in the richer 51.6% (110) and richest % (131) categories. On the other hand Mungwi has the highest number on the poorest category 54.2% (117). Kasama district is the Provincial Administrative and Commercial centre of Northern hence there are more economic opportunities. It is also noted that according to the CSO 2007 micro level estimates of poverty in Zambia) poverty levels in Northern province have reduced from 80 % in 2006 to 67.5% in 2007 (CSO 2010, census of population and housing vol. 6 Northern Province analytical report),

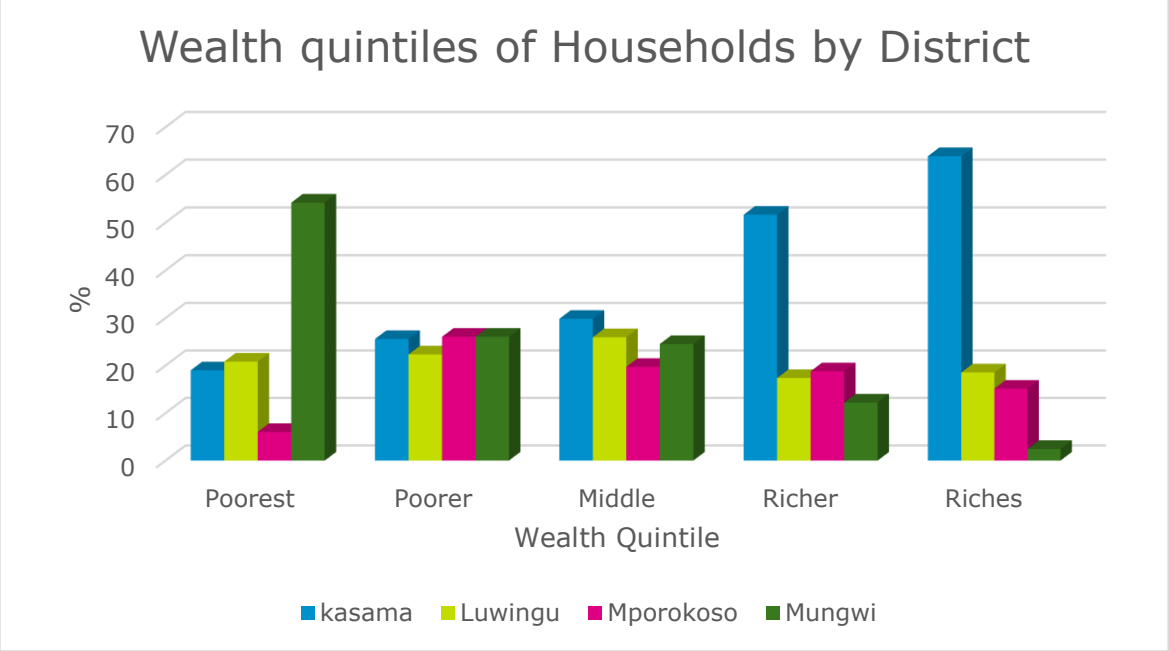

FIGURE 2 WEALTH QUINTILES OF HHS BY DISTRICT

Figures 3 below show the wealth quintiles in the female and male headed households respectively. In the female quintile the poorer and poorest quintiles are the largest at 26.2% and 29.8% respectively. The richer, middle and richest are 16.3%, 13.1% and 14.5% respectively among the female headed households. In the male headed households the largest quintiles are the richer (22.7%) and richest (21.2%) whilst the poorer and poorest comprise 18.2% and 17% respectively. This confirms that gender has a poverty dimension with females disadvantaged as 56% of female headed households are in the two lowest wealth quintiles as compared to 35% of the male headed households.

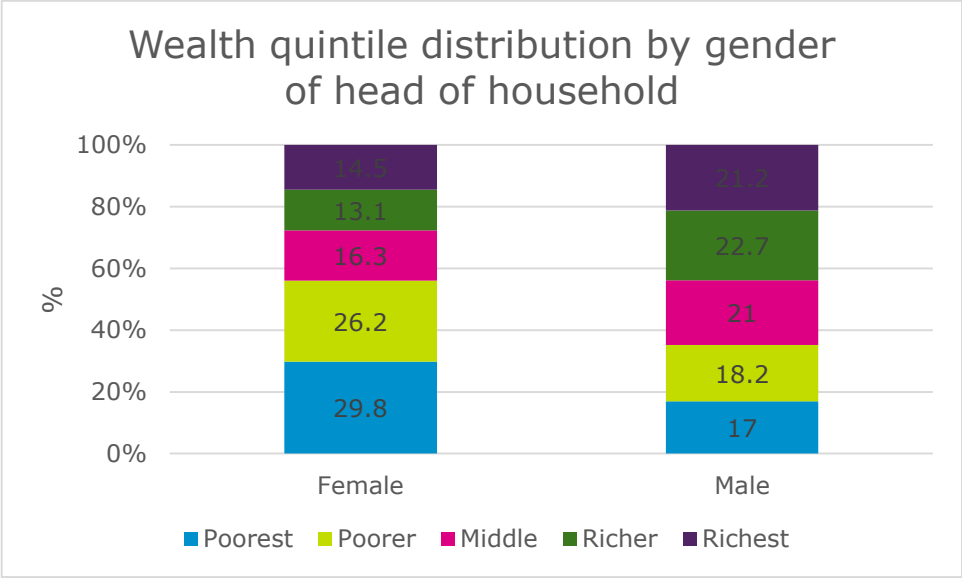

FIGURE 3 WEALTH QUINTILE DISTRIBUTION BY GENDER OF HEAD OF HH

The households with the disabled are on the high end in the poorest quintile as shown in figure 4 below. 23.15% of the households with the disabled were in the poorest quintile, 17.21% in the poorer, 18.75% in the middle, 14.08% in the richer and 13.66% in the richest quintile.

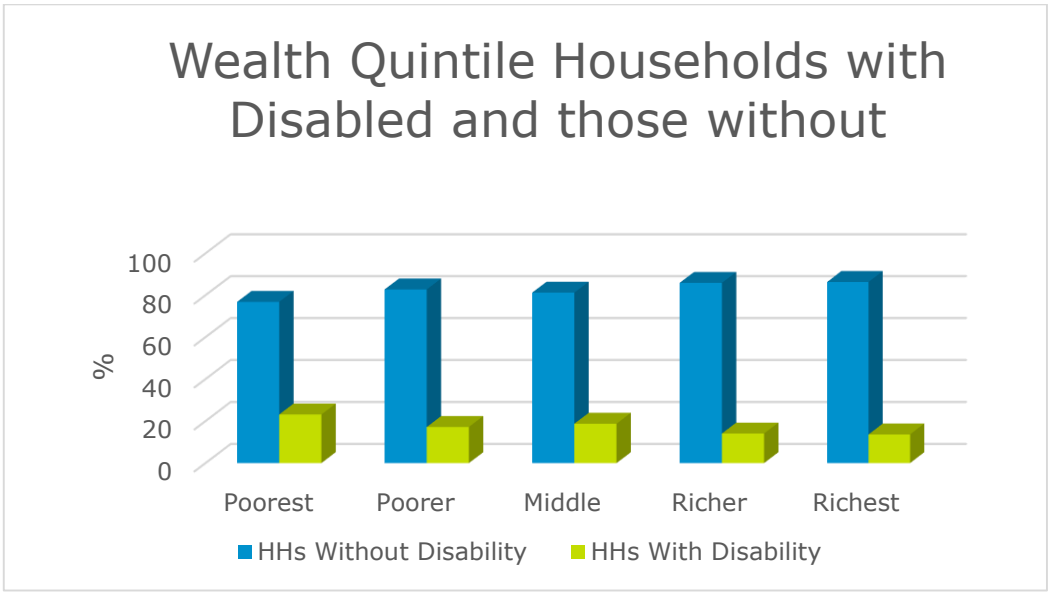

FIGURE 4 WEALTH QUINTILE HHS WITH DISABLED AND THOSE WITHOUT

3.3 Outcome indicator 1: Access to sanitary facilities

3.3.1 Overall access to sanitary facilities

The figure 5 below shows that of the surveyed HHs only 12.3% (131) had an improved toilet (JMP), 35.8% (381) had an unimproved latrine, 13% were sharing toilets whilst 51.9% (551) were practicing open defecation. Sanitation coverage including the shared toilets is 48.2% (512) over 1,063 respondents.

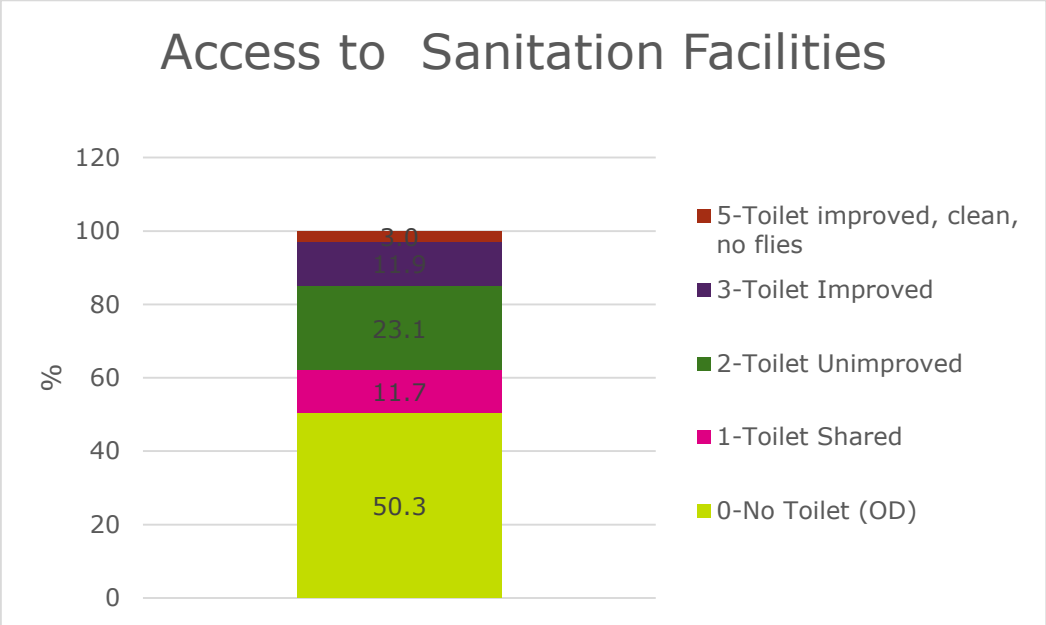

FIGURE 5 ACCESS TO SANITATION

65% (247) of the HHs with an unimproved toilet don't share toilets as compared to 35% (133) who share. 95.42% of the HHs with an improved latrine don't share a toilet with 4.58% (6) sharing. Of the HHs having a toilet, 72.8% (372) do not share a toilet and only 27.2% (139) share toilets. This therefore means that the actual coverage excluding shared toilets is 35% across the 4 districts.

Regarding the sharing of toilets, Mungwi has the highest number of HHs which don't share a toilet 87.9% (225) compared to 12,1% (31) who share. This is followed by Luwingu with 84.4% (195) not sharing and 15.6% (36) sharing then Kasama with 74.9% (314) not sharing and 25.1% (105) sharing and Mporokoso with 71.7% (134) not sharing compared to 28.3% (53) sharing. Figure 6 below depicts the sharing of toilets across the 4 districts.

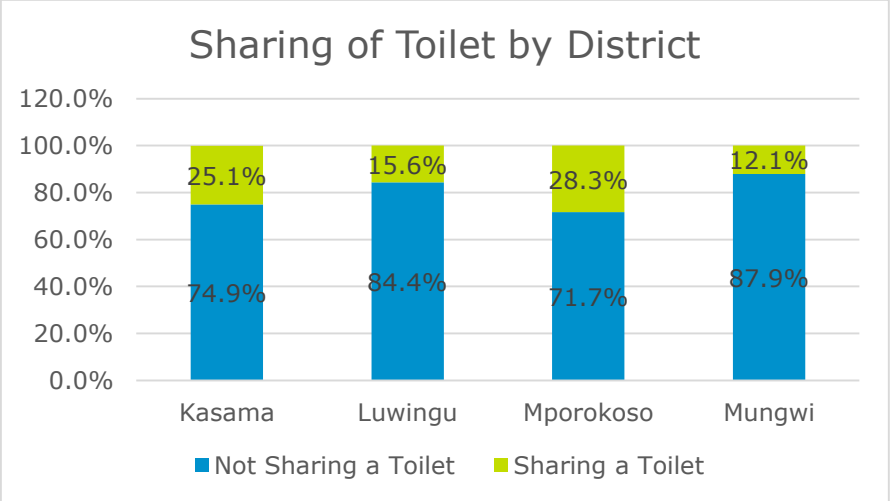

FIGURE 6 SHARING OF TOILET BY DISTRICT

The sanitation coverage is higher (35% than initially projected (29%). It is noted that following the introductory sessions on CLTS in all provinces by MLGH in 2012, some of the chiefs have been asking their subjects to constructs unimproved traditional latrines. Secondly part of Kasama, Luwingu and Mporokoso have or receive support on sanitation programmes from organisations such as World Vision. DAPP has also implemented school WASH and the impact of the programme has impacted surrounding villages.

The findings confirm that sharing of toilets is not a common practice in Zambia. This is also supported by CSO findings that "…….. sharing of latrines among two or several households did not appear common. Reasons given were that houses were far apart, the chief or headman had given a directive that every household should have its own latrine and there was too much bush around so it was easier to use this than ask a neighbour.'[7]

3.3.2 ACCESS TO SANITARY FACILITIES PER DISTRICT

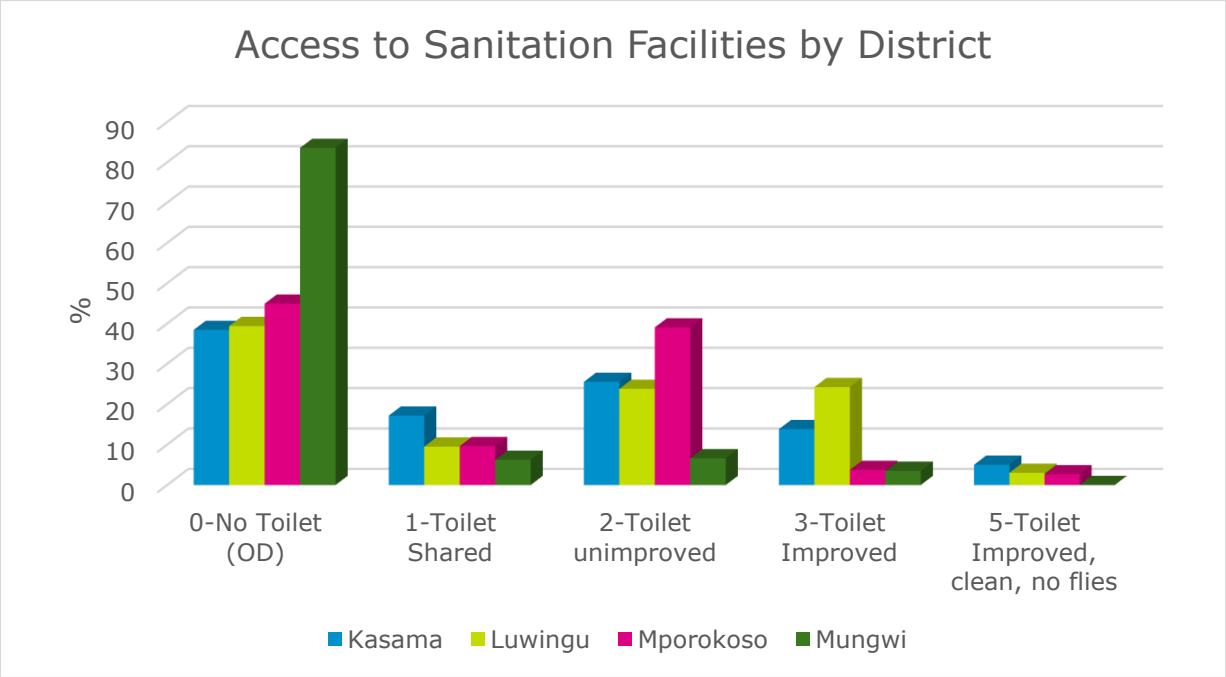

FIGURE 7 ACCESS TO SANITATION FACILITIES BY DISTRICT

Figure 7 above shows that Mungwi district has the highest number of households practicing OD at 38.9% (214) followed by Kasama 29.3% (161); Luwingu 16.6% (91) and Mporokoso 15.3% (84). Within Mungwi district the OD level constitutes 83.6% whilst in Mporokoso it is 44.7%; Luwingu 39.4% and Kasama 38.3%. For improved toilet Kasama has the highest number of households 45% (59) followed by Luwingu 42.8% (56); Mungwi 6.9% (9) and Mporokoso 5.3% (7).

It is noted that Mungwi has the highest OD rate and this is attributable to the absence of a sanitation and hygiene programme unlike other districts. Kasama, Luwingu have partnered with World Vision to roll out a sanitation and hygiene programme in selected wards in addition to the School WASH programme by DAPP. , Kasama, being the provincial and commercial capital is relatively richer than the other districts and is easily reached by more development partners.

[7] Zulu Burrow, Grontmij, Carl Bro; December 2008: **Assessment of Current Rural Sanitation and Hygiene Situation and Interventions**

3.3.3 ACCESS TO SANITARY FACILITIES AGAINST WEALTH QUINTILES

Within the poorest quintile, 91.2% (197) HHs practice open defecation, 6.9% (15) have an unimproved latrine with 1.9 (4) having an improved latrine. On the other extreme end for the richest, 53.7% (110) have an unimproved latrine, 26.8% (55) have an improved toilet whilst only 19.4% (40) practice open defecation. The poorer 75.8% (163) practice OD as well as 44.2% (92) of the middle quintile and 26.3% (56) of the richer. The unimproved latrine category is dominant within the richer quintile 57.3% and across other quintiles 32.3%.

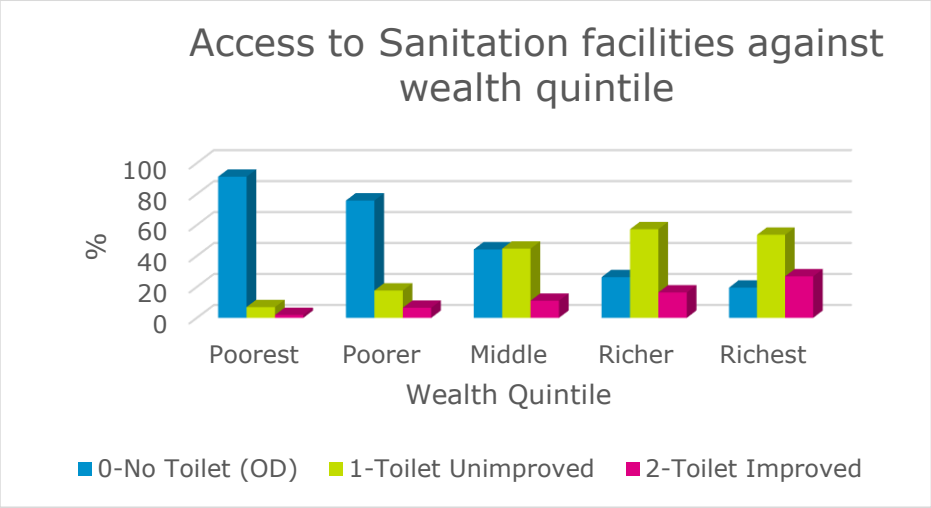

FIGURE 8 ACCESS TO SANITATION FACILITIES AGAINST WEALTH QUINTILES

As figure 8 above depicts there is an inverse relationship between the two extreme classes with OD rising from 7.30% amongst the richest to 35.95% in the poorest whilst access to improved latrine rises from 3.85% in the poorest to 41.98% in the richest. The results show that the poor lack access to sanitation facilities as compared to the rich and this could also be a resource issue. However the unimproved latrine can be completed using local materials without any purchases being made. The findings could also indicate that the poor may be disadvantaged in terms of access to information on constructing unimproved latrines or it could be an attitude problem. The DHS Survey 2007 shows that a higher standard of living is associated with the levels of education. Generally the less educated communities are the poorer.

