



SANITATION AND HYGIENE CONSUMER STUDY IN KASAMA, MUNGWI, MPOROKOSO AND LUWINGU DISTRICTS OF ZAMBIA



Cover Page Photographs

Top Left: An elderly and physically disabled woman of Kambobe village in Mporokoso District

Top Right: An elderly couple of Fube ward in Mungwi District who have challenges in having access to sanitation

Bottom pictures: Four parameters for adequacy as defined in the National Rural Water Supply and Sanitation Programme (Lid, cleanable floor, Hand Washing facility and super-structure providing privacy)

Acknowledgements

The Sanitation and Hygiene Consumer Demand Study, led by Mr. Warren Simangolwa – SSH4A Sanitation Supply Chain Advisor, has largely benefited from rigorous data collection, analysis and reporting efforts. SNV extends its appreciation to Dr Elijah Bwalya and team for data collection, it also extends its profound gratitude to PathMark Development Consult for their gleaning of data and presentation of the final report.

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We also extend our appreciation to all organisations and individuals who provided input into this study.

The views expressed in this report do not necessarily represent the views from SNV or the people consulted.

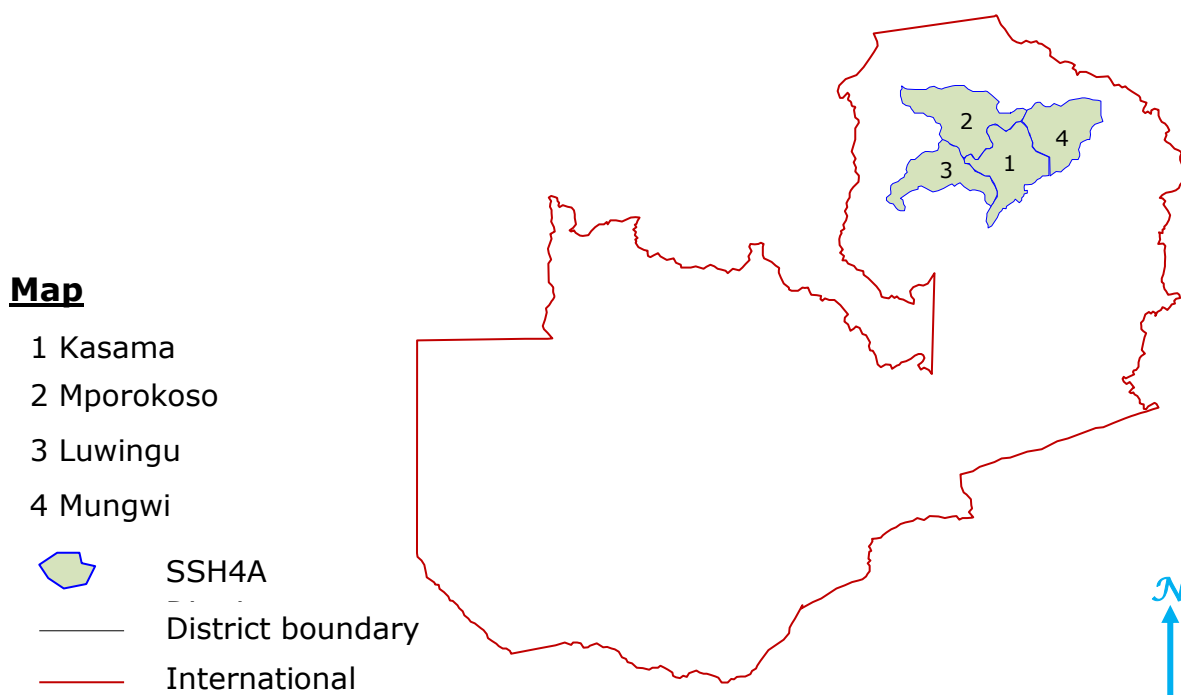


Figure 1: Map of Zambia showing the 4 SSH4A Operational Districts in Northern Province

Executive Summary

Background

SNV Zambia commissioned the Sanitation and Hygiene Consumer Study under its Sustainable Sanitation and Hygiene for All (SSH4A) results programme funded by the Department for International Development (DFID). The SSH4A results programme is being implemented in Luwingu, Kasama, Mungwi and Mporokoso Districts of Northern Province in Zambia. The key results that will be achieved through the SSH4A results programme in Zambia are as follows:

- Reach 230,000 people through sanitation and hygiene promotion activities by end of 2015
- 115,000 people to further improve their sanitation facilities to the Joint Monitoring Programme (JMP) benchmark for improved sanitation by end of 2017
- 80,000 people will practise hand washing with soap at critical times by end of 2017.

Methodology

The study employed mixed data collection techniques. Qualitative data was collected using key informant Interviews (KII's), Focus Groups discussions and Triads. Quantitative data collection employed household structured questionnaire with 1101 households, further the DHIS2 was used to glean CLTS data for 2014 in the project areas. A total of 18 FGD were conducted, further KII's were conducted with traditional leaders, civic leaders, councillors and technocrats. Visual ethnography was employed with the use of visual recordings, photographs and basic observations. In addition, the DHS wealth index was used to take account of the household's wealth quintiles. Where appropriate, purposeful randomised and stratified sampling methods were used.

Key Findings

- i. The needs and preferences for rural households are shaped by the existing sanitation options and hygiene facilities. These structures are designed and erected by individual households and/ or the local artisans and use locally available materials apart from nails, empty containers and polythene sheets which are sourced outside their community.
- ii. Sanitation technologies available in the four districts largely range from grass thatched to burnt bricks roofed with iron sheets. Based on the prevailing household income in the project areas, all sanitation options and hygiene facilities' exceed 5% of household's annual cash incomes.
- iii. Sanitation coverage in the four project districts (i.e. 38%) is lower than the national average of 41% especially in Mungwi district as a result of collapsing soils. The soil texture for the four districts largely comprises of sandy loose soils,

loam soils and isolated water logged areas. Other factors as the unavailability of information on area appropriate latrine options exacerbate the OD problem.

- iv. The physically challenged and elderly face serious challenges in using the sanitation and hygiene facilities because they are no options for their use. The study revealed that latrines are sited far off from dwelling houses and too tiny to allow the physically challenged to move easily inside the facilities
- v. There are supply chain actors in the sanitation sub sectors who include importer, manufacturers, transporters, traders, regulator, financial institutions and consumers. Sanitation market may be enhanced through strengthening of actors capacity so that they are able to supply products and services at higher level
- vi. There is great potential in promoting sanitation using appropriate communication channels of distributing information in the region such as posters, fliers and booklets to their target audiences. In areas, where community radio station exists like Kasama, radio station can be used to disseminate the sanitation and Hygiene information. Other channels include mounting sanitation demonstration latrines in public places such as the market and traditional ceremonies.

Key Recommendations and Conclusion

- i. Dissemination of existing sanitation options and hygiene facilities to the public informed by research and development of area based sanitation facilities that are user friendly to the physically challenged and elderly and make use of locally available materials;
- ii. Provision of community support mechanisms to enhance access to sanitation and hygiene for the elderly and disabled and consumers in the lowest wealth quintiles. Explore other channels of communication such as use of traditional leadership, civic leaders, mounting demonstrations at public places and use public media;
- iii. Promotion of saving and loans schemes to provide affordable latrine loans to financially challenged, the elderly and physically challenged

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List of Acronyms and Abbreviations

BCC	Behavioural Change Communications
BDS	Business Development Services
BoP	Bottom of Pyramid
CBTS	Community – Based Total Sanitation
CLTS	Community – Led Total Sanitation
CSO	Central Statistical Office
DBA	District Business Association
DHIS2	District Health Information Software 2
DRA	Demand Response Approach
FGD	Focus Group Discussion
GPS	Global Positioning Systems
JMP	Joint Monitoring Programme
KII	Key Informants Interviews
MSME	Micro Small and Medium Enterprise
NGO	Non- Governmental Organization
NRWSSP	National Rural Water Supply and Sanitation Programme
NWASCO	National Water Supply and Sanitation Council
ODF	Open Defecation Free
PACRA	Patents and Companies Registration Agency
PPS	Probability proportionate to size sampling technique
SME	Small and Medium Enterprises
SNV	Netherlands Development Organisation
SSH4A	Sustainable Sanitation and Hygiene for All
SWOT	Strength, Weaknesses, Opportunities and Threats
ToR	Terms of Reference
UNDP	United Nations Development Programme
UNICEF	United Nations Children’s Fund
VIP	Ventilated Improved Latrine
WASH	Water, Sanitation and Hygiene Education
WAZ	WaterAid in Zambia
WSP	Water and Sanitation Programme
ZCMBA	Zambia Chamber of Small and Medium Business Association

Operational Definition of Study Terms

Administrative Barriers: Refers to the legislation which affects business entry and licensing, tax and customs administration and company registration.

Behavioural Change Communication: Refers to materials used for increasing awareness and motivation for behavioural changes in relation to hygiene practice. Some of these materials are brochures, displays, videos and posters.

Business Development Services: Refers to facilitation of small enterprises' access to quality business development services and business information at affordable prices.

Hygiene Behaviour: Refers to behavioural habits of the population that increase or decrease their exposure to faecal – oral contamination (e.g. hands washing, use of a latrine to answer the call of nature)

Informal Sector: Refers to economic activity that is neither taxed nor monitored by the government's Gross National Product (GNP) as opposed to a formal economy.

Legal and Regulatory Framework: Law and legislation that govern the operations of business.

Munada Open Market: In northern part of Zambia, they organise large markets on designated dates which bring traders and buyers together in a community atmosphere. Traders take their assorted products and services to these markets and buyers purchase what they can afford.

Private Sector in Sanitation: Refers to individuals and organisations that provide goods and services required for construction of sanitation facilities. These are traders, markets or shops, manufacturers, contractors, transporters, artisans (bricklayers, carpenters, blacksmith etc.). Sanitation goods are materials and products. Sanitation services are technical knowledge/skills, transport etc. required for construction of sanitation facilities.