3.3.4 ACCESS TO SANITATION FACILITIES AGAINST GENDER OF THE HEAD OF HOUSEHOLD

Figures 9 below show access to sanitation facilities by gender of HH head. 54.6% of the female headed HHs practice OD whilst for male headed HHs it is 48.8%. Regarding the unimproved toilet, 21.3% of female headed HHs and 23.7% for male headed HHs have access to these. 12.7% of male headed HHs have access to an improved latrine compared to 9.6% of female headed HHs. 11% of female headed HHs share a toilet compared to 12% in male headed HHs.

Female headed HHs have less access to sanitation facilities as compared to those headed by males. This is probably due to the lack of resources. The construction of a latrine requires labour or cash. Female headed HHs are disadvantaged in securing labour for construction of latrines whilst for the males this could be a do it yourself exercise. As indicated on section 3.2.2 above, female headed HHs are poorer hence many cannot afford to engage labour to construct the latrines.

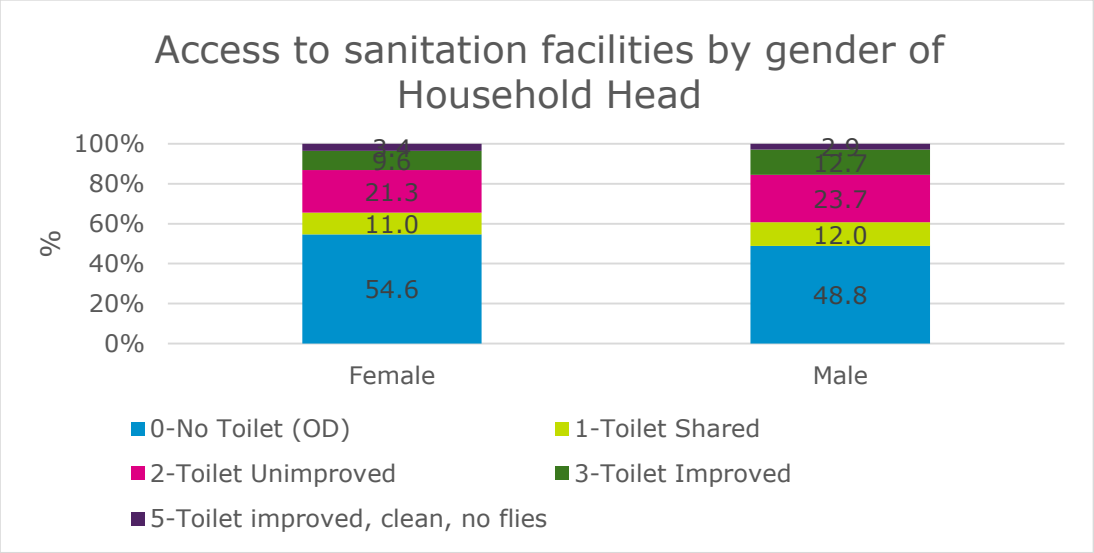

FIGURE 9 ACCESS TO SANITATION FACILITIES BY GENDER OF HOUSEHOLD HEAD

The under 2 and under 5 are also exposed to poor sanitation with 52.62% and 49.87% respectively staying in HHs with no toilet as shown in figures 10 and 11. Other categories in similar situations are women of child bearing age of which 49.68% (see figure 12) live in HHs with no toilets as well as 46.7% (see figure 13) of women above 50 years of age.

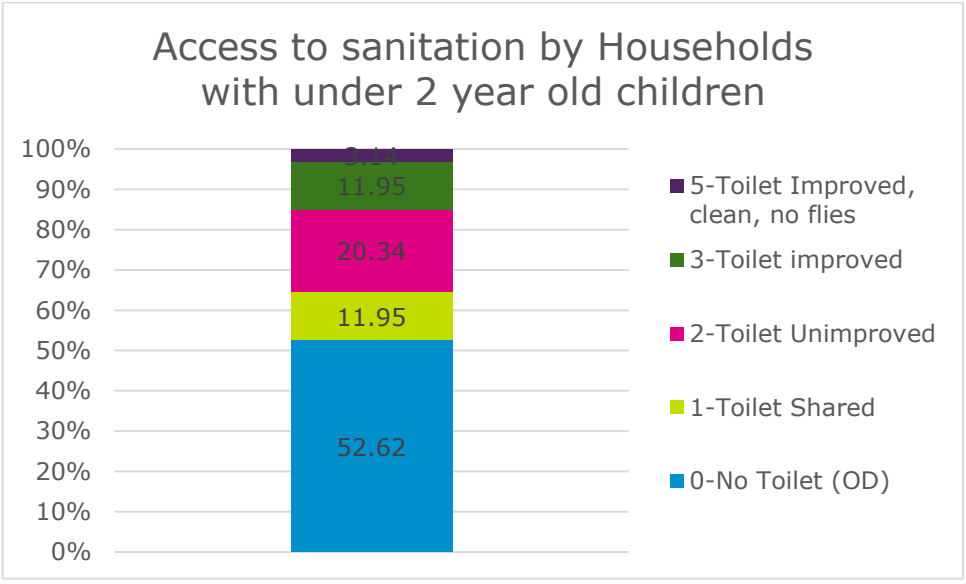

FIGURE 10 ACCESS TO SANITATION BY HHS WITH UNDER 2S

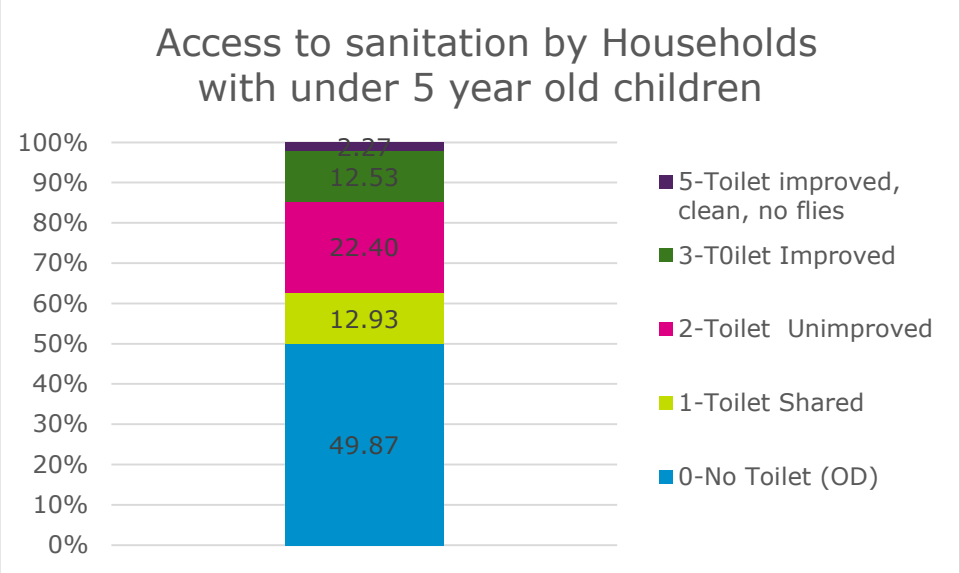

FIGURE 11 ACCESS TO SANITATION FACILITIES BY HHS WITH UNDER 5S

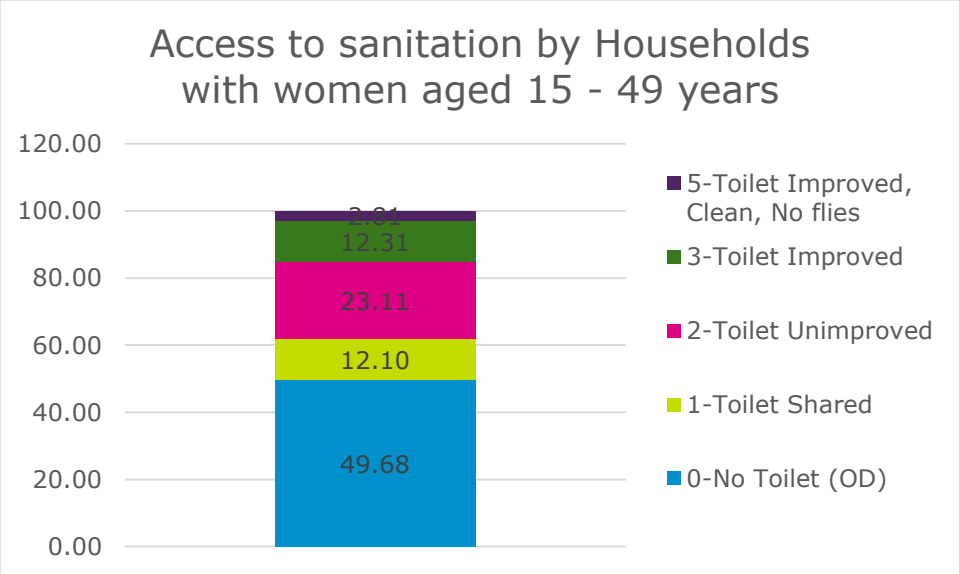

FIGURE 12 ACCESS TO SANITATION FACILITIES BY HHS WITH WOMEN AGED 15-49 YEARS

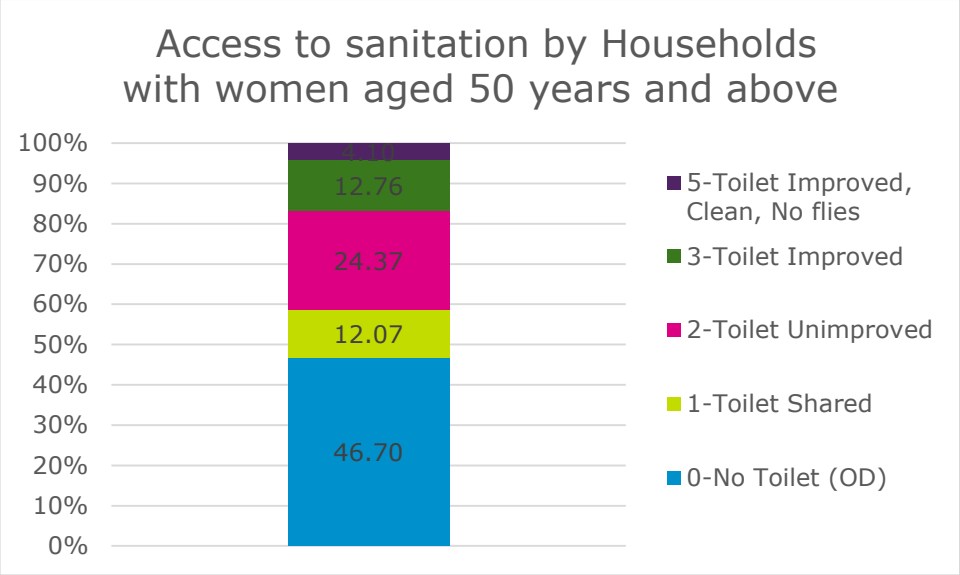

FIGURE 13 ACCESS TO SANITATION FACILITIES BY HHS WITH ELDERLY 50 YEARS AND ABOVE

3.3.5 TYPES OF TOILETS FOUND IN THE PROGRAMME AREA

As shown in table 5 below, the Pit latrine without slab is the dominant in terms of latrine options at 37% followed by the pit latrine with slab at 9%. The richer quintile has most of the pit latrines without slab at 32.7% followed by the richest (31%) and it gradually slides down the quintiles – 22.7% for the middle, 9.8% for the poorer and 3.3% for the poorest. For the pit latrine with a slab the richest have the most at 38.8% followed by the richer (25.5%), middle (5.7%) , poorer (10.2%) and poorest (2%). In 60.92% (332) of the HH's toilets rats can reach the faeces whilst in 87.32% (475) of the toilet pans / slab allow flies to go in. Of the 507 respondents on whether the toilet provides privacy, 52.07% (264) said it did not.

	WQ1	WQ2	WQ3	WQ4	WQ6	no WQ	total	%
no toilet or blank	197	163	92	56	41	3	552	52%
Pit latrine with slab	2	10	22	25	38	1	98	9%
Pit latrine without slab	13	39	90	130	124	1	397	37%
other (temporal, wrong material)	0	0	2	0	0	0	2	0%
Traditional pit latrine	3	3	2	0	0	0	8	1%
VIP	1	0	0	2	2	0	5	0%
Total	216	215	208	213	205	5	1062	100%

TABLE 5 ACCESS TO SANITATION FACILITIES AGAINST WEALTH QUINTILES - ABOVE GROUND STRUCTURE

Table 6 below shows that the direct pit is the dominant underground structure across all wealth quintiles.

	WQ1	WQ2	WQ3	WQ4	WQ6	no WQ	total	%
no toilet or blank	93	163	197	56	41	3	552	52%
Direct pit	115	52	18	155	162	2	504	48%
Off-set pit	0	0	0	0	1	0	1	0%
shared	0	0	0	1	0	0	1	0%
street, field, open pit	0	0	0	0	1	0	1	0%
	208	215	215	212	205	5	1059	100%

TABLE 6 ACCESS TO SANITATION FACILITIES AGAINST WEALTH QUINTILES - UNDERGROUND STRUCTURE

3.3.6 DISCUSSION ON THE FINDINGS ACCESS TO A SANITARY TOILET

The findings show that the hardest hit districts in terms of access to sanitation are Mungwi and Mporokoso. As indicated above, unlike as is the case with Kasama and Luwingu, these 2 have not had any sanitation and hygiene programme. This means the SSH4A would focus on the entire district for these 2 whilst in Kasama and Luwingu, the programme would prioritise support towards wards not covered by partners such as World Vision.

Focus of support in the programme should be directed at the women headed HHs, those with special needs and the poor as these have higher proportions of OD as compared to other categories. It becomes a severe case of deprivation in cases of poor, female headed HHs with some of it members having special needs. It is noted that the availability of latrines has a wealth dimension as well with the better off classes having more access compared to the poorer. The programme should also work on raising the voice of women in discussion about sanitation issues and options. In patriarchal societies as is the case in Northern Province, women's voices tend to be unheard.

The project should also ride on the support of the traditional leaders who seem already to be encouraging their subjects to construct latrines. It is evident that already the traditional leaders have played a critical role in ensuring a good number of their subjects have constructed latrines. The programme would focus on such communities climbing the sanitation ladder. The poor should be able to construct at least the unimproved latrine. This therefore requires sensitisation of communities on the importance of toilets especially through the roll out of CLTS.

3.4 Outcome indicator 2: Hygienic use and maintenance of sanitation facilities

3.4.1 Overall hygienic use and maintenance of sanitation facilities

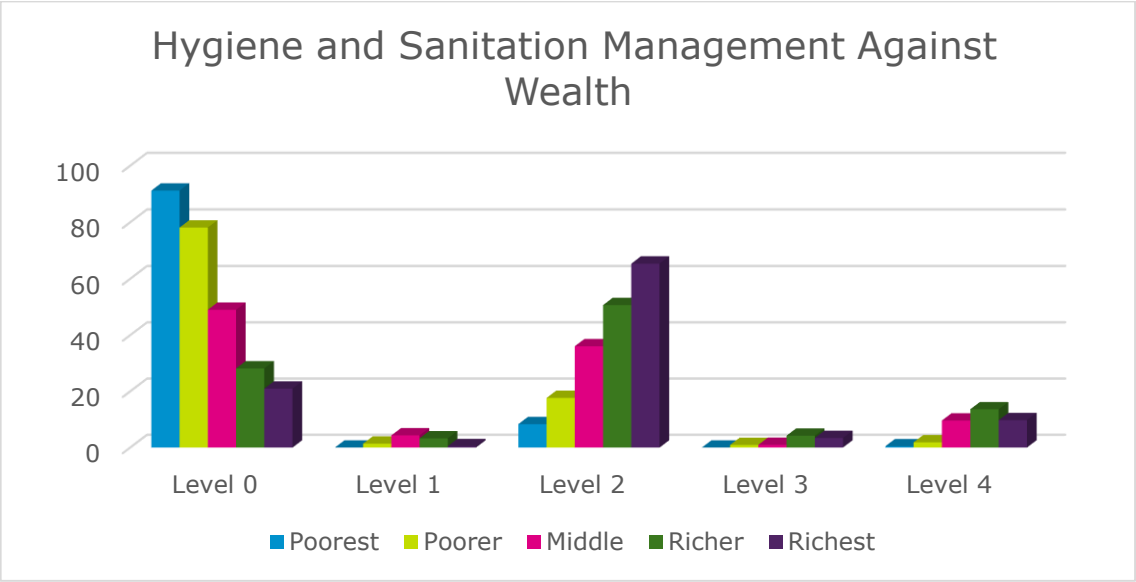

FIGURE 14 HYGIENIC USE AND MAINTENANCE OF SANITATION FACILITIES

As the figure 14 above shows, 54.05% (574) of the HHs do not have a toilet or if they have they do not use it as compared to 51.88% (551) who do not have (see section 3.3.1 above). This increases the number of HHs practicing OD by 2.17% (23).

1.88% (20) use a toilet but the hole is not covered with a lid, 35.22% (374) use a toilet with hole covered by a lid, but not clean or offering privacy. 1.88% (20) use a clean functional toilet with walls and doors in place ensuring privacy. 6.97% (74) use a clean, functional toilet providing complete privacy with doors which can be closed.

As indicated earlier in the above sections, traditional leaders have been a factor in encouraging their communities to construct latrines following the CLTS introductory meetings for CLTS as from 2012 throughout the country. It is for this reason that a large proportion (35.22%) of those using toilets have provided lids for the holes to prevent flies from moving in and out as they move towards meeting the national standards of an adequate latrine. However when cleanliness and privacy are factored in the proportion falls down considerably. These could be some of the reasons discouraging people from using toilets i.e. not clean and not offering privacy. The SSH4A programme should focus on hygiene promotion activities to motivate communities to keep their toilets clean as well as to use the toilets. The fact that some HHs have toilets but don't use them for the purpose could be an indication of compliance to the traditional leaders' directive but not appreciating the importance hence hygiene education is paramount. There is need for the programme to work closely with the traditional leaders.

3.4.2 Hygienic use and maintenance of sanitation facilities per district

Mungwi has the most HHs with no toilet or toilet not in use at 37.28% (214) followed by Kasama 28.62% (164), Luwingu 17.1% and Mporokoso 16.13% (97). Regarding HHs using a traditional latrine, Mporokoso has 55% (11), Mungwi 25% (5), Luwingu and Kasama at 10% (2) each. Regarding HHs who use functional toilets with the hole covered with a lid, Kasama has the highest in the category 47.86% (179), followed by Luwingu 30.48% (114), Mporokoso 12.03% (45) and Mungwi 9.63% (36). Kasama and Luwingu have and are currently receiving support in sanitation and hygiene promotion through development partners such as World Vision. This explains why they have better rates than the other districts.

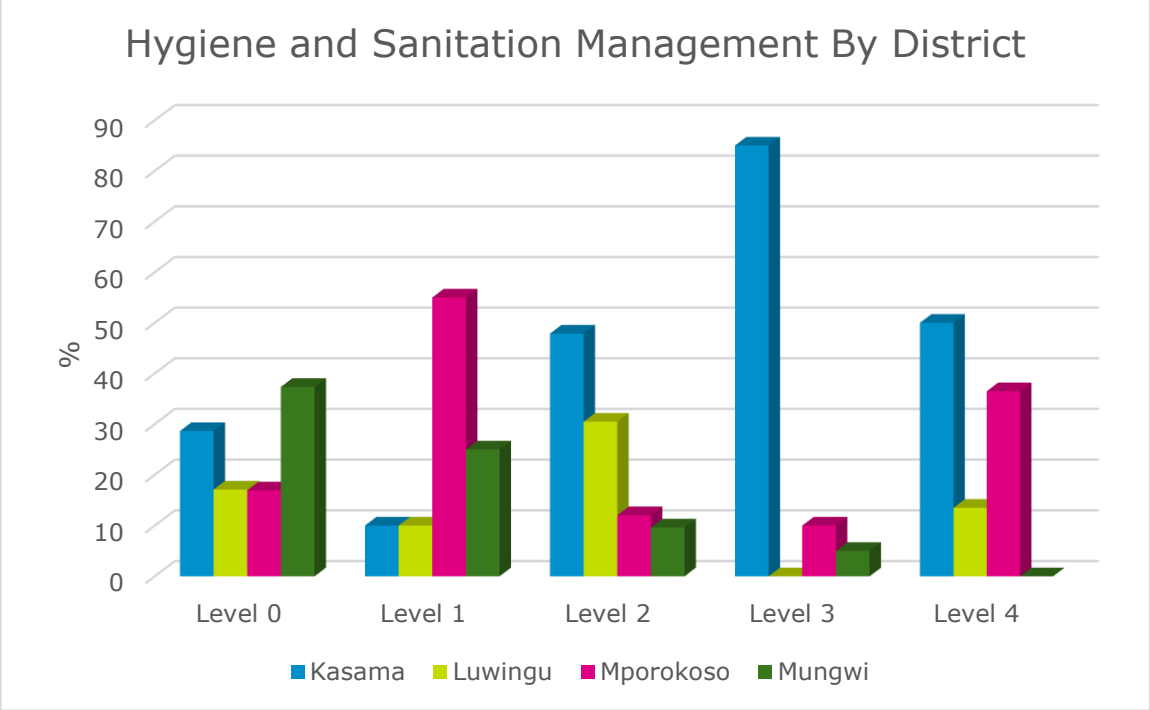

FIGURE 15 HYGIENE AND SANITATION MANAGEMENT BY DISTRICT

For those using a functional clean toilet Kasama has the highest percentage 85% (17), Mungwi 10% (2) and Mporokoso 5% (1). Luwingu did not register any. Kasama also has the highest number for use of functional, clean toilets offering privacy at 50% (37), followed by Mporokoso 36.09% (27), and Luwingu 13.51% (10). Mungwi registered nil. Figure 15 above shows the sanitation and hygiene management by district.

3.4.3 HYGIENIC USE AND MAINTENANCE OF SANITATION FACILITIES AGAINST WEALTH QUINTILES

The figure 16 below shows the findings regarding wealth quintiles and sanitation and hygiene management. The results show that the majority of the poorest (91.2%) and poorer (78.1%) are in level 0 where have no toilet or do not use a toilet if present. The poorest are at the bottom in terms of use of a functional toilet (level 2) at 8.3%. The use of functional toilets (level 2) rises up with the wealth quintiles i.e. with the poorer (17.7%), middle (36.1%), richer (50.7%) and richest (65.4%) within their categories.

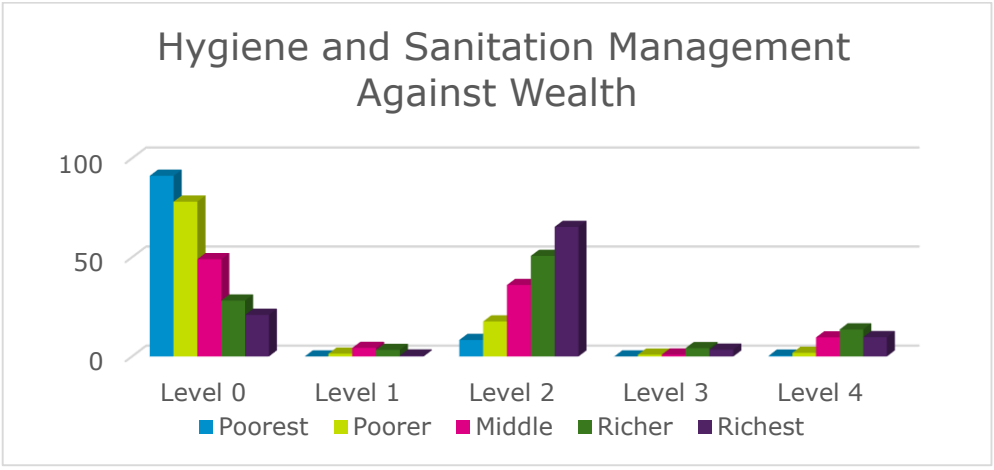

FIGURE 16 HYGIENE AND SANITATION MANAGEMNT AGAINST WEALTH

3.4.4 HYGIENIC USE AND MAINTENANCE OF SANITATION FACILITIES AGAINST GENDER OF THE HEAD OF HOUSEHOLD

Female headed households are more exposed to no toilet or no use of toilet compared to male headed HHs. 56.51% of female headed HHs either have no toilet or if it exists they do not use it as compared to 51% of male headed HHs. As the situation improves, female headed HHs proportion decreases more than that in the male headed HHs (see figure 19 and 20 below): 1.7% of female head HHs use toilet as a toilet compared to 1.87% for male; 34.59% of female headed HHs use a functional toilet and 37.56% for male; for functional used and clean toilets only 1.37% of female headed HHs compared to 2.11% for males and for the functional clean toilet providing privacy 5.82% for female headed HHs compared to 7.34% for male.

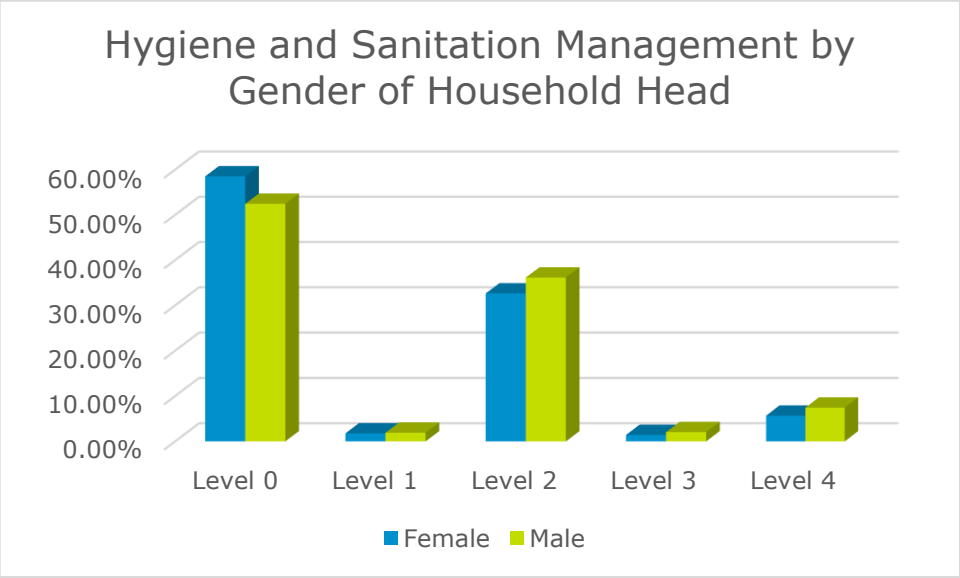

FIGURE 17 HYGINE AND SANITATION MANAGEMENT BY GENDER OF HH HEAD

3.4.5 DISCUSSION ON THE FINDINGS FOR HYGIENIC USE AND MAINTENANCE OF SANITATION FACILITIES

As already stated above, 54.05% of the HHs do not have a toilet or if they have they do not use it as compared to 51.88% who do not have a toilet. This means the number of HHs practicing OD increases by 2.17%. The poor and the female headed HHs contribute the majority of those who do not have a toilet or if they have they do not use.

Kasama district HHs seem to be better in using and keeping toilets clean. The cleanliness and privacy of latrines prop up as issues in all the districts. This could be contributing to some of the people not wanting to use the toilets.

The SSH4A programme needs to focus on hygiene promotion to encourage use of toilets as well as ensuring they are cleaned. A positive aspect which the programme should build upon is that a majority of the populace is using functional toilets with hole covered. What is required to be enhanced is the cleanliness as well as improving designs to ensure the toilets offer privacy. The female headed HHs and the poor should be specifically targeted.

3.5 OUTCOME INDICATOR 3: ACCESS TO HAND WASHING WITH SOAP (HWWS)

3.5.1 KNOWLEDGE OF CRITICAL MOMENTS OF HWWS

Of the 3286 responses received, more of the respondents 30.7% (1009) knew about hand washing before eating, 27.3% (897) about hand washing after defecation and 14.4% (472) about hand washing before preparing food. 8.7% (286) knew about hand washing after cleaning a child who has defecated whilst 8.6% (283) know about hand washing before breast feeding / feeding a child. 7% (230) knew about hand washing after cleaning a toilet

or potty. Only 0.6% (19) washed hands after doing some work or touching dirt and 0.1% (2) washed hands after shaking hands.

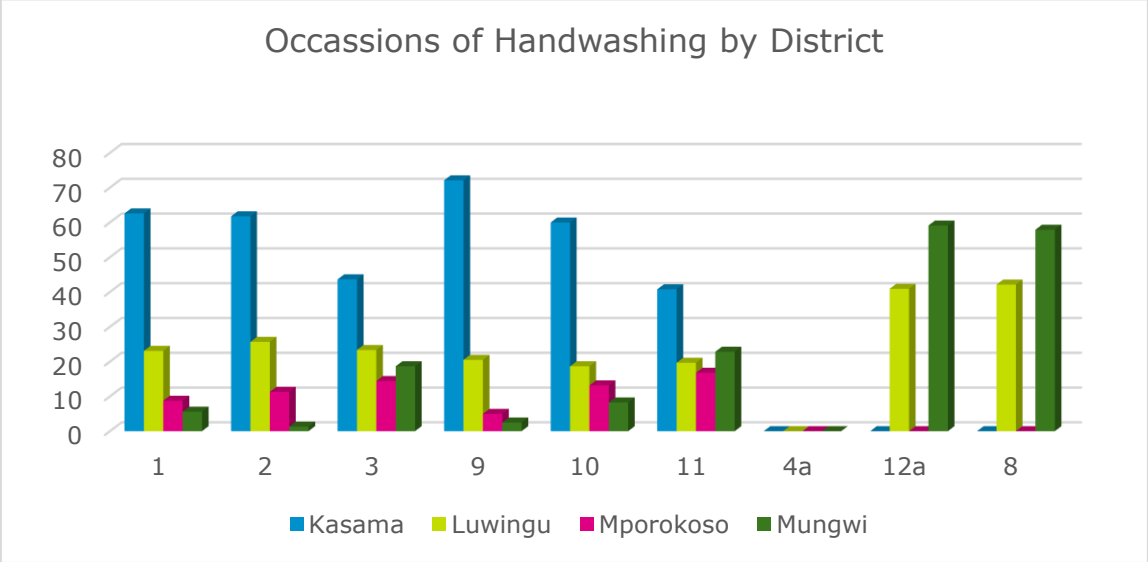

FIGURE 18 OCCASSIONS OF HANDWASHING BY DISTRICT

Key

1. After Cleaning a child that has defecated/changing child's nappy
2. After cleaning toilet or potty
3. After defecation
9. Before Breast feeding or feeding a child
10. Before cooking or preparing food
11. Before eating

4a. After shaking hands/greetings

12a. After waking up in the morning

8. After doing some work/touching dirt

Figure 18 above shows knowledge of the occasions for hand washing in each district. Kasama district had the highest percentages regarding washing hands after cleaning a child that has defecated 62.6%, after cleaning a toilet 61.7%, after defecation43.6%, before breast feeding a child 72.1%, before preparing food 60% and before eating 40.8%. Overall most respondents 93.3% knew about need for hand washing before eating, followed by after defecation 83% with 43.7% knowing about washing hands before cooking or preparing food, 26.5% knowing about hand washing after cleaning a child who has defecated and 26.2% knowing about washing hands after before breast feeding or feeding a child.

Figure 19 below shows the knowledge of hand washing occasion according to wealth quintiles. Taking all the quintiles together the highest responses were noted on knowledge about hand washing before eating 93.3%, followed by after defecation at 83.1%, after cleaning a child who has defecated at 26.5%, before cooking or preparing food at 43.7%, before breastfeeding or feeding a child at 26.2%.

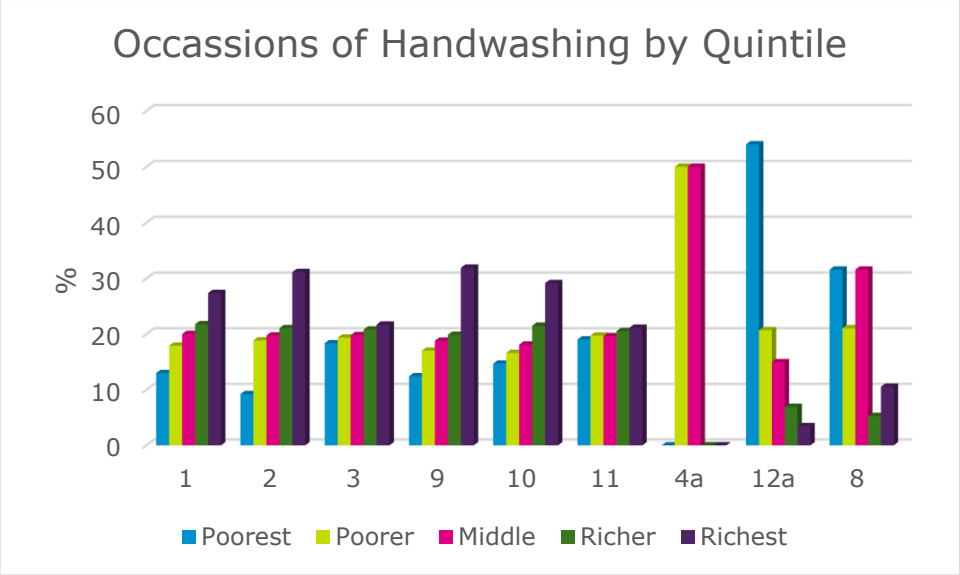

FIGURE 19 OCCASIONS OF HANDWASHING BY WEALTH QUINTILE

Key

1. After cleaning a child that has defecated/changing child's nappy
2. After cleaning toilet or potty
3. After defecation
8. Before breast feeding or feeding a child
9. Before cooking or preparing food
10. Before eating

4a. After shaking hands/greeting

12a After working up in the morning

8. After doing some work/touching dirt

Within the wealth quintiles, the poorest have the highest responses on knowledge about hand washing before eating at 89.3% followed by after defecation at 76.6% just as all the other quintiles with the poorer at 92.5% and 80.8%, the middle at 92.1% and 82.7%, the richer at 94.9% and 85.7% and the richest at 97/7% and 89.4% respectively.

Figures 20 and 21 below show that over 50% of the HHs with under 2 children have no knowledge about hand washing at critical times compared to 65% of the HHs with under 5 children. This explains that the children are exposed ti unhealthy surroundings hence affected by diseases such as diarrhoea and ARI.

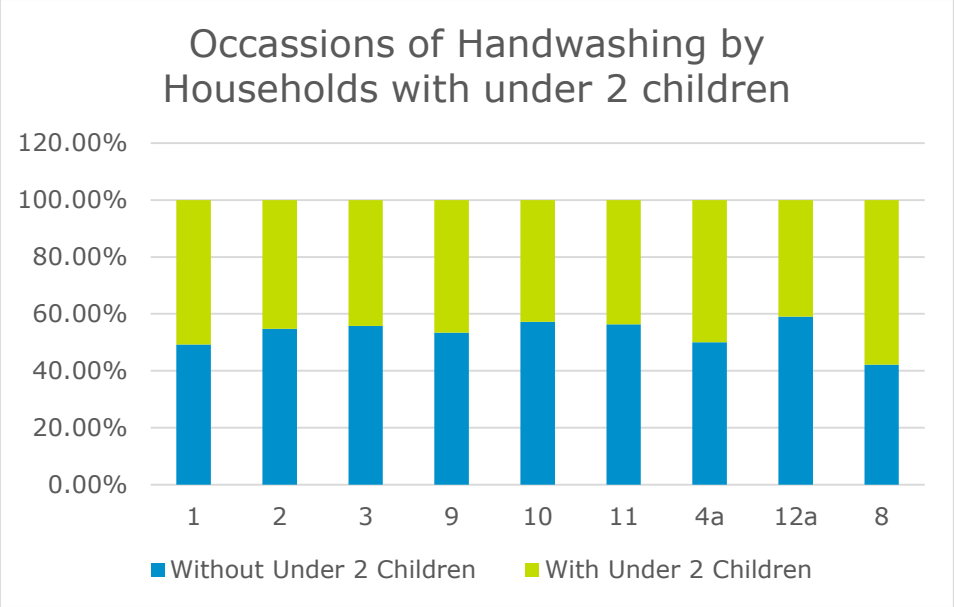

FIGURE 20 OCCASIONS OF HANDWASHING BY HHS WITH UNDER 2S

Key

1. After cleaning a child that has defecated/changing child's nappy
2. After cleaning toilet or potty
3. After defecation
9. Before breast feeding or feeding a child
10. Before cooking or preparing food
11. Before eating

4a After shaking hands/greetings

12a After waking up in the morning

8 after doing some work/touching dirt

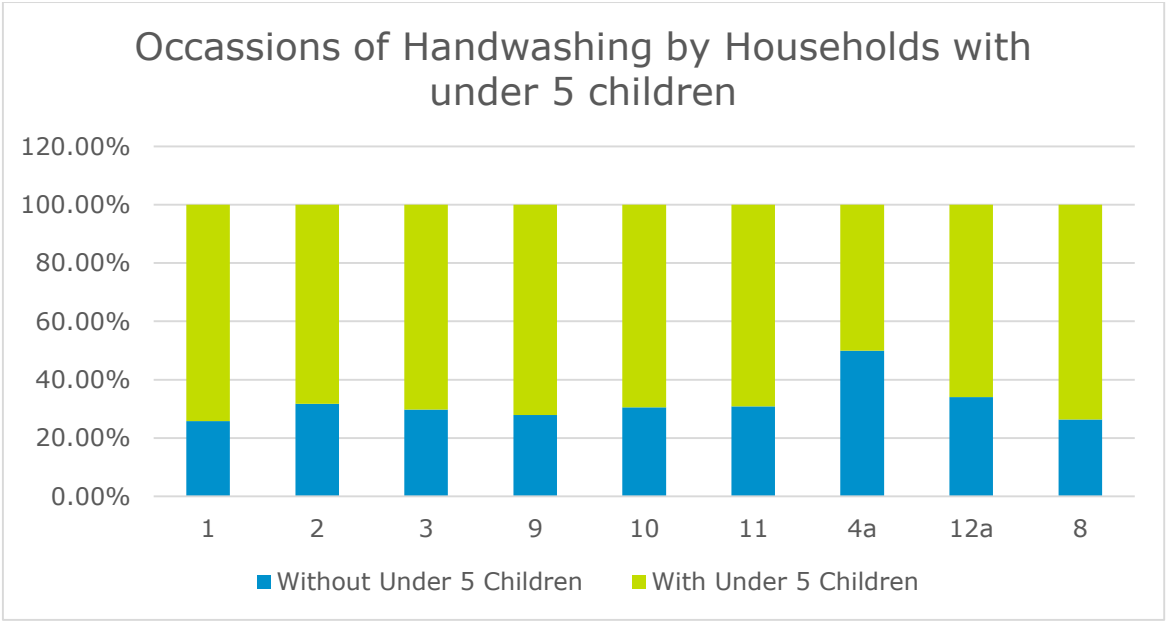

FIGURE 21 OCCASIONS OF HANDWASHING BY HHS WITH UNDER 5S

Key

1. After cleaning a child that has defecated/changing child's nappy

2. After cleaning toilet or potty
3. After defecation
9. Before breast feeding or feeding a child
10. Before cooking or preparing food
11. Before eating
4a After shaking hands/greetings
12a After waking up in the morning
8 After doing some work/touching dirt

3.5.2 PRESENCE OF A HAND WASHING STATION WITH SOAP FOR AFTER DEFECATION

Of the 1062 respondents, 99.25% (1054) do not practice hand washing with soap at critical times. There is no significant difference between the districts regarding the practice of hand washing with soap (see figure 22 below). During the baseline survey, the enumerators came across only one tippy tap in a household in Luwingu district. 0.66% (7) practice hand washing without soap and 0.09% (1) practice hand washing with soap with potential contamination.