Sanitation: Methods used for safe and sustainable management of human excreta including the collection, storage, treatment and disposal of faecal matter.

Sanitation Hardware: The hard or physical infrastructure (e.g. latrines, waste water treatment facilities, sanitation platform) which make sanitation services possible.

Social Marketing: It is a systematic approach for applying commercial marketing principles to achieve social objectives. As for sanitation social marketing, the aim is to attain improved public health. It entails undertaking promotional activities aimed at behaviour change (e.g. cessation of open defecation) and supply chain strengthening for distribution of beneficial products and services (e.g. latrine components and construction services).

Supply Chain: It is the combination of organisations, people, activities, information and resources required to create a product or service and move it from supplier to customer. Supply chain actors typically include input suppliers, producers, transporters, wholesalers, retailers and consumers.

1.0 Introduction

SNV Zambia commissioned the Sanitation and Hygiene Consumer Study under its Sustainable Sanitation and Hygiene For All (SSH4A) results programme funded by the Department for International Development (DFID). The SSH4A programme is being implemented in Luwingu, Kasama, Mungwi and Mporokoso Districts of Northern Province in Zambia (Figure 1).

This Study Report consists of seven chapters. Chapter 1 provides the introduction and Chapter 2 outlines the background of the study. Chapter 3 gives study objectives and chapter 4 carries the methodology. Chapter 5 provides findings and Chapter 6 contains recommendations and conclusion.

2.0 Background of the Sanitation and Hygiene Consumer Demand Study

2.1 Sustainable Sanitation and Hygiene for All (SSH4A) results programme

SNV Zambia is one of the 9 countries¹ implementing the DFID funded Sustainable Sanitation 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 as follows:

- Reach 230,000 people through sanitation and hygiene promotion activities by end of 2015
- 115,000 people to further improve their sanitation facilities to the Joint Monitoring Programme (JMP) benchmark for improved sanitation by end of 2017
- 80,000 people will practise hand washing with soap at critical times by end of 2017.

The programme also focusses on system strengthening and capacity building hence it will conduct the following:

- Build local capacity to steer and implement sanitation demand creation (CLTS or other) at scale with quality in the 4 districts, working with the respective local authorities and training of CLTS facilitators
- Develop market-based solution to improve access to affordable sanitation hardware and services (including sanitation marketing, supply chain development, inclusive business) working with local enterprises
- Enhance understanding the sanitation needs and preferences of vulnerable groups (ultra-poor, elderly and disabled) in the 4 districts and develop practical service strategies for these groups at local level.

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

2.2 Sanitation and Hygiene Consumer Study

The Study is solution - oriented and aims to build on and understand the story behind the baseline data conducted in August 2014. The Sustainable Sanitation and Hygiene for All performance monitoring framework has 10 sustainability indicators linking the objectives of the different components². In relation to the consumer study the relevant indicator is:

- Availability of affordable sanitation options for the poorest wealth quintile.

The baseline data for this indicator was collected through the sanitation and hygiene consumer study³. The objective is to ensure that appropriate affordable market-based solutions for a variety of sanitation consumer needs are implemented at scale. Availability of affordable sanitation options for the poorest wealth quintile compared the cost of sanitation options (only up to slab) with the income in the lowest wealth quintile. It is envisaged that for a sanitation option to be considered affordable, it should not exceed 5% of household's annual cash income.

2.3 Sanitation Status in Zambia

In 2010, the Central Statistical Office (CSO) reported that the population of Zambia stood at 13.092 million with 7.919 (60%) living in rural areas and 5.173 (40%) in urban areas. National Water Supply and Sanitation Council (NWASCO) records indicate that current sanitation coverage for urban/peri - urban areas stands at 57.5% while coverage for rural areas is 41%. Although these figures indicate modesty in sanitation coverage, sanitary conditions, especially in rural areas, are still poor. This phenomenon is attributed to several factors, among them, being the following: Low funding, rapid population growth inducing huge demand and supply pressures, inadequate regulation and re -enforcement of related statues.

The UNDP Human Report (1999) ranked Zambia 156 out of 174 countries having fallen from 136 in 1996 and 146 in 1998. Today, Zambia is among poorest countries in the world. Life expectancy is at 37 years compared to 42 years at independence (1964) and 54 years at the end of 1980s. The CSO figures indicate that rural poverty remain high at 80% with 71% of the inhabitants are extremely poor whilst urban poverty declined from 49% in 1991 to 34% in 2006. Rural poverty, therefore, is a daunting rural development challenge.

A household baseline survey for SSH4A programme conducted in August 2014 found that current sanitation coverage in Luwingu, Mungwi, Mporokoso and Kasama is at 38%. This sanitation coverage level is below the national coverage rate of 41% (as documented by NWASCO). The baseline survey further established that 50.27% of the 1,096 households sampled are practising open defecation. The survey found that 35.84% of the households have unimproved latrines and 12.32% have improved toilets. Of the households that have a fixed defecation point, 99.72% had the basic pit toilet as a common toilet technology and 0.28% had the Ventilated Improved Pit latrine (VIP). As regards Hand Washing with soap practice, the survey used a proxy indicator of existence

² Sanitation demand creation, supply chain and financing, behavioural change and communication and water, Sanitation and Hygiene (WASH) governance.

³ With use of finding from the Sanitation Supply Study

of a hand washing station in close proximity to latrine (not more than 10 steps) and established that 99.25% of the people do not have adequate facilities for hand washing with soap within an accessible distance. It was found that Mporokoso, Luwingu, Mungwi and Kasama districts have 40.05% of the households members aged 50 and above. 17.06% had people with special needs. 20.07% fell in the poorest wealth quintiles with 19.98% considered poor.

In Zambia, sanitation especially in rural and remote areas has been supply – driven. It can be likened to the contentious Say’s Law of “supply creates its own demand”. Under this economic paradigm, local authorities and NGOs/CBOs construct sanitation facilities for rural communities although they are not the beneficiaries’ first priority. Upon realising that this approach, could not spur increased rural sanitation coverage, the government through its National Rural Water Supply and Sanitation Programme (2005) propagated a new approach of Demand Response Approach (DRA). The DRA is a form of sanitation demand stimulation which is similar to sanitation demand creation being promoted by SNV.

3.0 Study Objectives

The consumer study⁴ will assist SNV together with sanitation and hygiene stakeholders in developing an evidence-based sanitation marketing and communications strategy. This is aimed at improving sanitation and hygiene practices and strengthening a sustainable commercial market for sanitation and hygiene products targeting the rural populace particularly the low-income households. The objectives of the study are as follows:

- a. Ascertain the needs, preferences, capacity and the consumer Willingness To Pay for a number of identified sanitation and hygiene options for different segments of the community, including the elderly and disabled;
- b. To gain a broad understanding of the current sanitation situation in the programme areas, including progress and key challenges related to sanitation market development, pro-poor strategies, approaches to improving sanitation coverage;
- c. Ascertain the challenges faced by the disabled and the elderly in using the sanitation and hygiene facilities and provide recommendations on how the needs of the disabled and elderly can be addressed;
- d. Determine demand responsive techniques for measuring, interpreting and reacting to sanitation demand.
- e. Determine the characteristics of desirable sanitation products and services based on the various segments of consumers and their preferences, desirability and aspirations.
- f. Provide data that can assist in developing local sanitation and hygiene markets.
- g. Determine the existing and potential communication channels suitable for sanitation marketing.

⁴ Together with use of recommendations from the sanitation supply study and Hand Washing with soap formative research.

3.0 Study Methodology

3.1 Literature Review

According to World Bank 2011, the economic and health benefits from improved sanitation require not only improved technologies for excreta disposal, but also important behavioral changes on the part of households. SaniFOAM Behavior Change Framework has been used in sanitation promotion in Tanzania, Ethiopia and South Africa. Under this framework, the behavioral determinants that are considered important are grouped under opportunity, ability, and motivation, while the “F” in FOAM serves as a reminder to focus on the target population and desired behavior change as depicted in Figure 1. By assessing behavioral determinants such as knowledge, attitude, perceptions and practices, inferences can be drawn on preferred alternatives (product attributes), their accessibility and affordability as well as the target population’s willingness to pay.

In consideration of accessibility to facilities for the physically challenged, an inclusive design approach may be adopted which aims to create functional environments to accommodate a diverse range of users and can be used equally by everyone irrespective of age, gender or disability. Alternatively, an individual approach which provides an aid or equipment for the use of disabled person based on their individual needs to enable them access an existing facility or environment. A major factor in being able to reach a facility is how near it is (Jones and Reed, 2005)

3.2 Field Data Collection

3.2.1 Study area

The study was conducted in selected wards of Kasama, Mugnai, Mporokoso and Luwingu districts based on the study detailed in the Household Baseline Study conducted by SNV in August 2014 (SVN, 2014). The data was collected over a period of 35 days from the 5th of December 2014 to the 10th of January 2015.

3.3. Data Tools used in the study

3.3.1 Structured Household Questionnaire

A structured household questionnaire comprising 38 questions was administered to a total of 1101 households. The questionnaire was developed by the Consultant and pre-tested in Chongwe District, Lusaka Province before it was finalised. The questions were translated into the local language (Bemba) and administered orally to the members of the community, to allow for clarification of questions and subsequent collection of quality data.

Using the DHS wealth index as used in the SNV baseline survey, part of the questionnaire relating to household characteristics was extracted from the Zambia Demographic Health Survey (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 and are then

divided into five groups of equal size, or quintiles, based on individuals' relative standing on the household index. See annex 9.4 for the questionnaire.