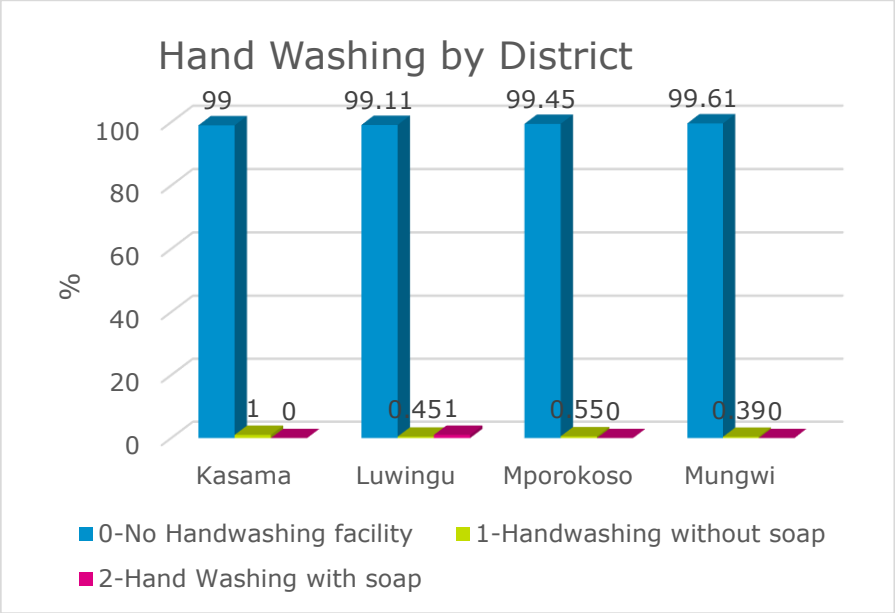

FIGURE 22 HANDWASHING BY DISTRICT

100% (216) of HHs in the poorest quintile do not practice hand washing, with 0.47% (1) of the poorer, 0.47% (1) of the middle, 0.94% (2) of the richer and 1.46% of the richest wash hands without soap. 0.49% (1) of the richest wash hands with soap but with a potential of contamination see figure 23 below. This cuts across areas such as cooking and preparation of food as well as after defecation.

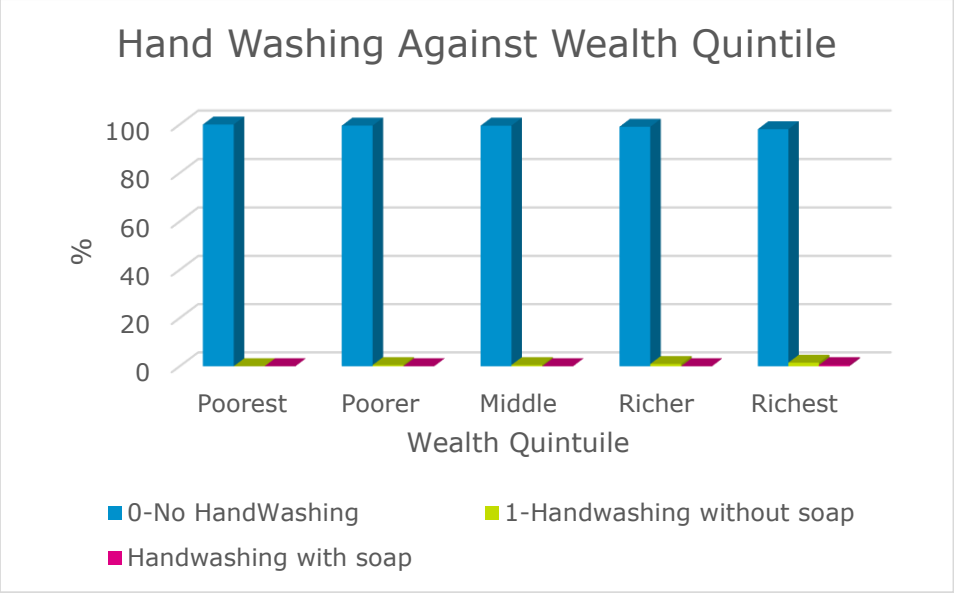

FIGURE 23 HANDWASHING AGAINST WEALTH QUINTILE

Within their respective categories 99.656% (291) of female headed HHs and 99.10% (773) of male headed HHs do not wash hands. 0.35% (1) of female headed HHs and 0.77% (6) of male headed HHs practice hand washing without soap. Only 0.13% of male headed HHs practice hand washing with soap but with a potential for contamination see figure 24 below.

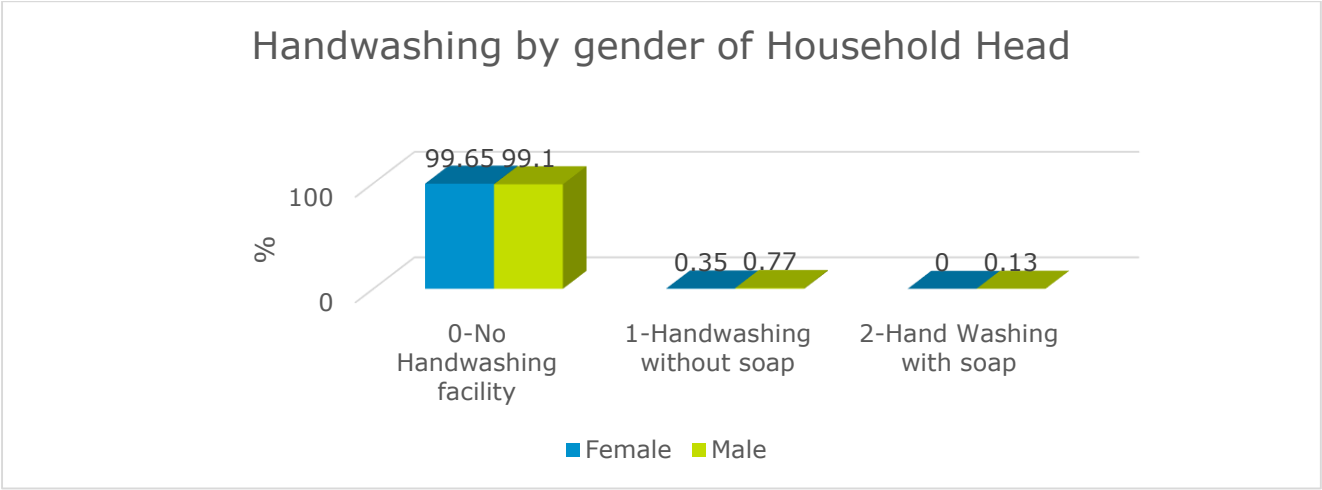

FIGURE 24 HANDWASHING BY GENDER OF HH HEAD

Regarding hand washing after defecation, of the 1062 HHs, 99.25% (1061) do not practice hand washing, 0.66% (7) practice hand washing without soap and 0.09% (1) practice hand washing with soap but with potential contamination see figure 25 below.

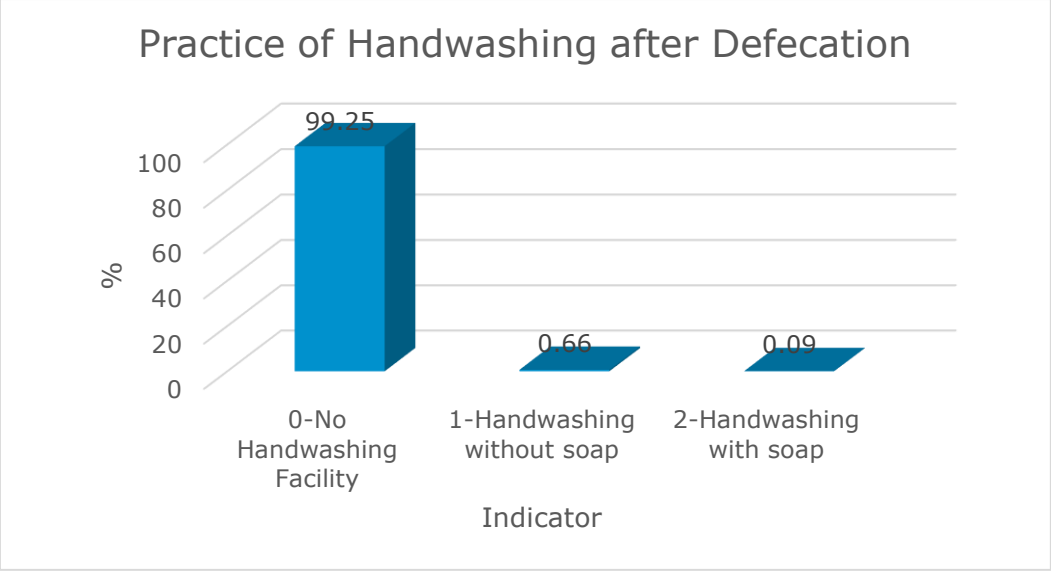

FIGURE 25 PRACTICE OF HANDWASHING AFTER DEFECATION

As already described above the findings are similar with regard to hand washing with soap against wealth quintiles, gender of the head of household. No significant differences are found, due to high numbers of no facility.

3.5.3 PRESENCE OF A HAND WASHING STATION WITH SOAP BEFORE COOKING AND FOOD PREPARATION

Hand washing before cooking and preparing food is almost non-existent. In all the 4 districts hand washing before cooking and preparation of food is not common. Only a negligible 0.09% (1) wash hands without soap before cooking and preparing food as shown in figure 26 below.

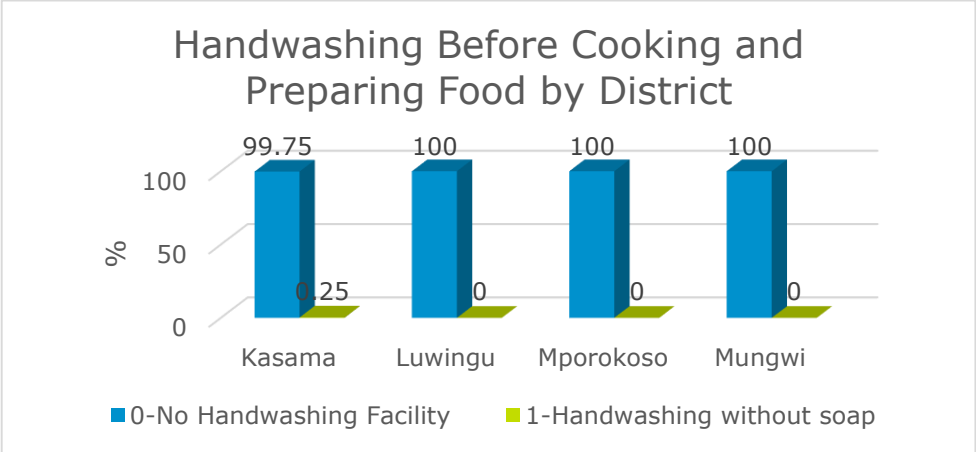

FIGURE 26 HANDWASHING BEFORE COOKING AND PREPARING FOOD BY DISTRICT

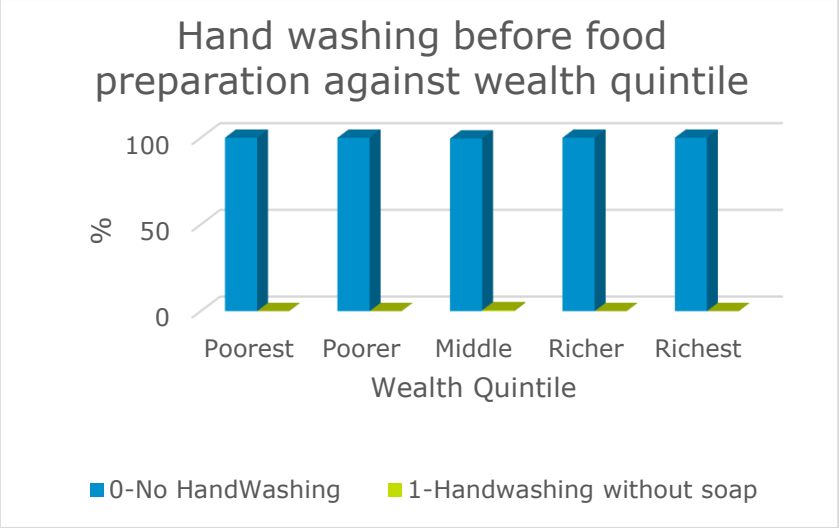

FIGURE 27 HANDWASHING BEFORE FOOD PREPARATION AGAINST WEALTH QUINTILES

99.25% (1054) of HHs do not wash hands before preparation of food. In all the wealth quintiles at least 99% do not wash hands before preparation of food as shown in figure 27 above. Within the female headed HHs 99.65% (281) and within the male headed households 99.10 (773) do not wash hand before preparing food. Only 0.13% (1) of male headed HHs wash hands before preparing food but without using soap see figure 28 below.

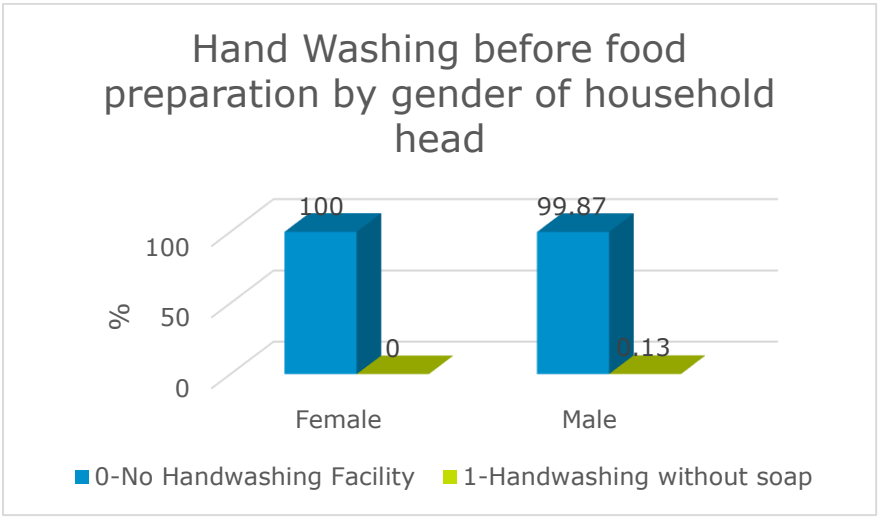

FIGURE 28 HANDWASHING BEFORE FOOD PREPARATION BY GENDER OF HH HEAD

3.5.4 DISCUSSION ON THE FINDINGS FOR ACCESS TO HAND WASHING WITH SOAP (HWWS)

The findings on hand washing show that the practice is non-existent, whilst in the Sanitation and Hygiene document of the Ministry it is indicated that 'The limited data available on hand washing practices indicate that only around half of rural women and men wash hands after using the toilet, with hardly any of them using soap/ other medium'. The reason why the baseline survey findings are high was the use of a proxy being the presence / absence of a hand washing station within accessible distance of the location of behaviour whilst the Ministry survey used a questionnaire. However there is considerable knowledge across all districts and across all wealth quintiles about hand washing at critical times especially after defecation and before eating or preparing food but the practice is different.

The SSH4A programme should focus on promoting hand washing with soap / other suitable media through hygiene promotion. It is also important to note that the standards defined by MLGH for an adequate latrine include the presence of a hand washing station. The hygiene promotion should include knowledge of all the critical times.

4 RESULTS AND FINDINGS ON SUSTAINABILITY INDICATORS

This section presents and discuss sustainability indicators 1, 6 and 10. Sustainability indicators 2, 3, 4, 5 and 7-9 will be presented later in addendums as they will only be done when the relevant activities are being implemented in the course of the year.

A sustainability indicator survey workshop comprising the D-WASHE members was held in each district. Its aim was:

- To ascertain the capacity of the district council in steering demand creation at scale in their area (sustainability indicator1) and
- To assess sector alignment at local level (Sustainability Indicator 6)

The meeting of the D-WASHE was called to discuss and evaluate the sustainability indicators 1 and 6. The D-WASHE comprises of council officers and representatives from line ministries. In Kasama and Mungwi districts, for indicator 1 the D-WASHE split into Council and non-council members. In Luwingu, and Mporokoso, the D-WASHE members split into two mixed groups i.e. in each group having Council and non-Council members as was the case for Indicator 6 in all districts. There was intensive discussion in the plenary session to reach an agreement on the final score which was supported by a mutual justification. SNV Advisors facilitated the process. Score sheets for sustainability indicator 1 and 6 are shown below for each district.

Sustainability Indicator 10 i.e. Progress in FSM – emptying and collection is measured at household level hence was measured during the Household survey.

4.1 SUSTAINABILITY INDICATOR 1: CAPACITY OF LOCAL GOVERNMENTS OR LINE AGENCIES TO STEER SANITATION DEMAND CREATION AT SCALE IN THEIR AREA

4.1.1 CAPACITY OF LOCAL GOVERNMENTS OR LINE AGENCIES TO STEER SANITATION DEMAND CREATION AT SCALE IN KASAMA DISTRICT

	Council Group 1	D-WASHE Group 2	Final score	Justification / Remarks
1. Has plan for implementing demand creation activities covering the entire district (even if in phases)	2	0	0	There is no plan for Sanitation demand creation plan. The provincial launch was done in 2012 nothing has been done in CLTS.
2. Ensures that there are human and financial resources to implement demand creation activities in line with its plans (in-house or other)	2	1	1	There is no human and financial resources specifically for sanitation demand creation.
3. Promotes standard and regularly assesses the performance of organisations engaged in demand creation	0	1	1	The standards exist but are at national level and have not been institutionalised at district level.
4. Has a monitoring system that measures progress on demand creation targets and results at village and sub-district level	3	1	1	There is a system for monitoring water and sanitations projects but does not focus on sanitation demand creation.

5. Ensures that follow-up happens at the most appropriate times of the year	2	0	0	No follow up because CLTS has not been rolled out in the district
6. Ensures that information on progress is shared, analysed and discussed with relevant sub-district and district level stakeholders	0	0	0	No CLTS plan, no CLTS monitoring and thus no information
7. Ensures that monitoring includes data that assesses inclusion of all groups within the villages, including people with a disability	0	0	0	No sanitation demand creation plan and thus no monitoring to generate information for decision making
8. Uses the data from monitoring and experiences to adjust or improve implementation of sanitation demand creation when relevant	0	0	0	The information on Sanitation demand creation is not collected as there are no activities happening.
9. Uses a differentiated approach for hard to reach villages and those lagging behind	0	1	0	Because sanitation demand creation has not been planned for, it is difficult to know hard to reach villages and laggards.
10. Mobilises local government and other local leadership around sanitation	2	2	2	Discussions on sanitation is done in meetings such as D-WASHE and DDCC though the main focus is on water, how many boreholes have been constructed, how many are functional. etc.
Average Score	**1.1**	**0.6**	**0.5**	

4.1.2 CAPACITY OF LOCAL GOVERNMENTS OR LINE AGENCIES TO STEER SANITATION DEMAND CREATION AT SCALE IN LUWINGU DISTRICT

	Group 1	Group 2	Final score	Justification/ Remarks
1. Has plan for implementing demand creation activities covering the entire district (even if in phases)	0	0	0	There is no plan for steering sanitation demand creation.
2. Ensures that there are human and financial resources to implement demand creation	0	0	0	No financial despite having human resource to carry out sanitation demand creation.

activities in line with its plans (in-house or other)				
3. Promotes standard and regularly assesses the performance of organisations engaged in demand creation	0	3	1	National standards are available but not yet institutionalized at district level.
4. Has a monitoring system that measures progress on demand creation targets and results at village and sub-district level	0	0	0	The district has no monitoring system, DWASHE do not meet quarterly or monitor sanitation. The absence of a plan makes no reason for the district to have a monitoring system
5. Ensures that follow-up happens at the most appropriate times of the year	0	0	0	NO follow up because of lack of the district plan on sanitation demand creation. Stakeholders may have their monitoring system but not harmonized.
6. Ensures that information on progress is shared, analysed and discussed with relevant sub-district and district level stakeholders	0	0	0	There is no information sharing because of the district not having a plan on sanitation demand creation.
7. Ensures that monitoring includes data that assesses inclusion of all groups within the villages, including people with a disability	0	0	0	There is no monitoring system but stakeholders have a monitoring system that assess inclusion of all groups.
8. Uses the data from monitoring and experiences to adjust or improve implementation of sanitation demand creation when relevant	0	0	0	No plan, no monitoring system therefore no information can be used to improve implementation.
9. Uses a differentiated approach for hard to reach villages and those lagging behind	0	0	0	The district has no plan but some stakeholders (self-help and world vision) are implementing sanitation activities in the hard to reach areas such as Bwalinde, Ibale, Isansa, Isangano, and Luata. Committees have been formed but also are lagging behind due to lack of district plan.
10. Mobilises local government and other local leadership around sanitation	2	3	1	Discussions are held with local and traditional leaders during public health committee and management meetings.

Average score	**0.2**	**0.6**	**0.2**	

4.1.3 CAPACITY OF LOCAL GOVERNMENTS OR LINE AGENCIES TO STEER SANITATION DEMAND CREATION AT SCALE IN MPOROKOSO DISTRICT

	Group 1	Group 2	Final score	Justification / Remarks
1. Has plan for implementing demand creation activities covering the entire district (even if in phases)	0	0	0	There is no plan for implementing demand creation activities.
2. Ensures that there are human and financial resources to implement demand creation activities in line with its plans (in-house or other)	0	0	0	No plan is in existence consequently no human resource has been planned for.
3. Promotes standard and regularly assesses the performance of organisations engaged in demand creation	0	1	0	The standards are there at the national level (e.g. NRWSSP and sanitation and hygiene component documents) but the council is not enforcing them.
4. Has a monitoring system that measures progress on demand creation targets and results at village and sub-district level	0	0	0	There is no system that has been put in place as there are no standards being enforced.
5. Ensures that follow-up happens at the most appropriate times of the year	0	0	0	There is no plan so there no follow-ups
6. Ensures that information on progress is shared, analysed and discussed with relevant sub-district and district level stakeholders	0	1	1	The council shares information with implementing stakeholders but not the entire D-WASHE.
7. Ensures that monitoring includes data that assesses inclusion of all groups within the villages, including people with a disability	0	0	0	Data which is available is not disaggregated.
8. Uses the data from monitoring and experiences to adjust or improve implementation of sanitation demand creation when relevant	0	0	0	Sanitation demand creation has not been implemented hence it has not been possible to adjust or improve.

9. Uses a differentiated approach for hard to reach villages and those lagging behind	0	0	0	Sanitation demand creation has not yet been planned and implemented; as a consequence it has not been possible to identify hard to reach villages (distance) and laggards (behaviour).
10. Mobilises local government and other local leadership around sanitation	2	1	1	Whenever possible the messages on sanitation are disseminated and this has been done during DDCC meetings.
Average score	**0.2**	**0.3**	**0.2**	

4.1.4 CAPACITY OF LOCAL GOVERNMENTS OR LINE AGENCIES TO STEER SANITATION DEMAND CREATION AT SCALE IN MUNGWI DISTRICT

Quest	Council Grp 1	D-WASHE Grp 2	Final score	Justification / Remarks
1. Has plan for implementing demand creation activities covering the entire district (even if in phases)	0	3	0	There is no plan but however, Unicef is supporting MDMHO through Communication for development program on sanitation demand creation using integrated approach.
2. Ensures that there are human and financial resources to implement demand creation activities in line with its plans (in-house or other)	0	2	0	No financial and skilled human resources to conduct community led Total sanitation activities.
3. Promotes standard and regularly assesses the performance of organisations engaged in demand creation	0	0	0	There are no organizations involved in sanitation demand creation activities.
4. Has a monitoring system that measures progress on demand creation targets and results at village and sub-district level	0	2	0	There are no sanitation and demand creation 48 quarterly in the district, therefore monitoring is not being conducted. MDMHO has a monitoring tool but not being used regularly.
5. Ensures that follow-up happens at the most appropriate times of the year	0	1	0	There are no follow ups being made, because the sanitation demand activities are not being conducted.
6. Ensures that information on progress is shared, analysed and discussed with relevant sub-	0	1	0	No information to share because there are no demand creation activities happening in the district.

district and district level stakeholders				
7. Ensures that monitoring includes data that assesses inclusion of all groups within the villages, including people with a disability	0	1	0	No Monitoring activities are being conducted due to lack of sanitation demand activities in the district.
8. Uses the data from monitoring and experiences to adjust or improve implementation of sanitation demand creation when relevant	0	2	0	No sanitation activities happening
9. Uses a differentiated approach for hard to reach villages and those lagging behind	0	0	0	No sanitation demand creation activities to reach hard to reach villages and laggards.
10. Mobilises local government and other local leadership around sanitation	2	1	1	Sanitation issues are discussed whenever there is an opportunity such as full council and DDCC meetings. The meetings are 49 quarterly held and sanitation discussions are focused on water.
Average score	**0.2**	**1.3**	**0.1**	

4.1.5 DISCUSSION ON THE FINDINGS FOR SUSTAINABILITY INDICATOR 1

Detail	**Score Kasama**	**Score Luwingu**	**Score Mporokoso**	**Score Mungwi**
1. Has plan for implementing demand creation activities covering the entire district (even if in phases)	0	0	0	0
2. Ensures that there are human and financial resources to implement demand creation activities in line with its plans (in-house or other)	1	0	0	0
3. Promotes standard and regularly assesses the performance of organisations engaged in demand creation	1	1	0	0
4. Has a monitoring system that measures progress on demand creation targets and results at village and sub-district level	1	0	0	0
5. Ensures that follow-up happens at the most appropriate times of the year	0	0	0	0

6. Ensures that information on progress is shared, analysed and discussed with relevant sub-district and district level stakeholders	0	0	1	0
7. Ensures that monitoring includes data that assesses inclusion of all groups within the villages, including people with a disability	0	0	0	0
8. Uses the data from monitoring and experiences to adjust or improve implementation when relevant	0	0	0	0
9. Uses a differentiated approach for hard to reach villages and those lagging behind	0	0	0	0
10. Mobilises local government and other local leadership around sanitation	2	1	1	1
Average score	**0.5**	**0.2**	**0.2**	**0.1**

The capacity to steer sanitation demand creation is very weak in all the districts because of the following:

- There is no plan to roll out Sanitation demand creation, consequently local authorities have not provided resources for this. Instead there has been dependence on partners who enjoy a free reign as local authorities have not provided guidance as they don't have the capacity to do so.
- There is no sanitation data for the district. As a result there is no monitoring or evaluation of sanitation activities.

At best sanitation activities are highlighted during national and international days such as World Toilet Day and Global Hand Washing Day. These are celebrated as part of national activities. The Ministry of Health is reported to be sensitising stakeholders at regular intervals on promotion of hygiene.

The SSH4A programme should therefore focus on supporting the Councils to:

- Develop a District Total Sanitation Plan. This will provide the required attention and focus on sanitation and hygiene promotion.
- Take a lead in promoting sanitation and hygiene in the entire district. Councils are failing to fulfil this mandate. They should be able to provide guidance to implementing partners or at least have an overview of activities, ensuring alignment. These guidelines are already provided by the Ministry of Local Government but are not being implemented at local level.
- Develop a monitoring and evaluation system for sanitation and hygiene promotion

4.2 SUSTAINABILITY INDICATOR 6: IMPROVED SECTOR ALIGNMENT AT LOCAL LEVEL

4.2.1 SECTOR ALIGNMENT IN KASAMA DISTRICT

	Group 1	**Group 2**	**Final score**	**Justification / Remarks**
1. A multi-stakeholder dialogue has started (on rural sanitation)	3	3	3	The D-WASHE exists as a structured forum where members discuss sanitation issues but it doesn't meet regularly. It comprises of

				both government and non-government institutions
2. All relevant (local) government sector stakeholders are involved in the dialogue.	4	2	1	Despite invitations being sent to all relevant (local) government sector stakeholders only a few turn up for meetings
3. All relevant (local) donor (or funding) agencies are involved in the dialogue.	2	2	2	Despite invitations being sent to all relevant done (funding) agencies only a few turn up for meetings to participate in the dialogue
4. Relevant civil society and private sector stakeholders are involved in the dialogue.	0	2	1	Private sector don't participate in the dialogue of sanitation issues. They are only called upon when need arises especially during commemoration of days to make contributions. They are also called upon when there is a sanitations need in their institutions.
5. Information and data (evidence base) are shared in the group.	1	1	1	Information/data is kept by each stakeholder in the sector and is shared at request. There is no evidence
6. Sector priorities (for rural sanitation) are set jointly by stakeholders.	0	1	0	Planning and setting of priorities is not done jointly.
7. Sector targets (for rural sanitation) are set jointly by stakeholders.	0	1	0	Planning and set targets is done per institutions.
8. Plans (for rural sanitation) are made jointly.	0	0	0	Plans are not made jointly
9. Approaches (to rural sanitation) are aligned.	0	0	0	Key principles are there but approaches not fully aligned.
10. Standards and norms (related to rural sanitation) are aligned.	0	0	0	Key principles are there but approaches not fully aligned.
Average score	**1.0**	**1.2**	**0.8**	

4.2.2 SECTOR ALIGNMENT IN LUWINGU DISTRICT

	Group 1	Group 2	Final score	Justification / Remarks
1. A multi-stakeholder dialogue has started (on rural sanitation)	3	3	2	D-WASHE committee exists but do not meet regularly.
2. All relevant (local) government sector stakeholders are involved in the dialogue.	2	1	1	The D-WASHE do not hold meetings on regular basis.
3. All relevant (local) donor (or funding) agencies are involved in the dialogue.	2	2	2	The donors; World vision, Self- help, Irish AID, DAAP are involved in dialogue.
4. Relevant civil society and private sector stakeholders are involved in the dialogue.	1	1	1	Private sector is not involved in sanitation demand creation.
5. Information and data (evidence base) are shared in the group.	1	1	1	Information is only shared on request.
6. Sector priorities (for rural sanitation) are set jointly by stakeholders.	1	0	0	Sector priorities for rural sanitation are not set jointly.
7. Sector targets (for rural sanitation) are set jointly by stakeholders.	1	0	0	Sector Targets are not set jointly as the district does not plan together.
8. Plans (for rural sanitation) are made jointly.	0	0	0	Stakeholders make individual plans
9. Approaches (to rural sanitation) are aligned.	1	2	1	Approaches are not fully aligned.
10. Standards and norms (related to rural sanitation) are aligned.	1	3	1	Not fully aligned.
Average score	**1.3**	**1.3**	**0.9**	

4.2.3 SECTOR ALIGNMENT IN MPOROKOSO DISTRICT

	Group 1	Group 2	Final score	Justification / Remarks
1. A multi-stakeholder dialogue has started (on rural sanitation)	3	3	3	The D-WASHE meets and discusses about sanitation though it does not meet regularly
2. All relevant (local) government sector stakeholders are involved in the dialogue.	4	3	3	The D-WASHE meetings are held but not all relevant stakeholders attend
3. All relevant (local) donor (or funding) agencies are involved in the dialogue.	2	2	2	Relevant local donors make attendance to meetings but not always
4. Relevant civil society and private sector stakeholders are involved in the dialogue.	2	2	2	The business sector has no representation but presence of the civil society is available though not always
5. Information and data (evidence base) are shared in the group.	2	2	2	Organisations share information but not regularly
6. Sector priorities (for rural sanitation) are set jointly by stakeholders.	1	4	1	Priorities are set by concerned stakeholders and the D-WASHE is later informed thus the local authority / D-WASHE are not in the lead in setting priorities. Priorities at national level are clear.
7. Sector targets (for rural sanitation) are set jointly by stakeholders.	4	0	0	There are no targets set at the local level
8. Plans (for rural sanitation) are made jointly.	4	0	0	Plans on sanitation are not available
9. Approaches (to rural sanitation) are aligned.	4	1	1	There is no clear alignment as the national documents are not being fully utilised.
10. Standards and norms (related to rural sanitation) are aligned.	4	1	1	Standards and norms not fully aligned as the national documents are not fully utilised
Average score	**3**	**1.8**	**1.5**	

4.2.4 SECTOR ALIGNMENT IN MUNGWI DISTRICT

	Group 1	Group 2	Final score	Remarks
1. A multi-stakeholder dialogue has started (on rural sanitation)	3	2	2	Multi-stakeholder dialogue has started but does not include civil society and private sector.
2. All relevant (local) government sector stakeholders are involved in the dialogue.	2	3	3	Meetings are held regularly though the attendance is not 100%.
3. All relevant (local) donor (or funding) agencies are involved in the dialogue.	2	2	2	Local government is always present but other agencies do not have presentation, However, formal communication is occasionally made through emails and reports.
4. Relevant civil society and private sector stakeholders are involved in the dialogue.	0	2	0	Both civil society and private sectors are NOT involved in the dialogue of sanitation and hygiene issues.
5. Information and data (evidence base) are shared in the group.	2	1	1	Information on sanitation is available but shared in meetings and on request.
6. Sector priorities (for rural sanitation) are set jointly by stakeholders.	4	0	0	There is no plan for sanitation demand creation hence priorities are not set jointly.
7. Sector targets (for rural sanitation) are set jointly by stakeholders.	0	0	0	No targets for sanitation demand creation as the district has no district plan.
8. Plans (for rural sanitation) are made jointly.	2	0	0	There is no district plan on sanitation demand creation.
9. Approaches (to rural sanitation) are aligned.	1	1	1	Not all the principles on sanitation and hygiene are adhered to.
10. Standards and norms (related to rural sanitation) are aligned.	3	2	2	Standards on sanitation available and aligned to national principles but not adhered to.
Average score	**1.9**	**1.3**	**1.1**	

4.2.5 DISCUSSION ON THE FINDINGS FOR SUSTAINABILITY INDICATOR 6

Detail	Score Kasama	Score Luwingu	Score Mporokoso	Score Mungwi
1. A multi-stakeholder dialogue has started (on rural sanitation)	3	2	3	2
2. All relevant (local) government sector stakeholders are involved in the dialogue.	1	1	3	3
3. All relevant (local) donor (or funding) agencies are involved in the dialogue.	2	2	2	2
4. Relevant civil society and private sector stakeholders are involved in the dialogue.	1	1	2	0
5. Information and data (evidence base) are shared in the group.	1	1	2	1
6. Sector priorities (for rural sanitation) are set jointly by stakeholders.	0	0	1	0
7. Sector targets (for rural sanitation) are set jointly by stakeholders.	0	0	0	0
8. Plans (for rural sanitation) are made jointly.	0	0	0	0
9. Approaches (to rural sanitation) are aligned.	0	1	1	1
10. Standards and norms (related to rural sanitation) are aligned.	0	1	1	2
Average score	**0.8**	**0.9**	**1.5**	**1.1**

The key observations relating to sustainability indicator 6 are that:

- A multi stakeholder platform, the D-WASHE is in place in all districts as this is a requirement by Government. However the meetings are irregular and attendance by stakeholders is an issue,
- The main agenda for D-WASHE meetings has been on water supply and very little if nothing on sanitation and hygiene promotion.
- There is no joint planning nor joint setting of priorities and targets. This is mainly due to the failure by local authorities to take the required lead.
- Attendance of D-WASHE meetings is by both government and non-governmental actors which comprises of CSOs and NGOs.
- The private sector is conspicuous by its absence in D-WASHE meetings. At best their participation is ad hoc when invited for special events.

The SSH4A programme should therefore focus on the following areas:

- Support the development of a District Sanitation Plan where all stakeholders would be involved in joint planning i.e. determining targets and priorities for the district.
- Revive the D-WASHE forums with meetings held as mandated and with an agenda on sanitation and hygiene promotion
- Facilitate the participation of the private sector around specific topics.

4.3 Sustainability Indicator 10: Progress in FSM – emptying and collection

4.3.1 Overall findings on safety of pit emptying and collection

As mentioned in section 3.3.5, all toilets found in the area are direct pits, and most of them without a slab. Generally pits are abandoned when they fill up and new latrine is constructed.

Only 2 respondents out of the 1062 indicated that their pit had ever been emptied. For one of them it was less than a year ago, while the other did not remember. In one case it was emptied into the drain, whereas the other respondent indicated that the pit contents were dumped in a pit in the compound and then covered. Clearly emptying is a very new concept for the area.

The practice of constructing a new toilet when the old one fills up, is considered safe FSM. The only risk is that families do not construct new toilets if they fill up too quickly. For households with small compounds a problem is that they are sometimes running out of space.