3.3.2 Focus Group Discussions

Focus Group Discussions (FGD) were convened in each of the 4 districts in order to gain a broad understanding of the current sanitation situation in the programme areas, including progress and key challenges related to sanitation market development, pro-poor strategies and approaches to improving sanitation coverage. The FGD guideline is attached as annex 9.6.

A brief stakeholder identification process was done to determine participants which included respective D-WASHE members, officers from the Council, and other stakeholders in the sector such as rural health workers, teachers, savings and lending institution workers, village headpersons, neighbourhood sanitation committee members, the physically challenged and the elderly. In total 18 FGD's were held as follows:- Kasama - 7, Mporokoso - 4, Mungwi - 4, Luwingu - 5 (Lists of attendants and summary of discussions attached -Annex 9.7 and 9.8).Two (2) district workshops facilitated by SNV, were also attended from which more insight was given regarding the challenges in both the current sanitation situation and the promotional activities currently being undertaken.

3.3.3 In-depth Interviews

In-depth interviews with traditional leaders, civic leaders/councillors and technocrats were used to establish and/or confirm interventions and approaches so far taken and the results they have yielded (see Annex 9.5).

3.3.4 Case Study

To better understand the challenges being faced regarding availability, accessibility and utility of the sanitation facilities, a case study is documented (see Annex 9.4).

3.3.5 Visual Ethnography (Camera's)

Video recordings, photographs and basic observation were used to collect sensitive information that would otherwise be too difficult to extract from both the questionnaire survey and the focus group discussions. It also allowed for the collection of more detailed and context-related information while allowing for the verification of the responses provided by both the interviews and the questionnaires.

3.4 Sampling

Sampling was guided by the baseline (SNV, 2014) as this study was building on the findings of the Household Baseline Survey conducted by SNV in August 2014. The same sampling frame with regards to villages and wards were used in each of the districts and the same sample size (+/-10%). A combination of probability and non-probability sampling methods however, were used when selecting the individual households to be interviewed. Random sampling was used to select households from the general populace while a purposive sample was picked to cover the elderly and disables in the communities. These sampling methods ensure that key subgroups of the population are represented and they also provide more statistical precision. Since the sub-populations

are more or less confined to geographical areas, each sub-population was sampled independently at village level. To pick a sample for the elderly and disabled, non-probability (purposive) sampling was applied.

3.5 Limitations

The study was conducted in the rainy season, which provided challenges in accessibility to some areas because of poor conditions of the roads. Further Zambia experienced presidential by-elections for the election on the 19th of January 2015. During this period, most activities were halted and data collection was a challenge as in some isolated communities, researchers were mistaken for being members of campaign groups.

4.0 FINDINGS

On the basis of the study findings, the project population is predominantly the household consumers. Households with elderly and physically challenged members are by large the poor and vulnerable households. Generally, peri - urban household consumers demand for sanitation hardware ranging from nails through to roofing sheets and services (building and transportation). Village - based household consumers demand for sanitation hardware like nails, empty containers, polythene sheet and building services. The target population for SSH4A result programme are mainly village - based household consumers whose choices of current latrines are within the sanitation options enumerated under **Annex 9.2 – Mud bricks with grass thatched roof**

Hygiene facilities being used by rural households are as follows:

- i. Tippy Tap positioned by a latrine. This device is used for dispensing water for hand washing after using the latrine
- ii. Refuse pits for throwing in rubbish generated by households
- iii. Bath Shelter used for adult bathing
- iv. Dish Rack - a raised platform for drying household utensils

The needs and preferences for rural households are shaped by the existing sanitation options and hygiene facilities. These structures are designed and erected by the local artisans and use locally available materials apart from nails, empty containers and polythene sheets which are sourced outside their community.

4.1.1. The needs, preferences, and capacity to pay for sanitation and hygiene options

NEEDS - It was noted from the study that the needs closely correlated to the challenges being faced with the sanitation facilities currently being used. Generally these challenges and mitigations included:-

- **Durability** – most sanitation facilities currently in use have a very short life span. The study revealed that durability is affected by the soil types, water table (during some months of the rainy season; January to March) and the type of materials used. Latrines constructed in areas with sandy soils and /or high water tables were reported to be prone to collapsing in the first 6 months of their construction. This is especially so for latrines which are constructed without adequate lining materials⁵. Locally available materials like the Mubanga (*Pericopsis angolensis*) are known to provide the required strength for the sanitation platform of the latrine just like steel would.

⁵ Wire mesh with cement coating, burnt bricks

- **Safety:** The major concern on latrine use by those taking care of vulnerable groups such as children, elderly and physically challenged persons is size of the orifice and sanitation platform. If the orifice is very big (exceeding a diameter of 20 cm) is a concern to child care givers while the weak platform was reported as a concern to all consumer segments.
- **Hygiene:** Hygienic use was reported to affect the physically challenged and elderly, especially those using shared latrines (see the story of a paraplegic woman of Mutemba Village in Mungwi District Annex 9.3). This is further exacerbated by the smoothness of the floor i.e. floor which is not smooth gets easy eroded when it comes in contact with water. Some consumers smear manganese (a used battery refuse), clay soil from the anthill or swamp on the latrine floor as a substitute for cement.
- **Accessibility** – in an attempt to address the issue of privacy, smell and other psycho-social issues avoiding in-laws from being seen as they go to use sanitation facilities, most latrines are constructed between 20 - 30m away from the house This however is a challenge to the elderly and disabled who may have difficulty in making their way to the facility especially in the night.

PREFERENCES

Figure 2 indicates consumer choice between raised and unraised squat options. The choice between the 'raised' and the 'not raised' latrines was also closely linked to the consumer segments. Households with elderly people showed a preference for raised improved latrines which have proved to be more convenient to use. As indicated in the figure below, unraised squat options are preferred more than the raised correlating with the disabled and elderly distributions in the districts of 40.05% and 17.06% respectively as indicated in the baseline SNV baseline survey (2014)

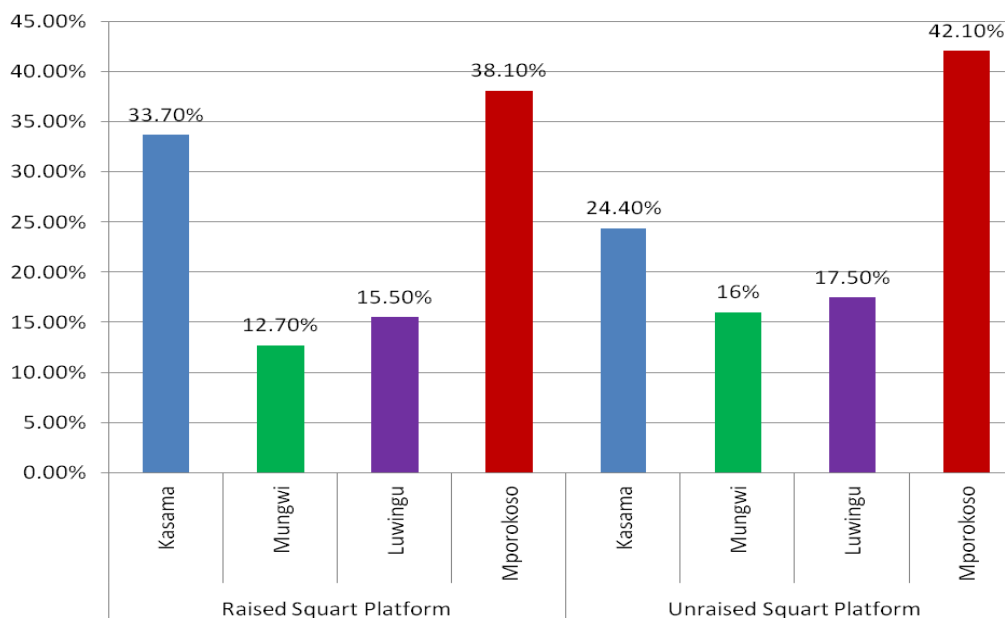


Figure 2: Consumer preference; raised and unraised squat platform

Source: Field data, 2014

CAPACITY TO PAY

According to CSO Living Conditions Monitoring Survey Report of 2006 and 2010, annual household income for poor households in Northern Province ranged from ZK150 – ZK300 per month (Table 1). An estimated household income survey showed that household income for sampled communities in the four project districts was as follows:

Table 1: Estimated annual household income

District	Average Annual Household Income (ZMK)
Luwingu	2,340.00 (US\$ 371.00)
Mporokoso	2,280.00 (US\$ 362.00)
Mungwi	2,580.00 (US\$ 409.00)
Kasama – Rural	3,120.00 (US\$ 495.00)
Overall Average	2,580.00 (US\$409.00)

The general principle for household affordability on latrine construction is that a household ought to only spend up to 5% of its annual income on sanitation. Sanitation of mud bricks with grass thatched roof deemed to be adequate latrine premised on the government standards and costing ZMK 492.11⁶ (sub-structure ZMK 223.39, whilst super structure is ZMK 268.72) with an expected lifespan of 4 years. With estimated average annual household income standing at ZK 2,580.00, 5% of this annual household income is ZK129.00 which is above the amortised building cost. On the other hand a one off payment of ZMK492.11 would be regarded as unaffordable.

With the current accelerated promotion of Community- Led Total Sanitation (CLTS) by local chiefs, district councils and NGOs such as SNV, World Vision and Caritas in the project districts, the demand for sanitation and hygiene facilities by rural household consumers is on the upswing.

However, the major impediment to sanitation access is finance. The study team explored alternative financing mechanism. The Zambia National Building Society (ZNBS) and CETZAM are institutions that provide construction loans in Zambia. However, the loans provided are tied to either collateral and that someone ought to be in employment. Nevertheless CETZAM provides loans to small business groupings.