4.3.2 Other data on environmental safety

An important aspect of environmental safety is whether or not the pits can contaminate ground or surface water. This is a function of the soil type and distance to the water source. Sandy and gravel soils are more permeable than clay soils. In the programme area, the vast majority of toilets are located in villages with clay or clay/silt soils (92%). This indicates that the environmental health risk is low there. A smaller number of toilets are located in villages with sandy soils (5%) and a very small percentage in loamy soils (1%). Only 2 respondents indicated that their soils are alluvial or gravel. In the table below a tentative indication is given of the likelihood of toilets contaminating ground or surface water. It is assumed that the alluvial soils are a mixture of gravel, sand and clay.

	(blank)	clay / silt	Loam	alluvial soil	sand	gravel	Total
Less than 10 metres		56	2		2		60
Between 10 and 100 metres		214			7		221
Between 100 and 500 metres	1	132	1	2	8	2	146
More than 500 metres		69	1		14		84
Grand Total	1	471	4	2	26	2	511

TABLE 7 LIKELIHOOD OF TOILETS CONTAMINATING GROUND OR SURFACE WATER

Data on groundwater depth does not seem very reliable, but it is estimated that about 8% of toilets are located in areas with a ground water table of less than 1m deep.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS AND RECOMMENDATIONS ON INDIVIDUAL DISTRICTS

5.1.1 KASAMA

Conclusion

Kasama district is the Provincial Administrative and Commercial centre of Northern Province connected by rail. Road and air with the capital city, Lusaka. There is much more economic activities in Kasama than in other districts within the province. The poverty levels have reduced from 80 % in 2006 to 67.5% in 2007[8]. The survey established that the poorest and poorer constitute a total of 24% compared to the richer and richest at 60%.
40% of the respondents practice OD with 45% having an unimproved toilet and 15% with an improved one. Only 1% of those who have a toilet and do not use it and 45% who use a toilet with a hole covered. Only 9% use a clean toilet providing privacy, Knowledge of Hand washing with soap at critical times is not known with 99% of respondents indicating so.
On the sustainability indicators, there is no Sanitation and Hygiene Plan and consequently no resources are provided for these activities The Council has in its employ a Rural Water and Sanitation Coordinator and has this year engaged a Health Inspector but focus is on water supply. The impact of the health inspectorate is yet to be seen regarding sanitation and hygiene promotion. It is noted that the Council has focussed their attention on the Water Supply component and very much less on sanitation and hygiene. The key documentation / guidelines from the Ministry of Local Government on Sanitation are not available at the Council. The steering of the water and sanitation has been left mainly to the Rural Water and Sanitation Coordinator.
Whilst the D-WASHE exists as a structured forum where members discuss sanitation issues especially during special events, it doesn't meet regularly and attendance is not always optimal. Despite CLTS having been introduced in 2012 by the Ministry of Local Government no activities have taken place on Sanitation Demand creation except in 2 wards supported by World Vision under its Area Development Programme. It is noted that Traditional leaders have been championing the construction of toilets in each household following the introduction of CLTS in 2012 but the technocrats under the D-WASHE and the Council have lagged behind. The D-WASHE is a mandatory body which all District Councils are supposed to have. The meetings are mostly attended by delegated members as the core members do not seem to be available. Accordingly, the planning and setting of priorities and targets is not done jointly through the D-WASHE. Each stakeholder sets its own targets and shares at the D-WASHE meeting. These are then consolidated. The key principles and strategy on Sanitation and Hygiene have been developed by the Ministry but there is little or no knowledge about them at local level.
The Private sector doesn't participate in any dialogue on sanitation issues except on national events such as commemorations when they are requested to make financial contributions or if there are issues at their premises.

Recommendation

The priority interventions for the SSH4A programme in Kasama district should be on:

- Enhance the practice of hand washing with soap.
- Reduce OD through CLTS and build on the gains already made in the district whereby more than 50% are using a toilet.
- Use of clean toilets which provide privacy is low and through hygiene promotion these levels should be increased
- Support the Council to develop a District Total Sanitation Plan and budget. The Council must begin to budget and provide resources for sanitation and hygiene promotion activities.

[8] Kasama Municipal Council: Kasama District Situational Analysis, December 2011

- Revive the D-WASHE to be a fully functional multi stakeholder forum which is in the forefront in terms of planning for sanitation and hygiene promotion interventions. There is need to incorporate the private sector in the D-WASHE meetings.
- The private sector to be supported in identifying and exploiting opportunities in sanitation especially options suitable for the poorer categories.
- There is need to build on the momentum created by traditional leaders for each household to have a latrine. The programme should work closely with the Chiefs to increase access to improved sanitation and promote good hygiene practices

5.1.2 LUWINGU

Conclusion

Luwingu district is generally described as poor[9]. The survey established that the poorer and poorest make 42% of the population. The main employers is the Government and the District Council. A larger part of the Luwingu District population is engaged in subsistence farming engaged in livestock keeping and crop production practised under rain fed conditions. From August to October community members move to fishing and chitemene (shifting cultivation) camps.

Regarding access to sanitation, 25% have an improved latrine, 34% an unimproved latrine with 41% practicing OD. Knowledge of Hand washing with soap at critical times is not known with 99.1% of respondents indicating so3% have a toilet but don't use it, whilst 51% use a latrine with the hole covered by a lid. However only 4% use a clean, functional toilet which provides privacy.

On the sustainability indicators, the Council has no plan for sanitation demand creation. The Council has the human resources but has not allocated financial resources for sanitation demand creation. The Sanitation demand creation activities taking place have been driven by partners such as World Vision and Self Help. Because of the absence of a district plan, there is no monitoring. Whilst the standards on sanitation demand creation are spelt out in national documents including training manuals these are yet to be institutionalised at the local level. The Council does not have a system for monitoring sanitation demand creation and hence there is no information collected. The overall capacity of the Council in steering sanitation demand creation is very weak.

The D-WASHE exists but the meetings are not held regularly and the attendances are erratic. Planning is harmonised and there is no system for monitoring sanitation demand creation activities. It is a multi-stakeholder forum with non-governmental organisations such as World Vision, Irish Aid and DAAP participating. World Vision is supporting the district on sanitation demand creation in 10 wards whilst DAAP implemented a school WASH programme. There is no joint setting of priorities and targets hence stakeholders make individual plans. Because of the absence of a harmonised approach, each stakeholder implements as it sees fit.

The D-WASHE is therefore a very weak organ especially towards sanitation and hygiene activities. Most of the members do not have access to the National Sanitation and Hygiene frameworks.

Recommendations

The SSH4A programme should prioritise the following interventions:

- Reduction of OD through scaling up of CLTS activities. The SSH4A programme should target wards not covered by World Vision and Self Help. The programme should aim at communities having adequate latrines as defined by MLGH.
- Enhance knowledge to communities on the critical moments for hand washing with soap and implement interventions which promote the hand washing practice. With communities having adequate latrines, this will promote the practice of hand washing with soap/ash soon after defecation.
- Address issue of cleanliness of toilets and also ensuring they provide privacy. This should be done in the roll out of CLTS as well as in hygiene promotion activities.

[9] Luwingu Disrict Council: Luwingu District Situational Analysis,

- As required by MLGH, the Council should have a District Total Sanitation Plan and budget. The programme should support the Council to develop this plan and take ownership and leadership on sanitation programmes.
- There is need to resuscitate the D-WASHE to be a fully functional multi stakeholder forum which is in the forefront in terms of planning for sanitation and hygiene promotion interventions.
- The private sector should be brought on board and participate in the D-WASHE meetings. The private sector should be supported in identifying and exploiting opportunities in sanitation especially options suitable for the poorer categories.

5.1.3 MPOROKOSO

Conclusion

Mporokoso district receives heavy rainfall averaging 1500mm annually. The soil texture is clay and is not stable due to heavy rains and are easily prone to erosion. The main occupation in the district is subsistence farming. Industrial activities in the district are non-existent. The district populace seems to be well off. The poorest and poorer constitutes only 7.18% and 30.94% respectively of the Mporokoso respondents with the middle, richer and richest making 22.65%, 22.10% and 17.13% respectively.

50% have an unimproved toilet, with 4% having an improved one and 46% practicing OD. It is noted that 7% do not use a toilet even if there is one available and only 15% have a functional clean toilet which provides privacy. Knowledge of Hand washing with soap at critical times is not known as 99.45% of respondents indicate this to be the case.

The council has no plan for implementing demand creation activities and there are no resources financial and human allocated for this purpose by the Council. There is no monitoring system for sanitation hence there are no standards being enforced.

The D-WASHE meetings are held but not all relevant stakeholders attend and the meetings are not regular. It is indicated that the D-WASHE does discuss about sanitation and hygiene. There is no joint planning hence no joint priorities / targets set. The national framework on sanitation and hygiene is not we institutionalised in the district. Civil society organisations do attend D-WASHE meetings on an irregular basis but the private sector is not represented and has not been invited.

Recommendations

The SSH4A programme should focus on the following:

- Increase sanitation coverage to ensure most of the HHs have access to own latrine which they use. This should be done by implementing CLTS in all the wards as well as hygiene promotion activities to ensure the toilets put in place are used the correct purpose.
- To provide direction to the Council, the programme should support it to develop a District Total Sanitation Plan. The plan should also be backed by a budget to ensure Council mobilises the required resources to facilitate implementation of sanitation and hygiene promotion activities.
- Hygiene promotion activates should also include promotion of the hand washing with soap at critical times.
- Strengthen the D-WASHE to meet regularly as well as for it to discuss the sanitation and hygiene component. The D-WASHE as a multi stakeholder platform should also invite the private sector to participate.
- Due to the issues of collapsing soils and heavy rains, the programme should focus on supporting the development of suitable durable toilet options.

5.1.4 MUNGWI

Conclusion

According to the Mungwi District Situational Analysis the district ranks top in terms of low income level and poverty in the province. The survey established that a majority, 66% of the populace are on the poorer and poorest wealth quintiles. The major economic activities that take place in the District in order of importance is farming, trading and fishing and these are mostly done on a small-scale level. The soils are deep, well drained and not prone to erosion hazards.

84% of the HHs practice OD with 13% having an unimproved toilet and 4% an improved toilet. When hygienic use and maintenance of toilets is taken into account, it is noted that Mungwi does not have people who have a toilet but do not use it. 2% use a toilet which is not clean nor does it have a lid and does not offer privacy whilst 14% use a toilet with the hole covered by a lid but these toilets are not clean nor do they offer privacy. Knowledge of Hand washing with soap at critical times is not known with 99.61% of respondents indicating so.

On the sustainability indicators, there are no sanitation and demand creation taking place in the district, hence no monitoring is being done. Mungwi does not have a plan for sanitation demand creation. The district has not had a sanitation and hygiene programme through any partner. This explains the high cases of OD.

The D-WASHE meetings are held on a regular basis but comprise only of government officials. There is need to bring in the private sector and civil society. There is no plan for sanitation demand creation hence no targets or priorities have been set for the district.

Recommendations

The SSH4A programme should focus on the following:

- Implementation of sanitation demand creation activities through CLTS in all the wards to reduce OD. This should be accompanied by hygiene promotion to ensure the toilets constructed are used and kept clean. The target should be communities to have adequate latrines which also ensures that privacy is taken care of.
- The hygiene promotion activities should also address the issue on hand washing with soap/ash.
- Support the D-WASHE to be a multi stakeholder forum by involving the civil society and private sector stakeholders.
- MLGH requires all local authorities to develop a District Total Sanitation Plan. The SSH4A should support the district in developing this plan which will provide guidance to the roll out of sanitation and hygiene interventions.

5.2 OVERALL CONCLUSIONS AND RECOMMENDATIONS

The overall conclusions and recommendations are made against the indicators assessed during the baseline survey.

5.2.1 OUTCOME INDICATOR 1 ACCESS TO SANITATION FACILITIES

Access to sanitation excluding shared toilets across the 4 districts is 35%. The sanitation coverage is higher (35% than initially projected (29%). It is noted that following the introductory sessions on CLTS in all provinces by MLGH in 2012, some of the chiefs have been asking their subjects to constructs unimproved traditional latrines. Secondly part of Kasama, Luwingu and Mporokoso have or receive support on sanitation programmes from organisations such as World Vision and Self Help.

The sharing of toilets is not very common as only 65% (247) of the HHs with an unimproved toilet do not share toilets compared to 35% (133) who share. With the improved toilet 95.4% of the HHs with an improved latrine don't share a toilet whilst 4.6% (6) share.

The SSH4A programme should focus on the following:

- Implement sanitation demand creation interventions to ensure the 4 districts at least meet the national target of 60% sanitation coverage. A national standard has been set regarding an adequate latrine and the 4 districts should works towards this. It is also noted that the sharing of toilets is not a common practice in Zambia. The programme should build on this and ensure each HHs has a separate latrine.
- Work with the traditional leaders to promote improvement if the sanitation situation in their chiefdoms. In turn the councillors should also be oriented on sanitation demand creation activities to ensure they support and approve the development of the District Total Sanitation Plan.
- Focus on the entire district for Mungwi and Mporokoso as these 2 have not had any sanitation and hygiene programme whilst in Kasama and Luwingu, the programme would prioritise support towards wards not covered by partners such as World Vision.
- Focus of support in the programme should be directed at the women headed HHs, those with special needs and the poor as these have higher proportions of OD as compared to other categories. The programme should also work on raising the voice of women in discussion about sanitation issues and options.

5.2.2 Outcome indicator 2: Hygienic use and maintenance of toilets

The findings showed 2% have a toilet but don't use it. This increases by 2.17% the OD rate from 51.88% who do not have a toilet. The poor are the female headed HHs are the majority who fall in this category. 91% of the poorest households have no toilet or do not use a toilet. The cleanliness and privacy of latrines is an issue in all the districts although Kasama district HHs seem to be better in using and keeping toilets clean. This could be contributing to some of the people not wanting to use the toilets.

The SSH4A programme needs to focus on hygiene promotion to encourage use of toilets as well as ensuring they are cleaned. A majority (35.82%) of the populace is using an unimproved toilet. The communities require to be supported to rise up the sanitation ladder. As indicated above, the NRWSSP target is that each HHs should have an adequate latrine which is kept clean and offers privacy. The female headed HHs and the poor should be specifically targeted.

5.2.3 Outcome Indicator 3: Hand washing with soap

The findings on hand washing show that the practice is non-existent in all wealth quintiles, across all the districts and in all HHs whether male or female headed in all the 5 critical moments i.e. after defecation, after cleaning a child who has defected, before breast feeding a child, before eating and preparing food.

The SSH4A programme should focus on promoting hand washing with soap / other suitable media through hygiene promotion. It is also important to note that the standards defined by MLGH for an adequate latrine include the presence of a hand washing station. In Zambia the modules approved by MLGH for CLTS roll out include hand washing with soap as one of the trigger tools. Therefore the promotion of hand washing with soap will be promoted during the triggering sessions, as well as in other activities

5.2.4 Sustainability Indicator 1: Capacity of local government or line agencies to steer sanitation demand creation at scale in their area

The capacity to steer sanitation demand creation is very weak in all the districts as evidenced by:

- There is no plan to roll out Sanitation demand creation, consequently local authorities have not provided resources for this. Instead there has been dependence on partners who enjoy a free reign as local authorities have not provided guidance as they don't have the capacity to do so.

- There is no sanitation data for the district. As a result there is no monitoring or evaluation of sanitation activities.
- Sanitation and hygiene promotion activities are highlighted during national and international days such as World Toilet Day and Global Hand Washing Day. These are celebrated as part of national activities.

The SSH4A programme should therefore focus on supporting the Councils to:

- Develop a District Total Sanitation Plan which will provide the required attention and focus on sanitation and hygiene promotion.
- Take a lead in promoting sanitation and hygiene in the entire district in accordance with guidelines already provided by the Ministry of Local Government
- Develop a monitoring and evaluation system for sanitation and hygiene promotion

5.2.5 SUSTAINABILITY INDICATOR 6: IMPROVED SECTOR ALIGNMENT AT LOCAL LEVEL

Whilst the multi stakeholder platform, D-WASHE exists in all the districts, its meetings are irregular and attendance not always regular. In some districts participants are only from the public sector. The main agenda for D-WASHE meetings has been on water supply and very little if nothing on sanitation and hygiene promotion. There is no joint planning nor joint setting of priorities and targets. This is mainly due to the failure by local authorities to take the required lead.

The SSH4A programme should therefore focus on the following areas:

- Support the development of a District Sanitation Plan where all stakeholders would be involved in joint planning i.e. determining targets and priorities for the district.
- Revive the D-WASHE forums with meetings held as mandated and with an agenda on sanitation and hygiene promotion
- Facilitate the participation of the private sector and NGOs

5.2.6 SUSTAINABILITY INDICATOR 10: PROGRESS IN FSM- EMPTYING AND COLLECTION

Toilets found in the area are direct pits, most of them without a slab. These are usually abandoned when they fill up and new latrine is constructed. Emptying is a very new concept in the four districts. The practice of constructing a new toilet when the old one fills up, is considered safe FSM. In the programme area, the vast majority of toilets are located in villages with clay or clay/silt soils hence the environmental health risk is low.

The SSH4A programme should focus on ensuring that new toilets are constructed when the old ones fill up as there is a high risk that this may not happen. The programme should also propagate the national guidelines that toilets should be constructed at least 30m downhill of a water source to avoid / reduce contamination.

6 BIBLIOGRAPHY

1. Central Statistics Office: **Census of population and housing vol. 6 Northern Province analytical report**, 2010
2. Kasama Municipal Council: **District Situational Analysis**, 2013
3. Luwingu District Council: **District Situational Analysis**, 2013
4. Ministry of Local Government and Housing: **National Rural Water Supply and Sanitation Programme (2006-2015)**, Nov. 2007
5. Ministry of Local Government and Housing: **National Rural Water Supply and Sanitation Programme – Sanitation and Hygiene Component**, May 2009
6. Mporokoso District Council: **District Situational Analysis**, 2013
7. Mungwi District Council: **District Situational Analysis**, 2013
8. SNV PMU: **Summary of the performance monitoring framework for the Sustainable Sanitation and Hygiene for All programme**, October 2013
9. [1] ZCAHRD, Boston University CGHD, UNICEF: **Impact Evaluation of the 3 Million Sanitation and Hygiene Program in Zambia Baseline Report**, 30 April 2013
10. [1] Zulu Burrow, Grontmij, Carl Bro;: **Assessment of Current Rural Sanitation and Hygiene Situation and Interventions,** December 2008

ANNEX 1: SSH4A PROGRAMME INDICATORS SSH4A PROGRAMME INDICATORS

OUTCOME INDICATOR

OUTCOME INDICATOR 1. PROGRESS IN ACCESS TO SANITATION FACILITIES

.

0. OD	There is no toilet within the premise.
1. Improved toilet (DFID definition) or shared toilet	Improved toilet (DFID definition) or toilet shared between one and more households (shared toilets recorded separately, not reported as result) -benchmark to be reported to DFID
2. Improved toilet (JMP definition) but accesible by flies	Human excreta contained in such a way that it is inaccessible for human contact or animals, but still accessible by flies (for example VIP latrine without fly screen or flush toilet without water seal)
3. Improved toilet without access to flies	Human excreta contained in such a way that it is inaccessible for human contact or animals, and inaccessible by flies
4. Environmentally safe toilet	Human excreta contained in such a way that it cannot contaminate surface or ground water

OUTCOME INDICATOR 2. PROGRESS IN HYGIENIC USE AND MAINTENANCE OF SANITATION FACILITIES

0. No toilet or not in use	Toilet exists but is not in use as toilet or no toilet
1. In use as toilet	Toilet is in use as a toilet
2.In use as toilet, and functional	Toilet is in use as a toilet, and has the hole covered or has functional water seal (not blocked)- benchmark to be reported to DFID
3.Used, functional, clean toilet	As previous and no fecal smears, walls and doors in place, no cleansing materials on floor and water available
4.Used, functional, clean toilet with privacy	As above and privacy (door can be closed/ locked)

6.1.1 OUTCOME INDICATOR 3. PROGRESS IN ACCESS TO HWWS

The indicator on hand washing with soap is a proxy indicator which looks at the presence of a hand washing station rather than the behaviour of hand washing itself. The reason for using a proxy indicator is that asking about hand washing behaviour will result in socially desirable answers, but not necessarily the truth. Also

knowledge about hand washing doesn't necessarily translate in behaviour. Whereas observing hand washing behaviour in households is very difficult (and expensive) to do. Therefore it is the consensus that this proxy indicator is the most cost effective way of measuring changes in hand washing behaviour.

Note that this indicator has to be measured for 5 critical times of hand washing, so locations for these times need to be identified in order to assess accessible distance.

0.No HWWS	No handwashing station within accessible distance of the location of behaviour
1.HW without soap	Hand washing station within accessible distance of the location of behaviour but no soap
2.HWWS with potential contamination	Hand washing station with soap within accessible distance of the location of behaviour, but hands touching the water - benchmark to be reported to DFID
3.HWWS without contamination	Hand washing station with soap within accessible distance, hands not touching the water
4.HWWS with running water	Hand washing station with soap within accessible distance, running water.

OUTCOME INDICATOR 4. NUMBER OF PEOPLE REACHED THROUGH HYGIENE PROMOTION

This indicator will report on the target group of the hygiene promotion activities.

SUSTAINABILITY INDICATORS

The Sustainable Sanitation and Hygiene for All performance monitoring framework has 10 sustainability indicators, linking to the objectives of the different components.

STRENGTHENING CAPACITY FOR STEERING AND IMPLEMENTATION OF SANITATION DEMAND CREATION

Objective: Local organisations are capable to implement and steer sanitation demand creation at scale.

Indicators are:

i. Capacity of local governments or line agencies to steer sanitation demand creation at scale in their area
ii. Capacity of local organisations implement sanitation demand creation (CLTS) with quality

SUSTAINABILITY INDICATOR 1. CAPACITY OF LOCAL GOVERNMENTS OR LINE AGENCIES TO STEER SANITATION DEMAND CREATION AT SCALE IN THEIR AREA

	Scores				
	0	1	2	3	4
1. Has plan for implementing demand creation activities covering the entire district (even if in phases)					
2. Ensures that there are human and financial resources to implement demand creation activities in line with its plans (in-house or other)					
3. Promotes standard and regularly assesses the performance of organisations engaged in demand creation					
4. Has a monitoring system that measures progress on demand creation targets and results at village and sub-district level					
5. Ensures that follow-up happens at the most appropriate times of the year					
6. Ensures that information on progress is shared, analysed and discussed with relevant sub-district and district level stakeholders					
7. Ensures that monitoring includes data that assesses inclusion of all groups within the villages, including people with a disability					
8. Uses the data from monitoring and experiences to adjust or improve implementation when relevant					
9. Uses a differentiated approach for hard to reach villages and those lagging behind					
10. Mobilises local government and other local leadership around sanitation					

SUSTAINABILITY INDICATOR 2. CAPACITY OF LOCAL ORGANISATIONS IMPLEMENT SANITATION DEMAND CREATION (CLTS) WITH QUALITY

	Scores				
	0	1	2	3	4
1. Facilitates does not lecture					
2. Ensures that workshop timing and invitations are done adequately as to ensure inclusive participation of different genders, ethnic groups, disabled and wealth groups					
3. Monitors attendance and makes additional efforts to reach groups who do not attend (if needed)					

	Scores				
	0	1	2	3	4
4. Demonstrates a respectful attitude towards participants and adapts to local customs					
5. Gives specific attention and/or uses methods to enable active participation of different genders, ethnic groups, disabled and wealth groups					
6. Starts post-triggering activities within 3 weeks of the triggering					
7. Includes informed technology choice activities and ensures understanding of sanitary quality of toilets in post-triggering					
8. Includes hygiene and hand washing in post-triggering					
9. Gives attention to special needs in triggering and/or post-triggering (disabled, elderly, poor)					
10. Is clear about agreements, roles & responsibilities of the community and outside organisations (does not create false expectations)					

STRENGTHENING CAPACITY FOR SANITATION SUPPLY CHAINS AND FINANCE

Objective: Appropriate affordable market-based solutions for a variety of sanitation consumer needs are implemented at scale.

Indicators are:

- Progress on private sector engaging in sale of sanitation hardware and services to BoP
- Availability of affordable sanitation options for the poorest wealth quintile

6.1.1.1 SUSTAINABILITY INDICATOR 3. PROGRESS ON PRIVATE SECTOR ENGAGING IN SALES OF SANITATION HARDWARE AND SERVICES TO BOP

0. No private sector involvement in sanitation	No private involved in sanitation hardware and/or services at the district level
1. Private sector involvement only at district HQ	Private sector involved in sanitation hardware and/or services at the district level
2. Private sector marketing sanitation	Private sector involved in sanitation hardware and/or services at district level, and actively marketing sanitation
3. Marketing and outreach to communities	Private sector involved in sanitation hardware and/or services, and marketing sanitation, and has outreach to communities
4. Marketing, outreach and reaching the poor	Private sector involved in sanitation hardware and/or services, and marketing sanitation, and has outreach to communities and its services are reaching the poorest wealth quintile

SUSTAINABILITY INDICATOR 4. AVAILABILITY OF AFFORDABLE SANITATION OPTIONS FOR THE POOREST WEALTH QUINTILE

This indicator will compare the cost of sanitation options with the income in the lowest wealth quintile. Affordability should not exceed 5% of annual cash income. Income data are collected in a household survey or from secondary sources, if existing. The cost of sanitation options will be based on the inventory with private sector.

6.1.2 STRENGTHENING CAPACITY FOR BEHAVIOURAL CHANGE COMMUNICATION (BCC) FOR HYGIENE PROMOTION

Objective: Anchor effective hygiene behavioural change communication in local practice

Indicators are:

- Progress on institutionalising hygiene behavioural change communication for hygiene

6.1.2.1 SUSTAINABILITY INDICATOR 5. PROGRESS ON INSTITUTIONALISING HYGIENE BEHAVIOURAL CHANGE COMMUNICATION

Measuring the existence and quality of a BCC strategy related to hand washing with soap.

	Scores				
	0	1	2	3	4
1. The BCC strategy has activities related to rural sanitation and/ or hygiene					
2. Has focus (on specific selected behaviours and target groups)					
3. Engages other actors, besides the lead line agency					
4. Is based on (formative) research with target group					
5. Includes other motivators besides health					
6. Includes other communication channels besides health sector					
7. Uses communication methods based on adult learning principles					
8. Is monitored for outcomes					
9. Is sustained (>6 months)					
10. Is integrated into a broader WASH or planning strategy such as a local sanitation plan					

STRENGTHENING CAPACITY FOR WASH GOVERNANCE

Objective: Improving local WASH governance terms of alignment of stakeholders, sector planning and monitoring, transparency and social inclusion

Indicators:

- Improved sector alignment at local level
- Progress on the influence of women in rural sanitation and hygiene programmes
- Progress on the influence of poor households and minority groups in rural sanitation and hygiene programmes
- Progress on the influence of disabled and elderly people in rural sanitation and hygiene programmes

SUSTAINABILITY INDICATOR 6: IMPROVED SECTOR ALIGNMENT AT LOCAL LEVEL

	Scores				
	0	1	2	3	4
1. A multi-stakeholder dialogue has started (on rural sanitation)					
2. All relevant (local) government sector stakeholders are involved in the dialogue.					
3. All relevant (local) donor (or funding) agencies are involved in the dialogue.					
4. Relevant civil society and private sector stakeholders are involved in the dialogue.					
5. Information and data (evidence base) are shared in the group.					
6. Sector priorities (for rural sanitation) are set jointly by stakeholders.					
7. Sector targets (for rural sanitation) are set jointly by stakeholders.					
8. Plans (for rural sanitation) are made jointly.					
9. Approaches (to rural sanitation) are aligned.					
10. Standards and norms (related to rural sanitation) are aligned.					

SUSTAINABILITY INDICATOR 7: PROGRESS ON THE INFLUENCE OF WOMEN IN RURAL SANITATION AND HYGIENE PROGRAMMES

0. No participation	No participation
1. Silent participation	Women, attend meetings (but do not speak)
2. Mere participation	Women, attend meetings; and speak (but do not influence decisions)
3. Participation and influence	Women, attend meetings; speak; and influence decisions
4. Participation, influence and "satisfied with" decisions	Women, attend meetings; speak; influence decisions; and decisions made also reflect and respect women's needs and perspectives.

SUSTAINABILITY INDICATOR 8: PROGRESS ON THE INFLUENCE OF POOR HOUSEHOLDS AND MINORITY GROUPS IN RURAL SANITATION AND HYGIENE PROGRAMMES

0. No participation	No participation
1. Silent participation	Poor households and minority groups, attend meetings (but do not speak)
2. Mere participation	Poor households and minority groups, attend meetings; and speak (but do not influence decisions)
3. Participantion and influence	Poor households and minority groups, attend meetings; speak; and influence decisions
4. Participation, influence and "satisfied with" decisions	Poor households and minority groups, attend meetings; speak; influence decisions; and decisions made also reflect and respect women's needs and perspectives.

SUSTAINABILITY INDICATOR 9: PROGRESS ON THE INFLUENCE OF DISABLED PEOPLE AND ELDERLY IN RURAL SANITATION AND HYGIENE PROGRAMMES

0. No participation	No participation of disabled and elderly in meetings and events
1. Silent participation	Disabled and elderly, attend meetings (but do not speak)
2. Mere participation	Disabled and elderly, attend meetings; and speak (but do not influence decisions)
3. Participantion and influence	Disabled and elderly, attend meetings; speak; and influence decisions
4. Participation, influence and "satisfied with" decisions	Disabled and elderly, attend meetings; speak; influence decisions; and decisions made reflect and respect women's needs and perspectives.

ADDITIONAL INDICATOR ON ENVIRONMENTAL SUSTAINABILITY

SUSTAINABILITY INDICATOR 10. PROGRESS IN FSM- EMPTYING AND COLLECTION

0. No on-site storage	No toilet or toilet discharges directly into environment
1. Storage but no emptying	Sludge discharged into environment and/or no emptying for last **3** years
2. Unsafe emptying	Tank/pit emptied in last 3 years, but someone enters pit without protection
3. Partially safe emptying and collection	Tank/pit emptied in last 3 years, and either a) manual emptying with protection c) compost/sludge disposed before 6 mths of storage
4. Safe emptying and collection	Emptied within last 3 years, no entering into the pit, no leaking and/or compost storage more than 6 mths

ANNEX 2 SSH4A ZAMBIA MASTER QUESTIONNAIRE

Question **Response**

HH: Household information

1. HH1: Cluster number _____
2. HH5: Date of interview _____
3. HH7: District

Kasama_____
Mungwi_____
Luwingu_____
Mporokoso_____

Only answer if you responded Kasama to Q3

4. Kasama Constituencies

Kasama Central_____
Lukashya_____

Only answer if you responded Kasama Central to Q4

5. Kasama Central Wards

Kasenga_____
Bululu_____
Chilunga_____
Lukulu_____
Julia Chikamoneka_____
Lukupa_____
Buseko_____

Only answer if you responded Lukashya to Q4

6. Lukashya Wards

Lusenga_____
Mukanga_____
Lualuo_____
Chiba_____
Kapumaula_____
Chibundu_____
Kapongolo_____
Musowa_____
Chumba_____

Only answer if you responded Mungwi to Q3

7. Mungwi Constituency

Malole_____

Only answer if you responded Malole to Q7

8. Malole Wards

Lubanda_____
Mpanda_____
Kabisha_____
Fibwe_____
Chibamba_____
Iyaya_____
Kalunga_____
Fube_____
Ngulula_____
Mungwi_____
Chambeshi_____
Mabula_____
Munsensenshe_____

Only answer if you responded Luwingu to Q3

9. Luwingu Constituencies

Lubansenshi_____
Lupososhi_____

Only answer if you responded Lubansenshi to Q9

10. Lubansenshi Wards

Ipusukilo_____
Katopola_____
Namukolo_____
Chilungoma_____
Masonde_____
Chifwile_____
Mushitowamboo_____
Lwata_____
Isango_____

Only answer if you responded Lupososhi to Q9

11. Lupososhi Wards

Itandashi_____
Kaela_____
Munshinga_____
Katilye_____
Kanfinsa_____
Kapemba_____
Mulalashi_____
Mufili_____
Llambo_____
Ibale_____
Bwalinde_____
Mwelawamangu_____
Isansa_____

Only answer if you responded Mporokoso to Q3

12. Mporokoso Constituencies

Lunte_____
Mporokoso_____

Only answer if you responded Lunte to Q12

13. Lunte Wards

Kansanshi_____
Isenga_____
Nchelenge_____
Malambwe_____
Malaila_____
Bwandela_____
Masonde_____
Luangwa_____
Kalungwishi_____
Lunte_____
Kanyanta_____
Lubushi_____

Only answer if you responded Mporokoso to Q12

14. Mporokoso Wards

Lumangwe_____
Chikulu_____
Mumbuluma_____
Chisha Mwamba_____

Mikomba_____
Kapumo_____
Muchinga_____
Chimpolenge_____
Mutotoshi_____
Mabalemabale_____

15. HH6 :Village _____
16. HH8A: Groundwater table in this village (metres) _____
17. HH9: What is the dominant soil-type in this village?

Clay / silt_____
Sand_____
Gravel_____

18. HH11. Name of respondent _____
19. HH12: Gender of respondent

Male_____
Female_____

20. GPS location _____
21. Can I take your Picture

Yes_____
No_____

22. Photo _____

HM: Household members

23. HM1: Name of head of household _____
24. HM1A: Gender of the Householdhead

Male_____
Female_____

25. HM2: Number of women aged 50 years and older _____
26. HM3: Number of men aged 50 years and older _____
27. HM4: Number of women aged 15 - 49 years _____
28. HM5: Number of men aged 15 - 49 years _____
29. HM6: Number of girls aged 6 -14 years _____
30. HM7: Number of boys aged 6 – 14 years _____
31. HM8: Number of girls aged 3 – 5 years _____
32. HM9: Number of boys aged 3 – 5 years _____
33. HM10: Number of girls aged 0 – 2 years _____
34. HM11: Number of boys aged 0 – 2 years _____
35. HM12: Total number of household members _____
36. HM13-1. Because of a health problem or old age, does anybody in your household have difficulty seeing? (No difficulty) _____
37. HM13-2. Because of a health problem or old age ,does anybody in your household have difficulty seeing? (Some Difficulty) _____

38. HM13-3. Because of a health problem or old age, does anybody in your household have difficulty seeing? (A lot of difficulty) _____

39. HM13-4. Because of a health problem or old age, does anybody in your household have difficulty seeing? (Unable to do it) _____

40. HM14- 1. Because of a health problem or old age, does anybody in your household have difficulty walking or climbing steps? (No difficulty) _____

41. HM14-2. Because of a health problem or old age, does anybody in your household have difficulty walking or climbing steps? (Some dificulty) _____

42. HM14- 3. Because of a health problem or old age, does anybody in your household have difficulty walking or climbing steps? A lot of difficulty) _____

43. HM14- 4.Because of a health problem or old age, does anybody in your household have difficulty walking or climbing steps? (Unable to do it) _____

44. HM15-1. Because of a health problem or old age, does anybody in your household have difficulty with self-care such as washing or dressing? (No dificulty) _____

45. HM15-2. Because of a health problem or old age, does anybody in your household have difficulty with self-care such as washing or dressing? (Some difficulty) _____

46. HM15-3. Because of a health problem or old age, does anybody in your household have difficulty with self-care such as washing or dressing? (A lot of difficulty) _____

47. HM15-4. Because of a health problem or old age, does anybody in your household have difficulty with self-care such as washing or dressing? (unable to do it) _____

48. Total number of people in this household with special needs _____

W: Household characteristics / wealth index (Zambia)

49. URB/RUR: OBSERVATION Question

Urban_____
Rural_____

50. W01. What is the main source of drinking water for members of your household?

Piped water_____
Tube well or borehole_____
Dug well_____
Water from spring_____
Rainwater_____
Tanker truck_____
Surface water (river/dam/lake/pond/stream/canal)_____
Stone tap / Dhara_____
Bottled water_____

Only answer if you responded Piped water to Q50

51. Piped water

piped into dwelling_____
piped to yard/plot_____
public tap/standpipe_____

Only answer if you responded Dug well to Q50

52. Dug well

Protected well_____
Unprotected well_____

Only answer if you responded Water from spring to Q50

53. Water from spring

Protected spring_____
Unprotected spring_____

54. W02. What kind of toilet facility do members of your household usually use?

flush toilet_____
traditional pit toilet_____
ventilated improved pit toilet_____
no facility/bush/field_____

55. W03. Do you share the toilet facility with other households?

Yes_____
No_____

56. W04. Does your household have?

Electricity_____
A radio_____
A television_____
A mobile telephone_____
A non-mobile telephone_____
A refrigerator_____
Table_____
Chair _____
Bed_____
Sofa_____
Cupboard_____
Computer _____
Clock_____
Fan_____
Sewing machine_____
Cassette player_____
Plough_____
Grain grinder_____
VCR/DVD_____
Tractor_____
Vehicle_____
Grinding machine_____

57. W19. What type of fuel does your household mainly use for cooking?

Electricity_____
lpg/ natural gas_____
Biogas_____
Kerosene_____
Coal, lignite_____
Charcoal_____
Wood_____
Straw/Shrub/grass_____
Agricultural crop_____
Animal dung_____

no food cooked in house _____
Solar power_____

58. W20. ASk and OBSERVE

Natural floor (Earth/sand)_____
Rudimentary floor_____
Finished floor (Parquet or polished)_____

Only answer if you responded Rudimentary floor to Q58

59. Rudimentary floor

Wood planks _____
Palm/bamboo _____

Only answer if you responded Finished floor (Parquet or polished) to Q58

60. Finished floor (Parquet or polished)

Wood _____
Vinyl or asphalt strips _____
Ceramic tiles _____
Cement _____
Carpet _____

61. W21. ASk and OBSERVE

Natural roofing_____
Rudimentary roofing_____
Finished roofing_____

Only answer if you responded Natural roofing to Q61

62. Natural roofing

No roof _____
Thatch/palm leaf _____

Only answer if you responded Rudimentary roofing to Q61

63. Rudimentary roofing

Rustic mat _____
Palm/bamboo _____
Wood planks_____
Cardboard_____

Only answer if you responded Finished roofing to Q61

64. Finished roofing

Galvanised sheet _____
Wood _____
Calamine/cement fiber_____
Cement _____
Roofing shingles _____

65. W22. ASk and OBSERVE

Natural walls_____
Rudimentary walls_____
Finished walls_____

Only answer if you responded Natural walls to Q65

66. Natural walls _____

Only answer if you responded Rudimentary walls to Q65

67. Rudimentary walls

Bamboo with mud _____
Stone with mud _____
Plywood _____
Cardboard _____
Reused wood _____