⁶ The cost amount if amortized over its lifespan and giving an annual building cost of ZK 123.11

5.1 The current sanitation situation in the programme areas

The Sanitation Market

Figure 3 provides information on latrine adequacy (source: DHIS2)

An assessment of adequacy for latrines as defined in the NRWSSP (2007) was evaluated. The study revealed that that some latrines did not meet the four parameters/indicators;

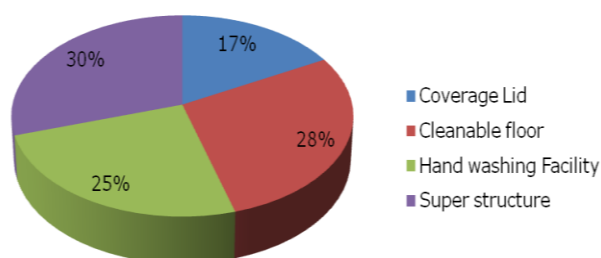


Figure 3: Household that met the NRWSSP adequacy for latrine

Source: DHIS2, 2014

super structure privacy, cleanable floor, lid and hand washing facility. Of the 10469 Households that were reported in the mobile to web reporting system in 2014, the DHIS2 the majority (30%) meet the super structure requirement, whilst the data indicates too that only 17% had a lid. Validation FGD's indicating that though improvements in coverage have been attained, households still find including a lid and a hand washing facility as a

challenge.

Figure 3 evidently indicate that people place much importance on the super-structure than the other parameter.

The found sanitation coverage rates in Kasama, the Northern Province headquarters and its neighbouring Mungwi district were low because local authorities had promoted more water interventions than sanitation. On- prioritization of sanitation by local authorities brought about low sanitation coverage.

The National Water Supply and Sanitation Council (NWASCO) and Chambeshi Water and Sewerage Company have confined their operations to per urban areas in the four project districts. These two organisations do not extend their services to remote areas of the project districts. In these remote areas, traditional authorities (chiefs and village heads) are the local regulators and enforcing agents of sanitation by-laws.

In remote areas of Zambia, poor household consumers, despite their desire to use cement to line their latrine pits as well as put a smooth finish to the latrine floor, they have not been able to access the commodity due to its huge packing size (i.e. 50kg pockets) and high price. Hence, they substitute it with white clay from dambos⁷ which they use to finish up latrine floor and walls. In addition, they make use readily available natural resources (grass, poles and logs from trees, sand and stones).

The consumer demand study observed that all key players in the sanitation chain starting from manufacturers (for example cement manufacturers - Lafarge and Zambezi Portland) , transporters (local and national), wholesalers, traders and local artisans face operational challenges largely due to inadequate working capital. Hence, they are

⁷ In some dambos, there are whitish deposits which the local people dig up and use to smear latrine walls and floor to smoothen them

not able to meet the current market demand for sanitation products. Moreover, they grapple with poor road network and inaccessible support services which stifle growth of their businesses. These challenges were confirmed during the Focus Group Discussions the study team held with District Business Associations in the four project districts (Chingo *et al.*, 2014). The study report further reveals that 30% of village-based sanitation traders operate informally i.e. they are not registered with either the district council or Patents and Companies Registration Agency (PACRA). This makes it difficult for them to access business loans from financial institutions. See challenges matrix in Table 2 below:

Table 2: Key challenges to sanitation market development

Challenges	Mitigation Measures
<p>Monopolist Challenge</p> <p>Cement manufacturers - Lafarge Cement and Zambezi Portland Ltd have not opened up distribution depots in any of the project districts. Hence, traders have to travel either to Lusaka (850km) and Ndola (765km) to source cement stocks</p>	<p>Lafarge and Portland, like other manufacturers (Zambia Breweries), can set up a local distribution depot in Kasama to serve traders in project districts</p>
<p>Affordability challenge</p> <p>Cement is packed in 50kg bag selling at K95 per bag in Kasama and K105 in Luwingu and Mporokoso. This price is beyond most household consumers reach. For household latrine building, less than 50kg cement is required.</p>	<p>Packing cement in smaller packs of 20kg, 15kg and 10kg can meet household consumers at their point of need and affordability.</p>
<p>Logistical challenge</p> <p>Hardware traders of other sanitation materials such as polythene sheets, wire nails, paint, PVC pipes, roofing sheets which are also demanded in rural villages, travel to either Lusaka or Ndola to procure these supplies.</p> <p>Manufacturers of such materials cannot set up plants in Kasama due to erratic and unstable electricity supply</p>	<p>Ndola and Lusaka – based manufacturers to set up distribution centres in Kasama to serve traders in the four districts</p> <p>District Business Associations to lobby government for increased and stable electricity supply to project districts</p>
<p>Outreach challenge</p> <p>High transport costs which discourage traders from penetrating into rural markets with their products</p>	<p>Use of alternative marketing strategies like the Munada open market, in - community sales agents etc.</p>
<p>Knowledge Challenge</p>	

Some chiefs in project districts not oriented to CLTS and hence not active in urging their subjects to improve personal and community hygiene	Conscientised chiefs are drivers of improved sanitation. They are local sanitation regulators and enforcers. Greater involvement of chiefs in community sanitation
Technology Challenge Local artisans (bricklayers, carpenters, masons, blacksmith) have capacity to develop latrine designs for the physically challenged. These have not been adopted by household customers due to lack of information.	More efforts in R & D to develop sanitation options that can withstand heavy rains and are user - friendly to the physically challenged.
Capacity challenge Most rural traders are informal entrepreneurs with low business skills and knowledge. They have potential to grow their businesses	Provision of business development services to informal entrepreneurs to enable them expand their businesses
Financial challenge Traders find it difficult to access business loans from financial institutions due to stringent loan conditions	Establishing and strengthening district business associations to facilitate BDS provision to their members. These organizations can negotiate soft loans for their members.
Logistical support challenge Transporters and vehicle - owners in Mporokoso, Luwingu and Mungwi travel to Kasama over distances of 175km, 165km and 26km respectively to buy fuel for their operations. There are no fuel stations in the three districts.	Government to improve road network to and within these districts. This may attract private investors to these districts with the view of setting up fuel stations to serve the huge existing fuel demand there. As at the time of writing the report, constructing of fuel stations in Luwingu and Mporokoso districts had started.
Demand Seasonality In remote areas of project districts, local people's demand for sanitation products and services is seasonal. They receive income when they sell agricultural produce and caterpillars(End of October – mid November)	Local people to diversify household income sources. Exploit local business opportunities such as selling grass, empty containers, polythene sheets which are required for latrine construction.

In order to exploit the existing rural sanitation market, multi - pronged strategies involving the government, traditional leaders and private sector are required to strengthen the sanitation supply chain. For example, the government undertaking feeder roads improvement, traditional leaders taking up Community - Let Total Sanitation (CLTS) on increased scale and encouraging their subjects to adopt this sanitation approach, the private sector penetrating remotes areas with their products and services. Civil society organisations, non - governmental organisations promoting sanitation using integrated development paradigm which entails implementation of food and non-food interventions simultaneously to address varied needs of the target community. A well-targeted hardware financial system for the poorest households, if properly implemented, can increase local demand for products and services. **See Annex 9.1 - Menu of recommendations for more measures.**

5.2 Sanitation and Hygiene for the elderly and disabled

All household latrines sampled by the study team were not designed and built for use by



Figure 4: Tiny latrine with narrow entrance

the disabled and the elderly. This situation was demonstrated by tiny latrines with narrow entrance and little space inside which cannot allow users to turn freely and position themselves for use of the latrine (Figure 4).

The physically challenged, elderly and children face myriad of challenges in accessing sanitation and hygiene facilities (Figure 5). Some of these are latrines that are erected far away (about 25m) from the dwelling house, collapsing latrines which pose a serious danger to the users, no raised platform/orifice, wet

or damp latrine floor exposing crawling users (disabled, elderly) to faecal - oral contamination, hand washing facility (tippy tap) positioned too high for the disabled, dish rack put up too high for the physically challenged to use etc.



Figure 5: One of the physically challenged persons who has difficulties in using the latrine

The study team advanced some proposals to make latrines more user - friendly to the physically challenged and the elderly. These are outlined below:

- i. Raised orifice (latrine opening for the disposal of urine and faecal matter)
- ii. Wide latrine entrance
- iii. Slanting latrine entrance (with a slope of 5 to 10%) with no stairs

In addition, latrine pits can be lined with either burnt bricks or woven basket to make latrine sub - structures stronger and resistant to collapsing

When building latrines for use by the physically challenged persons, it is advisable to consider the following factors:

- i. Easily accessible – not more than 15m from the dwelling house
- ii. Easy and comfortable to use – raised platform
- iii. Easy to clean and maintain with tolerable levels of smell
- iv. Should be safe with minimal chances of accidents
- v. Should provide privacy to users

Community solidarity can complement meeting the needs of the disabled and elderly persons. When residents of a village, for example young and abled men, come together and offer free labour to build a latrine for an elderly woman. In the past years, this practice used to be an integral part of the African culture.

Sanitation technology desired for the physically challenged, the elderly and pregnant women is as shown below in Figure 6.

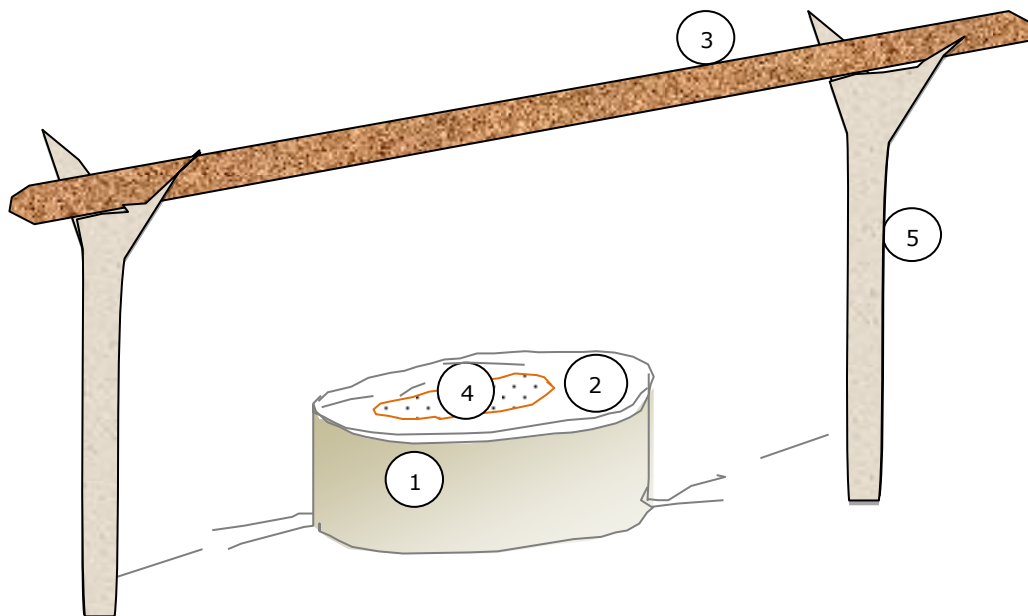


Figure 6: Sanitation technology desired for the physically challenged, the elderly and pregnant women

In the sketch above (Figure 6),

1 is raised squatting platform/ orifice for the latrine

2 is the standard toilet seat (which costs ZMK 35)

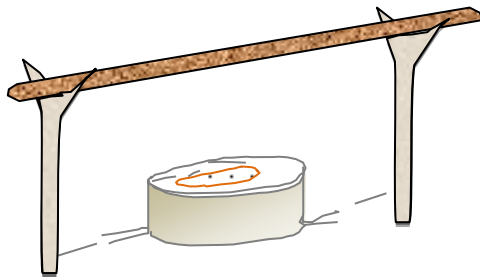
3 is the multipurpose wooden support beam (Which costs ZMK 3). It may cost nothing if sourced by the household as all required materials are available locally on consumers' farms. A substitute hanging rope can be used which can reduce the cost substantially.

4 is the orifice for the latrine

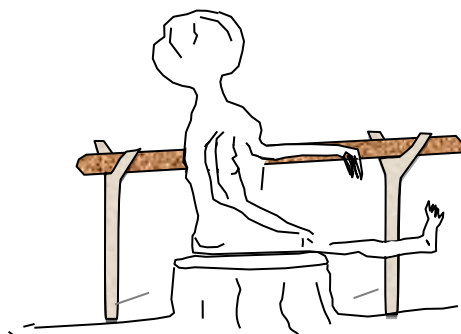
5 Is a forked pole on which the wooden multipurpose beam rests.

Basic functionality of the multipurpose rail;

1. The physically challenged person can hold on to the multi-purpose rail arm when positioning oneself in the latrine
2. The rail can be used for resting the arm (for good balance) when using the latrine
3. It can be used for leaning onto it when cleaning oneself after using the latrine



The multipurpose wooden beam can either be placed on the left or right hand side of the latrine orifice.



It can be used for resting the arm while using the latrine for good balance

It can be used for leaning on when cleaning one's self after using the latrine. This is good for balance (again this is good for balance).

The multipurpose rail is good for the elderly, the blind, the children as well as the pregnant women.

The multipurpose rail can create job opportunities for welders and traders of sanitation hardware.

5.3 Demand responsive techniques for measuring, interpreting and reacting to sanitation demand.

The study revealed, some of the techniques being used are as follows:

- i. Observations: By interacting with the local community members, traders can establish sanitation products and services which are in demand in a particular area. Traders from Chambeshi ward in Mungwi district for instance told the study team that they conduct stock taking weekly. Both the stock count and physical inspection of sanitation stocks enable them to decide when to purchase more stocks to avoid being out of stock as this frustrates customers.
- ii. NGOs working in a particular geographical area, establish sanitation status of their target populations through baseline surveys, periodic monitoring etc. and these techniques inform them about the demand situation in those intervention areas.
- iii. Local district councils are responsible for regulating and co-ordinating sanitation activities in the district. Through D – WASHE fora, they establish sanitation demand in the district through reports and information shared by member organisations. Validating Key Informants interviews with members of D-WASHE indicate that as observed through Sanitation Supply Chain Study, D and V- WASHE committees in the four districts are weak and not able to co-ordinate effectively sanitation interventions being implemented in the district. Hence, great need to re – invigorate these structures through well structures terms of references for the operation. .

5.4 Characteristics of desirable sanitation products and services

As indicated under **point 5.1**, target clientele for SSH4A sanitation marketing are predominantly household consumers. Household consumers based in town procure sanitation services and products for building residential houses, schools and other infrastructure. They purchase their sanitation products largely from formal enterprises. Household consumers in villages, particularly the poor and vulnerable consumers, procure small hardware and services largely from local traders (informal traders and artisans). As a result of the wide spreading adoption of CLTS in the project districts, there is increased building of new household latrines and improving upon existing ones to make them attain acceptable standards as set by the government. In flooding areas of Chambeshi and Kalunga wards of Mungwi district, there is potential for cement to be used in lining latrine pits and building stronger latrines (Figure 7). For rocky areas, special skills for breaking rocks are required and the local artisans are available to provide their skills, In addition, digging pits to 3m depth in sandy or loose soils require special skill which is available in local communities. In these places, digging of oval or round pits is the alternative solution to reducing collapsing latrines (Figure 7).

The aspiration of the local councils and traditional authorities is for every household to have a latrine and all household members including the elderly, physically challenged

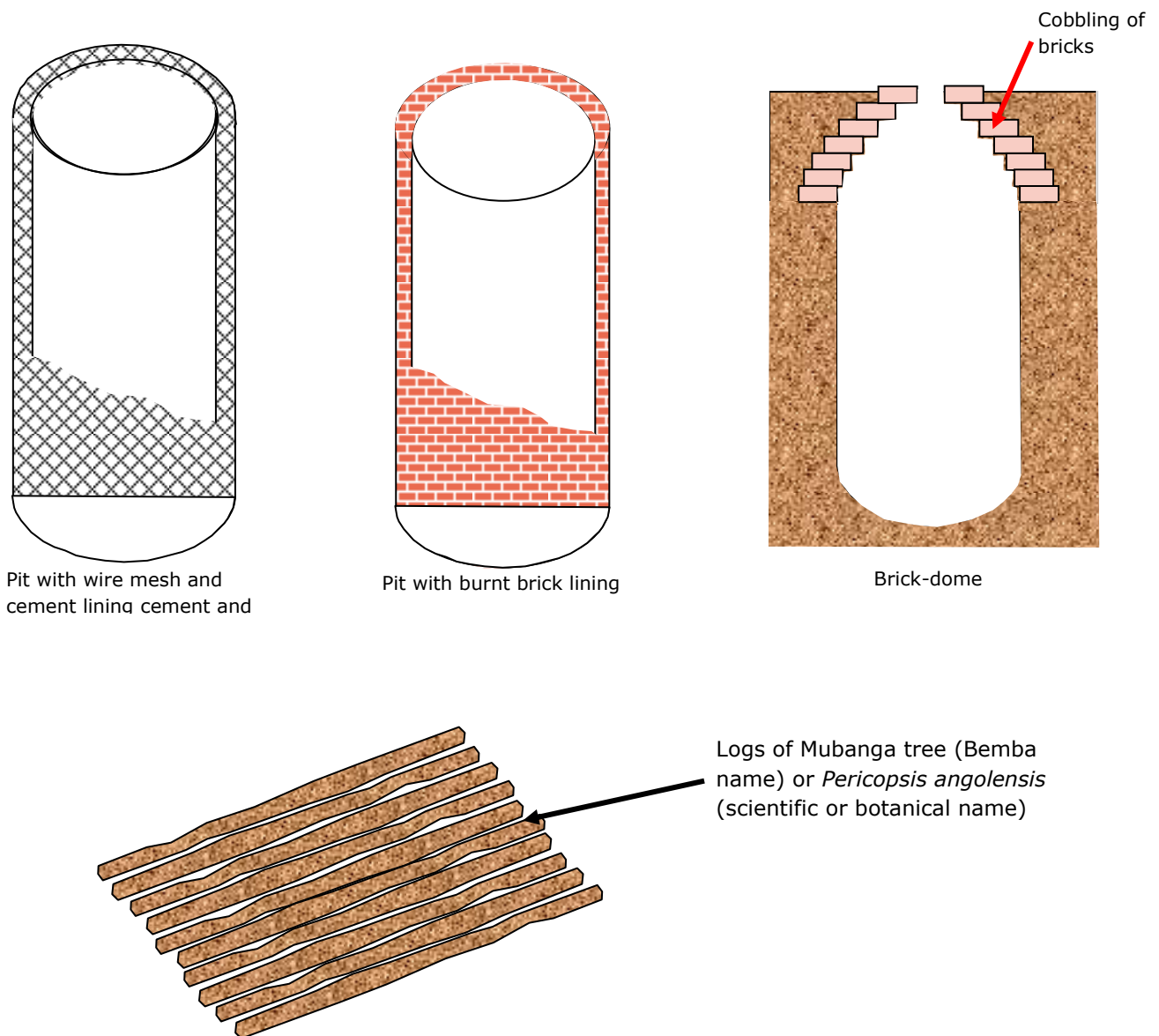


Figure 7: Potential designs of latrine pits lined with wire mesh, burnt bricks and logs of Mubanga tree to be used as reinforcement material for the platform of the sub-structure. A brick-dome is an alternative

and children using the latrine. The latrines should meet basic requirements for the good latrine as stipulated by the government. Hence, upgrading of household latrines is an on-going process and hence demands for sanitation hardware and services are also on going. As a result of the accelerated adoption of demand creation using CLTS, household consumers' preferences and aspirations have to be in line with the local authorities' requirements and standards.