Only answer if you responded Finished walls to Q65

68. Finished walls

Cement _____

Stone with lime/cement _____
Bricks _____
Cement blocks _____
Wood planks/shingles _____

69. W23. How many rooms in your household are used for sleeping? _____

70. W24. Does any member of your household own?

Watch_____
Bicycle_____
Motorcycle or motor scooter_____
Three wheel tempo_____
Animal-drawn cart_____
Car, truck_____

71. W30. Does any member of your household own any agricultural land?

Yes_____
No_____

72. W31. How many hectors of your agricultural land do members of this household own? _____

73. W32. Does your household own any livestock, herds, other farm animals or poultry?

Yes_____
No_____

74. W34. How many milk cow or bulls does your household own? _____

75. W35. How many Horses, Donkey, or mules does your household own? _____

76. W36. How many Goats does your household own? _____

77. W37. How many Sheep does your household own? _____

78. W38. How many Chicken does your household own? _____

79. W39. How many Ducks does your household own? _____

80. W40. How many Pigs does your household own? _____

81. W41. How many Other livestock and Other poultry does your household own? _____

82. W42. Does any member of your household have a Bank account/cooperative/ or other savings account?

Yes_____
NO_____

83. W43. How many people live in your household _____

84. W43. Do you own your house or any other house either alone or jointly with someone else?

Yes_____
No_____

Sanitation

85. SAN1. Do the members of your household use a toilet?

No toilet, Practice OD_____
Use Toilet_____

Only answer if you responded Use Toilet to Q85

86. SAN2. ASK and OBSERVE Question

Flush/pour flush toilet_____
Ventilated improved pit latrine (VIP)_____
Pit latrine with slab_____
Pit latrine without slab_____
Composting toilet_____

Urine diversion toilet_____
Bucket_____
Hanging toilet or hanging latrine_____

Only answer if you responded Use Toilet to Q85

87. SAN2A. Ask and OBSERVE Question

The street, field or open pit_____
A pond_____
The river or storm water drain_____
A direct pit_____
An off-set pit_____
A double (alternating) off-set pit _____
Alternating compartments (ecosan)_____
Two sequential pits_____
A water tight pit_____
A water tight double chamber septic tank_____
Piped sewer_____

88. Can I take a picture of your toilet? (OUTSIDE FRONT) _____

89. Can I take a picture of your toilet? (OUTSIDE BACK) _____

90. Can I take a picture of your toilet? (INSIDE) _____

Only answer if you responded Use Toilet to Q85

91. SAN3. Can rats reach the faeces in any way?

Yes_____
No_____

Only answer if you responded Use Toilet to Q85

92. SAN4. How many households use the toilet?

One (only own household)_____
More than one_____

Only answer if you responded Use Toilet to Q85

93. SAN5 .OBSERVE- Does the toilet pan or slab allow flies to go in and out of the pit?

Yes_____
No_____

Only answer if you responded Use Toilet to Q85

94. SAN5A. Is the toilet slab washable and/or cleanable?

No_____
Yes, cleanable, but not washable_____
Yes, cleanable, and washable_____

Only answer if you responded Yes to Q85

95. SAN6 Is the tank/pit above the ground?

Yes_____
No_____
Partly_____

96. SAN7. How deep is the pit below the surface? (meters) _____

Only answer if you responded No|Partly to Q95

97. SAN8. Can (ground) water get in or out of the pit? ('water tight')

Yes_____
No_____

Don't know_____

Only answer if you responded No|Partly to Q95

98. SAN9. When the pit was dug, was any ground water seeping in?

Yes_____
No_____
Don't know_____

Only answer if you responded No|Partly to Q95

99. SAN10. Does the pit or toilet leak waste water at any time of the year? (CONSIDER RAINY SEASON TOO)

Yes_____
No_____
Don't know_____

100. SAN11. What is the distance to the nearest water source?

Less than 10 metres_____
Between 10 and 100 metres_____
Between 100 and 500 metres_____
More than 500 metres_____

Only answer if you responded No|Partly to Q95

101. SAN12. ASK and OBSERVE Question

Downhill_____
Uphill_____
At the same level_____

102. SAN13. Has the pit ever been emptied?

Yes_____
No_____

Only answer if you responded Yes to Q102

103. SAN14. When was it emptied?

Less than 12 months ago_____
Between 1-3 years ago _____
Between 4-5 years ago _____
More than 5 years ago _____
Don't know_____

Only answer if you responded Yes to Q102

104. SAN15. Who actually empties the pit?

The house owner/ tenants _____
A sweeper/ service provider_____
Don't know_____

Only answer if you responded Yes to Q102

105. SAN16. The empty the pit, did someone need to enter the pit.

Yes, with full protection (gloves +mask+boots)_____
Yes, without full protection_____
No_____
Don't know_____

Only answer if you responded Yes to Q102

106. SAN17. What was it emptied into?

Directly into drain/water body / field_____
Into a pit on the compound that is then covered_____
Into a pit on the compound that is left open_____
Directly into drum/open container and taken away_____
Directly into closed container/tanker and taken away_____

Use of Sanitation

107. USAN1. Is the toilet in use, as a toilet?

Yes_____
No_____

Only answer if you responded Yes to Q107

108. USAN2. Is the toilet functioning as intended?

Yes_____
No_____
Don't know_____

Only answer if you responded Yes to Q107

109. USAN3. Are the walls and the door of the toilet in place?

Yes_____
No_____

Only answer if you responded Yes to Q107

110. USAN4. Is the toilet free from faecal smears on pan, wall and floor?

Yes_____
No_____

Only answer if you responded Yes to Q107

111. USAN5. Is the toilet pan free from used cleansing materials (paper, stones, sticks)?

Yes_____
No_____

Only answer if you responded Yes to Q107

112. USAN6. What do you use for anal cleansing?

Nothing_____
Paper_____
Water_____
Ash_____
Soil / mud_____
Sticks_____
Grass_____
Stones_____

Only answer if you responded Yes to Q107

113. USAN7. Do you flush the toilet?

No flush – pit latrine or other_____
Yes, pour flush_____
Yes, full/ handle flush_____

Only answer if you responded Yes, pour flush|Yes, full/ handle flush to Q113

114. USAN8. Is water available in the toilet? (for anal cleaning and flushing)

Yes_____
No_____

Only answer if you responded Yes to Q107

115. USAN9. How do you dispose of stools of children under the age of 3 years old?

Pick up and deposit in the toilet_____
Pick up and deposit in the garbage_____
Leave where it drops_____

Only answer if you responded Yes to Q107

116. USAN10. Does the toilet provide privacy?

Yes_____
No_____

Only answer if you responded Yes to Q107

117. USAN11. Is everyone in the household presently able to use the toilet easily and conveniently, unassisted?

Yes_____
No_____

Only answer if you responded No to Q117

118. If no, why

Illness_____
Old age_____
Injury_____
Disability_____
Pregnancy_____
Menstruating women_____
Small children_____

Only answer if you responded Yes to Q107

119. USAN11A. How many people in your household are unable to use the toilet because of special needs?

0_____
Specify how many people_____

120. Specify how many people _____

121. USAN11B. In this household, are people with this special needs assisted in any way, to make use of the toilet

No_____
Yes, with a walking aid_____
Yes, with a pedestal_____
Yes, they use a bed-pan_____

122. If yes, Specify _____

123. USAN12. Does anybody in the household have any problems using your toilet?

No problems_____
Not clean _____
Smelly_____
No water inside_____
Not easy to reach toilet_____
Not easy to squat_____
Afraid of falling or slipping_____
Not easy to wash yourself_____
Not easy to flush_____
Too small _____
Too dark_____
No privacy_____
Insects and animals inside_____

124. USAN13. Do you have any problems cleaning and maintaining your toilet?

No problems_____
Toilet blocks often_____
Water not available to clean_____
Cleaning materials not available_____
Don't know how to clean_____
Too many users_____
Other users don't know how to use_____
Other users don't take their turn to clean_____
Design is difficult to clean_____

Fills up too quickly_____

125. USAN14. What is the main problem with the design?

Too small _____
Too dark_____
Wrong construction materials_____
Wrong internal layout_____

Handwashing

126. HW1. Please mention all the occasions when it is important to wash your hands?

Before eating_____
Before breast feeding or feeding a child_____
Before cooking or preparing food_____
After defecation_____
After cleaning a child that has defecated/ changing child's nappy_____
After cleaning toilet or potty_____
Don't know_____

127. HW2. Is there a place for hand washing within 10 meters from the toilet?

Yes_____
No_____

128. Can you show it to me please? (Picture Question)

_____

Only answer if you responded Yes to Q127

129. HW3. Is there water available at the specific place for hand washing, now?

Water is available_____
Water is not available_____

Only answer if you responded Yes to Q127

130. WH4. ASK and OBSERVE Question

No_____
Soap_____
Ash / mud / sand_____

131. Can you show it to me please? (Picture Question)

_____

Only answer if you responded Yes to Q127

132. HW5. Does the hand washing station prevent contamination of the water by hands?

Yes_____
No_____

Only answer if you responded Water is available to Q129

133. HW6. Is there running water from a tap?

Yes_____
No_____

134. HW7. Is there a place for hand washing within 10 steps from where food is prepared?

Yes_____
No_____

135. Can you show it to me please? (Picture Question)

_____

Only answer if you responded Yes to Q134

136. HW8. Is there water available at the specific place for hand washing, now?

Water is available_____
Water is not available_____

Only answer if you responded Water is available to Q136

137. HW9. Is there soap or a soap substitute available at the specific place for hand washing, now?

No_____
Soap_____
Ash / mud / sand_____

138. Can you show it to me please? (Picture Question) _____

Only answer if you responded Water is available to Q136

139. HW10. Does the hand washing station prevent contamination of the water by hands?

Yes_____
No_____

Only answer if you responded Water is available to Q129

140. HW11. Is there running water from a tap?

Yes_____
No_____

141. HW12. Have you seen / heard any promotion on good hand washing practice in the last 12 months? Through which source or media?

No_____
Yes, in a workshop_____
Yes, on the radio_____
Yes, on TV_____
Yes, in the newspaper_____
Yes from a health visitor / community worker_____
Yes, through a brochure_____

Only answer if you responded Yes, in a workshop|Yes, on the radio|Yes, on TV|Yes, in the newspaper|Yes from a health visitor / community worker|Yes, through a brochure to Q141

142. HW13. Which organisation organised it?

Don't know_____
SNV (or one of our partners in this programme)_____
Local government_____

Zambia questions

143. Do you have a bath shelter

Yes_____
No_____

144. Do you have a rubbish pit?

Yes_____
No_____

145. Do you have a dish rack?

Yes_____
No_____

Observations

146. Interviewer's Observations _____
147. Field Editor's Observations _____
148. Supervisor's Observations _____

ANNEX 3: FOCUS GROUP DISCUSSION FORMS

ANNEX 3.1 KASAMA DISTRICT SUSTAINABILITY INDICATOR 1

Quest	Council Grp 1	D-WASHE Grp 2	Final score	Remarks
1	2	0	0	There is no plan for Sanitation demand creation plan. The provincial launch was done in 2012 nothing has been done in CLTS.
2	2	1	1	There is no human and financial resources specifically for sanitation demand creation.
3	0	1	1	The standards exist but are at national level and have not been institutionalised at district level.
4	3	1	1	There is a system for monitoring water and sanitations projects but does not focus on sanitation demand creation.
5	2	0	0	No follow up because CLTS has not been rolled out in the district
6	0	0	0	No CLTS plan, no CLTS monitoring and thus no information
7	0	0	0	No sanitation demand creation plan and thus no monitoring to generate information for decision making
8	0	0	0	The information on Sanitation demand creation is not collected as there are no activities happening.
9	0	1	0	Because sanitation demand creation has not been planned for, it is difficult to know hard to reach villages and laggards.
10	2	2	2	Discussions on sanitation is done in meetings such as D-WASHE and DDCC though the main focus is on water, how many boreholes have been constructed, how many are functional. etc

ANNEX 3.2 LUWINGU SUSTAINABILITY INDICATOR 1

	Group 1 score	**Group 2 Score**	**Final score**	**Remarks**
	0	0	0	There is no plan for steering sanitation demand creation.
	0	0	0	No financial despite having human resource to carry out sanitation demand creation.
	0	3	1	National standards are available but not yet institutionalized at district level.
	0	0	0	The district has no monitoring system, DWASHE do not meet quarterly or monitor sanitation. The absence of a plan makes no reason for the district to have a monitoring system
	0	0	0	NO follow up because of lack of the district plan on sanitation demand creation. Stakeholders may have their monitoring system but not harmonized.
	0	0	0	There is no information sharing because of the district not having a plan on sanitation demand creation.
	0	0	0	There is no monitoring system but stakeholders have a monitoring system that assess inclusion of all groups.
	0	0	0	No plan, no monitoring system therefore no information can be used to improve implementation.
	0	0	0	The district has no plan but some stakeholders (self-help and world vision) are implementing sanitation activities in the hard to reach areas such as Bwalinde, Ibale, Isansa, Isangano, and Luata. Committees have been formed but also are lagging behind due to lack of district plan.
	2	3	1	Discussions are held with local and traditional leaders during public health committee and management meetings.

ANNEX 3.3 MPOROKOSO SUSTAINABILITY INDICATOR 1

	Group 1 score	**Group 2 Score**	**Final score**	**Remarks**
	0	0	0	There is no plan for implementing demand creation activities.
	0	0	0	No plan is in existence consequently no human resource has been planned for.
	0	1	0	The standards are there at the national level (e.g. NRWSSP and sanitation and hygiene component documents) but the council is not enforcing them.
	0	0	0	There is no system that has been put in place as there are no standards being enforced.
	0	0	0	There is no plan so there no follow-ups
	0	1	1	The council shares information with implementing stakeholders but not the entire D-WASHE.
	0	0	0	Data which is available is not disaggregated.
	0	0	0	Sanitation demand creation has not been implemented hence it has not been possible to adjust or improve.
	0	0	0	Sanitation demand creation has not yet been planned and implemented; as a consequence it has not been possible to identify hard to reach villages (distance) and laggards (behaviour).
	2	1	1	Whenever possible the messages on sanitation are disseminated and this has been done during DDCC meetings.

ANNEX 3.4 MUNGWI SUSTAINABILITY INDICATOR 1

	Council score	**Other D-WASHE MEMBERS 2 Score**	**Final score**	**Remarks**
	0	3	0	There is no plan but however, Unicef is supporting MDMHO through Communication for development program on sanitation demand creation using intergrated approach.
	0	2	0	No financial and skilled human resources to conduct community led Total sanitation activities.
	0	0	0	There are no organizations involved in sanitation demand creation activities.
	0	2	0	There are no sanitation and demand creation happenning in the district, therefore monitoring is not being conducted. MDMHO has a monitoring tool but not being used regularly.
	0	1	0	There are no follow ups being made, because the sanitation demand activities are not being conducted.
	0	1	0	No information to share because the are no demand creation activities happening in the district.
	0	1	0	NO Monitoring activities are being conducted due to lack of sanitation demand activities in the district.
	0	2	0	No sanitation activities happening
	0	0	0	No sanitation demand creation activities to reach hard to reach villages and laggards.
	2	1	1	Sanitation issues are discussed when ever there is an opportunity such as full council and DDCC meetings. The meetings are quartely held and sanitation discussions are focused on water.

7 ANNEX 4 SUSTAINABILITY INDICATOR 6

ANNEX 4.1 KASAMA SUSTAINABILITY INDICATOR 6

Quest	Grp 1	Grp 2	Final score	Remarks
1	3	3	3	The D-WASHE exists as a structured forum where members discuss sanitation issues but it doesn't meet regularly. It comprises of both government and non-government institutions
2	4	2	1	Despite invitations being sent to all relevant (local) government sector stakeholders only a few turn up for meetings
3	2	2	2	Despite invitations being sent to all relevant done (funding) agencies only a few turn up for meetings to participate in the dialogue
4	0	2	1	Private sector don't participate in the dialogue of sanitation issues. They are only called upon when need arises especially during commemoration of days to make contributions. They are also called upon when there is a sanitations need in their institutions.
5	1	1	1	Information/data is kept by each stakeholder in the sector and is shared at request. There is no evidence
6	0	1	0	Planning and setting of priorities is not done jointly.
7	0	1	0	Planning and set targets is done per institutions.
8	0	0	0	Plans are not made jointly
9	0	0	0	Key principles are there but approaches not fully aligned.
10	0	0	0	Key principles are there but approaches not fully aligned.

ANNEX 4.2 LUWINGU SUSTAINABILITY INDICATOR 6

	Group 1 Scores	**Group 2 scores**	**Final score**	**Remarks**
	3	3	2	D-WASHE committee exists but do not meet regularly.
	2	1	1	The D-WASHE do not hold meetings on regular meetings.
	2	2	2	The donors; World vision, Self- help, Irish AID, DAAP are involved in dialogue.
	1	1	1	Private sector is not involved in sanitation demand creation.
	1	1	1	Information is only shared on request.
	1	0	0	Sector priorities for rural sanitation are not set jointly.
	1	0	0	Sector Targets are not set jointly as the district does not plan together.
	0	0	0	Stakeholders make individual plans
	1	2	1	Approaches are not fully aligned.
	1	3	1	Not fully aligned.

ANNEX 4.3 MPOROKOSO SUSTAINABILITY INDICATORS 6

Sustainability Indicator 6: Improved sector alignment at local level				
Sub-category	**Group 1 Scores**	**Group 2 scores**	**Final score**	**Remarks**
1	3	3	3	The D-WASHE meets and discusses about sanitation though it does not meet regularly
2	4	3	3	The D-WASHE meetings are held but not all relevant stakeholders attend
3	2	2	2	Relevant local donors make attendance to meetings but not always
4	2	2	2	The business sector has no representation but presence of the civil society is available though not always
5	2	2	2	Organisations share information but not regularly
6	1	4	1	Priorities are set by concerned stakeholders and the D-WASHE is later informed thus the local authority / D-WASHE are not in the lead in setting priorities. Priorities at national level are clear.
7	4	0	0	There are no targets set at the local level
8	4	0	0	Plans on sanitation are not available
9	4	1	1	There is no clear alignment as the national documents are not being fully utilised.
10	4	1	1	Standards and norms not fully aligned as the national documents are not fully utilised

ANNEX 4. 4 MUNGWI INDICATOR 6

Sustainability Indicator 6: Improved sector alignment at local level				
Sub-category	**Group 1 score**	**Group 2**	**Final score**	**Remarks**
1	3	2	2	Multi-stakeholder dialogue has started but does not include civil society and private sector.
2	2	3	3	Meetings are held regularly though the attendance is not 100%.
3	2	2	2	Local government is always present but other agencies do not have presentation , However, formal communication is occassionally made through emails and reports.
4	0	2	0	Both civil society and private sectors are NOT involved in the dialogue of sanitation and hygiëne issues.
5	2	1	1	Information on sanitataion is available but shared in meetings and on request.
6	4	0	0	There is no plan for sanitataion demand creation hence priorities are not set jointly.
7	0	0	0	No targets for sanitation demand creation as the district has no district plan.
8	2	0	0	There is no district plan on sanitation demand creation.
9	1	1	1	Not all the principles on sanitation and hygiëne are adhered to.
10	3	2	2	Standards on sanitataion available and aligned to national principles but not adhered to.