5.6 Developing local sanitation and hygiene markets.

The study established the supply chain actors in this sub sector. These are the importers, manufacturers/suppliers, transporters, traders, regulatory bodies (state and traditional authorities), financial and insurance institutions and consumers.

In all projects districts, there are existing sanitation options and hygiene facilities which are elaborated under points 5.1. These options and facilities are designed and implemented by local artisans who utilize locally available materials. This situation by itself provides opportunities for suppliers of sanitation hardware and services (transporters and artisans)

It is important to know that there are standards that have been set up by the government which lead to classification of latrines as adequate sanitation or not. As the sanitation sub sector is regulated by both state and traditional authorities, it is important that chain players and other key stakeholders are fully conversant with the existing regulations and standards. This will enhance compliance and costumers confidence in the products and services provided.

The study also revealed that sanitation products are availed to customers through fixed selling points which are shops or makeshift stalls. There are also foot sellers (sales agents) who move from one village to another on bicycle or foot to sell the products. In view of this mode of transport, products being sold are restricted to portable items such as nails packed in small quantities and polythene sheets. There are also Munada Open markets and these are traders who mobilise themselves and hire transport to deliver their products to designated villages for sale. They share the cost of hiring transport and also buy products from the local people which they take to their homes for sale. This marketing systems also enhances money circulation in the local economy

5.7The existing and potential communication channels suitable for sanitation marketing

There are a number of communication channels that are being used for sanitation marketing. Some of these are as outlined below:

Community radio stations: According to studies conducted before, radio is a mass medium with the highest penetration in Zambia, with a penetration of 83% in Zambia⁸. A number of suppliers in Kasama district use Radio Mano for disseminating information about general products and services they are selling. In 2010, an Audience Scopes report⁹ based on a national media survey indicated that 23% of the population of Northern Province said that Radio Mano was one of the stations they listen most often to. Furthermore, the reported stated that in Northern Province, 73% of radio listeners give "a great deal of attention" to health issues discussed on radio. This channel is good for areas being reached by the radio station. However, the challenge is timing for making the radio announcement because if it is done during off peak time, there are few people who receive the message. Moreover, prime time announcements are very expensive.

Messages in rural areas are also disseminated to the wider audience through school children. They are given to the schoolchildren who in turn pass on these messages to their peers, parents and guardians

⁸ <http://www.nielsen.com/content/dam/niesenglobal/ssa/docs/nielsen-emi-zambia-snapshot.pdf>

⁹ http://www.audiencescapes.org/sites/default/files/chapter%203_Maurthy%2BMuzammil_Trad%20Media.pdf

Traditional leaders. With increasing adoption of CLTS in rural communities, sanitation messages are being delivered to the rural populace through local chiefs and village headmen/women. Through this channel, detailed information on the available sanitation products and services are disseminated to the local people

Public events and celebrations: There are public events that are held in the local communities such as celebration of the World Water Day, World Toilet Day and traditional ceremonies like Ukusefya pangwena among the Bemba. The ceremony is presided by the Paramount Chief and several people from the four project districts as well as other areas attend the ceremony. These events provide a unique opportunity for disseminating information to the public on the sanitation products and services available. Suppliers can also provide technical information to their customers as they meet them face to face, In addition, demonstration of sanitation hardware can be put at strategic points such as market place, health facilities etc.

Community social marketing by NGOs operating in the project districts. NGOs such as Caritas, World Vision, Self Help Africa, SNV etc. disseminate information on their available sanitation products and services to the target populations through their own organized project events such as open days during which they display their products and services, distribute information leaflets and brochures to the people

With expansion of mobile networks by Zamtel, Airtel and MTN to most areas in the project districts, it is possible to use mobile phones especially SMS messages to disseminate information to wider audience on products and services being sold.

Road shows and use of churches are also other means of communication being used. Popular musicians are hired by promoters of the products and play music at designated places to attract the people and during which time they distribute information materials such as posters, booklets and fliers.

6.0 Recommendations

Based on the study findings, the following recommendations are being proposed:

- i. Dissemination of existing sanitation options and hygiene facilities to the public informed by research and development of area based sanitation facilities that are user friendly to the physically challenged and elderly and make use of locally available materials
- ii. Provision of target hardware subsidy to the poor who cannot afford to pay for sanitation and hygiene facilities
- iii. Explore other form of channel of communication such as mounting demonstrations at and use public media
- iv. Promotion of saving and loans schemes to provide affordable loans to household consumers

In addition to the aforementioned, there are other recommendations under Annex 9.1.

7.0 Conclusion

Access to adequate sanitation and hygiene still remains a challenge for households in Kasama, Mporokoso, Mungwi and Luwingu districts. The needs and preferences of all consumer segments demand a pragmatic approach to ensure for the sustainability of any interventions. The traditional authorities, civic leaders and the government has the will in the quest to make provision of appropriate structures and system that will provide an environment for policy orientation in meeting the sanitation targets as set in the NRWSSP and the Vision 2030. To accomplish this, appropriate area based technologies founded on locally based materials in advancing sanitation and hygiene access can be adopted. This is to be coupled with marketing and communication strategies that provide the various consumer segments with options they need, when they need them and at prices they can afford.

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9.0 Annexes

Annex 9.1: Sanitation Supply Chain Study – Menu of Recommendations to strengthen Supply Chain

Supply Chain Actor	Recommendations
Importers(Nakonde suppliers)	<p>Develop appropriate interventions in supply chain development for use of Tanzanian - made cement to Zambian customers to increase their uptake of these “imported” cement</p> <p>Involve private sector in provision of low cost sanitation and hygiene options to supplement local products</p>
Manufacturers (Lafarge Cement and Zambezi Portland Ltd)	<p>Packing cement in smaller packs, for example, 25kg, 15kg and 10kg to reduce its bulkiness and increase affordability</p> <p>Establishing wholesale depots (wholesalers) in Kasama (provincial headquarters)and eventually in the other project districts to reduce frequent travels by traders to Ndola and Lusaka to purchase cement stocks</p> <p>Provide research and development on identified substitutes for cement such as the battery cell refuse (a technology common in Mporokoso) and the anthill soil used in flood prone areas for scale up</p>
Energy and Fuel Suppliers	<p>Promoting alternative/renewable energy supplying equipment to the districts e.g. solar and biogas technologies</p> <p>ZESCO increasing current voltage and supply period to project districts. Connecting strategic remote areas to national electricity grid under the Rural Electrification Programme</p>
Transporters (Big transporters who reach Kasama)	<p>Strengthening Truckers Association of Zambia (TAZ) and lobbying government on road network rehabilitation and maintenance</p> <p>Lobbying government on fuel and spare parts prices and incentives on importation of trucks</p>
Inter and intra – district transporters)	<p>Lobbying government on improved inter and intra district road network</p> <p>Facilitating establishment of fuel stations by private</p>

	entrepreneurs in Luwingu, Mporokoso and Mungwi
Village transporters (Bicycles and ox cart)	<p>Realization that they provide reliable and affordable transport in remote areas.</p> <p>Charging economic prices for their services</p> <p>Local traders stocking bicycles and ox-carts' spare parts in their shops</p> <p>Integrate the various service providers into business associations to provide business support</p>
Wholesalers	<p>Refrain from dualist operation i.e. also charging retail prices and competing with registered retailers</p> <p>Setting up wholesale outlets for sanitation products at district centres</p>
Town- based Traders	<p>Setting up retail outlets in areas with high business potential</p> <p>Joining District Business Associations (DBAs) to enhance organisations' capacity. DBAs providing critical business services to their members</p>
Village- Based Traders	<p>Registering their businesses with local district councils/PACRA/ZRA</p> <p>Supplying sanitation products demanded by household consumers. These products to be packaged in affordable sizes.</p>
Munada Traders	Trade in all sanitation products as long as they are portable and demanded by targeted rural customers
Foot and Bicycle Traders	Trade in all portable sanitation products such as nails, empty grain bags, polythene sheets, empty water containers etc.
Household Consumers	<p>Willing and able to build on - site household sanitation (latrines).</p> <p>Upgrading existing latrines which do not meet minimum standards</p> <p>Practice community solidarity i.e. work with others in the village to help the poor and vulnerable persons build latrines</p>
Local artisans (Bricklayers, carpenters and blacksmith)	<p>Providing their services to the local people at an affordable price</p> <p>Willing and able to pay for their skills upgrading</p> <p>Designing and building latrines that are user- friendly</p>

	<p>to elderly and physically – challenged persons</p> <p>Willing to work together with fellow artisans and traders set up a one – stop shop in villages. This will supply all required building materials and services to local customers</p>
Training Institutions	In collaboration with SNV and other NGOs, design and run tailor - made training courses for community artisans to upgrade their technical skills (these to include refresher courses)
Financial Institutions	<p>Develop loan products to support hardware traders and individuals borrowing for house construction (sanitation is embedded).</p> <p>Presently, Zambia National Building Society (ZNBS), Christian Enterprise Trust of Zambia (CETZAM) and Indo Zambia Bank provide collateralized housing loans to their clients</p>
Insurance Companies	Develop special insurance products to serve traders and transporters
National Sanitation Regulators – NWASCO and ZABS	Increasing capacity to extend their services to district level and all border points respectively.
District Regulators/Local councils	<p>Recruiting more watsan staff and providing logistical support to improve their efficiency and effectiveness</p> <p>Co - ordinating development of district total sanitation plans and monitoring implementation</p>
Traditional Authorities	<p>Orientation to CLTS and strict enforcement of by – laws</p> <p>Undertaking regular monitoring errands among their subjects to check on CLTS adoption progress and encourage their subjects</p>
Other NGOs operating in project districts	<p>Active and regular participation in D-WASHE activities</p> <p>Strong collaboration with other organisations promoting sanitation in the district in order to rationalize resources and avoid using conflicting approaches</p> <p>Promotion of village saving and lending schemes to provide affordable loans to household consumers</p>
SNV	<p>Providing critical logistical support to local partners for planning, implementing and monitoring sanitation interventions</p> <p>Providing one – off in – kind hardware support to</p>

	<p>targeted poor and vulnerable households</p> <p>Supporting development of District Total Sanitation Plans for the four project districts</p> <p>Providing small awards to villages which have attained Open Defecation Free and winners of sanitation competition</p>
Department of Forestry	<p>Conducting community sensitization events on implication of the Forestry Act concerning cutting down of trees for logs used in building household latrines</p>
Government of Republic of Zambia	<p>Improving and maintaining road infrastructure to and within project districts</p> <p>Scaling up rehabilitation of feeder roads to enable transporters reach remote areas</p> <p>Providing one – stop centre for business registration and supervision in each project district</p>

Annex 9.2: Mud bricks with a grass thatched roof



Total Cost: ZMK 492.11

Suitability: All geographical locations. Where soils are sandy, it is preferred to construct a latrine near or on top of an anthill to reduce incidence of latrine collapsing especially during the rainy season.

This is **“The started option to health living”**. It is the option currently being promoted by traditional authorities in the 4 districts. The option is not only cost effective but also meets the basic requirements of an adequate latrine.

Life span: 3 to 5 years (depending on family size. Other dependant factors include design of the sub-structure.

Cost of constructing a Mud bricks latrine with a grass thatched roof (Option 5)

Main Latrine component	Latrine activity component	Materials/Services	Cost (ZMK)
Sub-structure			
1	Pit	Depth (3.5m)	
		Labour for digging	64.88
		Sub total	64.88
2	Covering/Slab		
		Slab reinforced with wooden logs (Mud/Earth)	120.25
		Polythene sheet	15.76

		Empty grain bags	
		Used clothes	-
		Grass (Bundles)	
		Banana leaves	-
		Labour for covering	17.50
		Sub total	153.51
3	Toilet lid	Plastic lid	5.00
		Sub total	5.00
Super-structure			
4	Wall		
	4.1 Mud bricks	Mud bricks	38.23
		Labour	104.17
		Sub total	142.40
	4.2 Grass	Grass (Bundle)	16.17
		Poles	29.85
		Rafters (Bundle)	18.44
		Iron nails (kg)	7.53
		Fibre (Bundle)	15.23
		Labour	26.65
		Sub total	113.86
10	Hand washing facility		
		Sticks	2
		Water container (2.5 L)	4
		Rope	1
		Labour	5
		Sub total	12
		Grand Total	492.11

- Product not available in rural areas

Annex 9.3 Case Studies on the disabled

9.3.1 Case study with Silver from Mungwi district

SNV conducted an in-depth semi-structured interview with Silvia a paraplegic middle-aged woman from Mutemba village in Mungwi district. Silvia has never been able to use her legs in Mungwi district. She manages to get around with the use of a donated wheelchair. In terms of access to sanitation facilities, she currently shares a pit latrine with several community members. This latrine, however, is not accessible to her wheelchair. It means she has to crawl on her hands and knees when entering the latrine and completely sit herself down on the open mud hole of latrine. She mentioned that the hygiene levels are at times poor as a result of sharing; she often finds excreta and urine remnants smeared on the toilet floor. She has not used gloves for a while so her hands and body often get dirty when she has to use the toilet.

Previously she used to have pit latrine that had been built for her by the community, however, this collapsed due to sandy soil in the region and non-durable construction methods used. At that time she would personally clean and maintain the toilet, making it smooth by rubbing clay soil on the surface. This would pose a particular challenge in the rainy season as the clay would get wet, meaning she would get dirty when using the latrine. In light of this background, she stated her preferences would firstly be able to have her own private and easily accessible latrine. Since this is currently unrealistic, she would prefer firstly being able to use a latrine with large entrance so she can access it with her wheelchair. Secondly, having a raised platform in this latrine would enable her to move from a wheelchair to the toilet opening.



Semi-structured interview with Silvia



In terms of her awareness of the raised platform latrine options, she knew of masons able to construct such a latrine and estimating the sub-structure cost of construction to be at 100 kwacha. The reality though is she lives without any stable income, being cared for by her aged mother and would constitute the lowest income quintile in the programme area. She relies a lot on community assistance and with her mother grows a few subsistence crops. This means the main barrier is financial as she struggles with living hand to mouth. The ability to construct a latrine is far beyond her means. Considering she lives without any safety nets and relies on the goodwill of her community, the key learning for the SNV team was that Informed Choice Materials could have a role in raising general awareness for people with disabilities. While she does not have her own latrine presently, it was hopeful that she previously had one built for her by the community. Creating informational materials, which raise the awareness about the difficulties, faced by disabled people and distributing them to key stakeholders in the community and at the governmental level is thus a key goal for SSH4A Zambia programme. In particular showing the kind of construction options for latrines available for disabled people has been focused on in the creating of the materials.

9.3.2 Case study for Theresa from Mporokoso District

A case study of the challenges that Theresa Kabwe; born blind were studied. The triad consisted of one blind person and two elderly persons. Theresa explained that she gets to use the same latrines with everyone else. It's a general tendency for people that are disabled and the elderly to use the same toilets with other 'abled' persons. When asked about the challenges she experienced in having access to the latrine, Theresa bordered her concerns on access. She notes that 'it's not all the times that she has the support of her grandchildren in taking her to the toilet'.

At times she moves from her secured hut to the communal toilet alone. One elderly triad participant confirms that often times Theresa by passes the toilets and the homes within the living area into the field in search for the toilet. In the African setting, the old are usually provided accommodation a distance away from the compound as a sign of respect. If she is lucky to find the toilet, Theresa battles with another challenge of locating the drop hole as it is level with the floor. She uses her foot to locate the hole. The struggle to defecate in a fixed point does not end here for her. Squatting at the drop hole is a challenge as her advanced age has weakened her legs. The two other aged group members expressed similar sentiments.



When the informed choice materials; accessories was introduced, the participants were more absorbed at the pictures. They also explained that they were not previewed to costs as much of the purchasing decisions are made by those financially responsible for them; their families and the village community at large. The biggest challenge to them was the availability of materials. They are aware of masons and artisans in the community that would provide the services of making the setting options and the rails.

		10		
Q3	How old were you at your last birthday?			
Q4	What is your current marital status?	Married 01 Never 02 Divorced/separated 03 Widowed 04 Cohabiting 05	married [__]	
Q5	How many years have you been living here?	_____ Years		
Q6	What is your highest level of education?	None 00 Primary 01 Secondary 02 College/Vocational 03 University 04 Adult 05 Other 06 specify _____	level literacy [__]	
SECTION 2: HOUSEHOLD COMPOSITION				
Q7	Are you the head of your household?	Yes 01 No 02	[__]	
Q8	Is this a single parent/guardian headed household?	Yes, male headed household 01 Yes, female headed household 02 No 03	[__]	
Q9	How many people usually live in your household? (household	Number of people in household [__] Number of females [__] Number of males [__]	[__]	

	size) (if none write 00)																																																			
Q10	What is your main source of income?	None 01 Formal employment 02 Self-employment/Business 03 Piece works 04 Other specify _____																																																		
Q11	What is your total monthly income on average?	[___ Zmk _____]	[___]																																																	
Q12	Does your household have:	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr><td>Electricity</td><td>1</td><td>2</td></tr> <tr><td>A radio</td><td>1</td><td>2</td></tr> <tr><td>A television</td><td>1</td><td>2</td></tr> <tr><td>A phone</td><td>1</td><td>2</td></tr> <tr><td>A refrigerator</td><td>1</td><td>2</td></tr> <tr><td>A bed</td><td>1</td><td>2</td></tr> <tr><td>A Chair</td><td>1</td><td>2</td></tr> <tr><td>A Table</td><td>1</td><td>2</td></tr> <tr><td>A Sofa</td><td>1</td><td>2</td></tr> <tr><td>A Clock</td><td>1</td><td>2</td></tr> <tr><td>A fan</td><td>1</td><td>2</td></tr> <tr><td>A Cassette player</td><td>1</td><td>2</td></tr> <tr><td>A VCR/DVD</td><td>1</td><td>2</td></tr> <tr><td>A vehicle?</td><td></td><td></td></tr> <tr><td>Other</td><td></td><td></td></tr> </tbody> </table>		YES	NO	Electricity	1	2	A radio	1	2	A television	1	2	A phone	1	2	A refrigerator	1	2	A bed	1	2	A Chair	1	2	A Table	1	2	A Sofa	1	2	A Clock	1	2	A fan	1	2	A Cassette player	1	2	A VCR/DVD	1	2	A vehicle?			Other			[___]	
	YES	NO																																																		
Electricity	1	2																																																		
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A television	1	2																																																		
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A Cassette player	1	2																																																		
A VCR/DVD	1	2																																																		
A vehicle?																																																				
Other																																																				
SANITATION SYSTEM																																																				
Q13	What form of sanitation system does your use in your home?	Toilet 01 Latrine 02 Other specify _____																																																		

Q14	If response to question 13 is toilet, what type does your household use? If not, skip to question 20	Flush or pour flush toilet Flush to piped sewer System 01 Flush to septic tank 02 Flush to pit latrine 03 Flush to somewhere else 04 Flush, don't know where 05	
Q15	Is the tank above the ground?	Yes 01 No 02 Partly 03	[__]
Q16	Is water available in the toilet?	Yes 01 No 02	[__]
Q17	Do you share this toilet facility with other households?	Yes 01 No 02	[__]
Q18	If yes, how many households use this toilet facility?	_____ Households	[__]
Q19	Are the walls and the surrounding of the sanitation system well maintained (check & observe: take a picture)	Yes 01 No 02	[__]
Q20	If response to question 13 is pit latrine, what type does your household use?	Traditional 01 Improved 02	
Q21	Does your system leak waste water at any time of the	Yes 01 No 02	

	year? (consider rainy season too)	Don't know 03		
Q22	What source of water does your household use?	Tap running water 01 Well 02 River 03 Other 04 Specify	[__]	
Q24	Do you have anyone with special needs in this household	Yes 01 No 02		
Q25	If yes, are people with special needs assisted in any way to make use of the toilet?	Specify_____		
Q26	How many people with special needs live in this household?	Specify Number_____		
PREFERENCES AND CHALLENGES				
Q27	Do you face any challenges with your system?	Yes 01 No 02	[__]	
Q28	What are some of the challenges you face? explain			
Q28	What alternative system would you prefer?	Improved latrine raised 01 Improved latrine non raised 02 Conventional toilet 03		
Q29	Does it have the following characteristics?	Does not pollute drinking water 01 It separates human excreta from contact with humans, animals and insects	[__]	

		02 Does not cause intolerable smells 03 Ensures privacy and safety for users 04 Is easy to keep clean 05		
Q30	What challenges do you face in attaining these alternatives?			
Q31	Are you willing to purchase this sanitation system if assisted?	Yes 01 No 02		
Q32	If yes to question 31, what kind of assistance would you want? Explain			
Q33	Do you have any knowledge of any other alternative systems that could be used?	Yes 01 No 02	[]	
Q34	If yes, could you share some examples?			
Q35	Through which source or media did you learn of such a product(s)?	Radio 01 TV 02 Newspaper 03 Workshop 04 Brochure 05 Other 06 Specify	[]	
INFORMATION DISERMINATION				
Q36	Have you seen	Yes		

	/ heard any promotion on alternative sanitation systems in the last 13 months?	01 No 02 Don't know 03		
Q37	If yes, Through which source or media?	Radio 01 TV 02 Newspaper 03 Workshop 04 Brochure 05 Other 06 Specify		
Q38	Which media would you say is the most effective way to communicate to you about the identified alternatives sanitation systems?	Radio 01 TV 02 Newspaper 03 Workshop 04 Brochure 05 Village 06 Other 07 Specify	headman	

Thank you for participating!

Annex 9.5: In-Depth Interview Guide

INTRODUCTION

The purpose of this in-depth interview is to gain a broad understanding of the current sanitation situation, progress and key challenges related to the sanitation market development and pro-poor strategies and approaches to improving sanitation coverage. This discussion will be used to ascertain the needs, preferences, capacity and the consumer willingness to pay for a number of identified sanitation and hygiene options for different segments of the community including the elderly and disabled, while identifying the challenges faced by them in using the sanitation and hygiene facilities.

It will determine the demand for desirable sanitation products and services, and identify existing and potential communication channels suitable for sanitation marketing.

1. Current sanitation situation in the programme areas.
 - What type of sanitation system is widely used in the area?
 - Are you and your people aware of the risks that come with using such a system? (For village leaders only). *Interviewer to do a partial sensitisation.*
 - Are you in the village Committee/Organisation introducing any initiatives towards attaining Open Defecation Free status by introducing sanitation systems that are considered adequate according to government standards in the area?
 - For village leaders mention the requirements on the checklist.
 - For organisations mention the published Sanitation and Hygiene Component of the National Rural Water Supply and sanitation Programme (2006- 2015).
 - If yes, please explain such initiatives and mention if there any external stakeholders involved in these initiatives.
 2. Local sanitation and hygiene markets.
 - For the Village Committee ONLY
 - Are the people aware of the identified sanitation and hygiene options available to them?
 - Would you be willing to take part and champion a Community Led Total Sanitation (CLTS) in your community? *Interviewer to do a partial sensitisation on the dangers of the systems currently in use with the hope of changing the attitudes and their systems as a result.*
- For both the Village committee and the D-Washe
- What Kind of assistance in your opinion would be most effective in attaining this goal? Please explain in detail

Annex 9.6: Focus Group Guide

INTRODUCTION

The purpose of this focus group discussion is to gain a broad understanding of the current sanitation situation, progress and key challenges related to the sanitation market development and pro-poor strategies and approaches to improving sanitation coverage. This discussion will be used to ascertain the needs, preferences, capacity and the consumer willingness to pay for a number of identified sanitation and hygiene options for different segments of the community including the elderly and disabled, while identifying the challenges faced by them using the sanitation and hygiene facilities.

It will determine the demand for desirable sanitation products and services, and identify existing and potential communication channels suitable for sanitation marketing.

Guiding Questions

What are the common hygienic practices in the communities?

Which cultural factors can motivate or prevent people from adopting better hygienic practices?

Which institutional factors can motivate or prevent people from adopting better hygienic practices?

Which economic factors can motivate people to adopt safe hygienic practices and build on them?

Which environmental factors can motivate people to adopt safe hygienic practices and build on them?

Which psycho-social factors can motivate people to adopt safe hygienic practices and build on them?

Which educational factors can motivate people to adopt safe hygienic practices and build on them?

Date:

Moderator:

Topic

Coordinator

Time

Introduction

Current situation

Break

Local Sanitation and Hygiene Market

Annex 9.7 – LIST OF FOCUS GROUP DISCUSSIONS (FGD) PARTICIPANTS

BWEMBYA VILLAGE – KAPONGOLO WARD, LUKASHYA – KASAMA

NAME

CELL NO.

- | | |
|--------------------------------------|-------------|
| 1. FLORENCE MULENGA MUBANGA KASAKULA | 0973 048833 |
| 2. MAUREEN CHONGO | 0968 232406 |
| 3. LISTER KAKULA | |
| 4. GLADYS KAYULA | |
| 5. SYLVIA MWILA | |
| 6. CATHERINE CHILESHE | |
| 7. GERTRUDE CHILESHE | 0973 048833 |

MWANGO VILLAGE, CHUMBA WARD, LUKASHYA CONST', KASAMA

1. MONICA MUBANGA
2. HELLEN CHUNGULO
3. PHOEBEMWENYA
4. MARY MAPALO
5. GRACE CHILESHE
6. JOYCE CHANDA
7. LUCY SIWALE

KASENGA WARD, MUTALE MWAMBA VILLAGE TEAM, KASAMA

1. JOHN NKOLE MWAMBA (HEADMAN) 0979 709246
2. NKOLE MWILA 0978317125
3. EVARISTO CHILUFYA MULENGA 0972 083842
4. JUSTINE KABILA NDOTI (SECRETARY) 0962 602731
5. EMMANUEL MULENGA 0962 257841

ANDELE CHAKAILA VILLAGE, KASAMA

1. MULENGA CHILESHE (HEADMAN)
2. THOMAS CHISALA (NHC CHAIRMAN)
3. JOSEPH MULENGA
4. PERCY MWAMBA CHISELA
5. JOSEPHAT MULENGA 0976 011567

MWASHYA VILLAGE, KASAMA

1. JAMES MWANSA (MULOBOLA CENTRE)
2. GABRIEL ANGA KONE VILLAGE
3. KATONGO RICHARD 0973 69809 (MISANGWA VILLAGE)
4. CHARLES MUMA KASONDE MWAMBA VILLAGE
5. MORGAN BWALYA KASHESHE VILLAGE
6. JOSEPH MWANGO 0975 074110 (CHUMBA WARD - CHITALA VILLAGE)
7. CHRISTINA M. SATA
8. ALICE CHOMBA MWASHA VILLAGE
9. DICKSON MULENGA 0976 778908 (KASAKULA VILLAGE)
10. MOSES KASONDE 0977 336208 (KABWIBWI VILLAGE)
11. BONIFACE CHISHIMBA 0978 403221 (MWASHA VILLAGE)
12. JUSTIN KATONGO 0978928186 (ANDELE VILLAGE)
13. TRESPHORD MUMBI MALANDA VILLAGE
14. HENDRICK MULENGA 0976 894802 (LUNKA VILLAGE)
15. BENJAMIN CHISHIMBA 0972 086280 (MWASHA VILLAGE)
16. KENNEDY KAPEYA CHILUFYA WARD
17. MULENGE EVARISTO KABOSHA VILLAGE
18. MUBANGA DAVIS 0962 373721 (MULOBOLA CENTRE)
19. JONAS MULENGA SANJA VILLAGE
20. MUSONDA JOSEPH 0975 015487 (KABWIBWI VILLAGE)
21. EMMANUEL CHILESHE 0973 694404 (NTUMPA VILLAGE)
22. CHAMA EMMANUEL CHANDA 0975 577020

MUNGWI – CHAMBESHI WARD (FOCUS GROUP MEMBERS)

- | NAME | CELL NO. |
|---------------------------|-----------------|
| 1. SIMON CHIMFWEBE | 0972 68433 |
| 2. ELIZA MUSONDA | |
| 3. EVARISTO MWAMBA | |
| 4. BWALYA CHIKWANDA | 0973908109 |
| 5. MARY BWALYA | |
| 6. CRISPIN MULENGA CHOKWE | |

MUNGWI, MALOLE – FUBE WARD (COMMUNITY HEALTH CARE FOUNDATION)

- | NAME | CELL NO. |
|-------------|-----------------|
|-------------|-----------------|

1. GEORGE MUNYAMA - EXEC. DIRECTOR, COMMUNITY BASED CARE FOUNDATION
0978 287631
2. ANGELA KAOMA – MID-WIFE; IN CHARGE, MALOLE RURAL HEALTH CENTRE -
0979534759
3. KENNEDY MWAMBA - 0978 424660
4. MWENYA BENSON - TEACHER, ST. JOHN'S SCHOOL -
0977 565204
5. VICTOR MULENGA – TEACHER, ST. JOSEPH'S SCHOOL 0979
534776
6. BOWA DAVISON – SUPERVISOR, SAVINGS & INTERNAL LENDINGS IN THE
COMMUNITY- 0979 534775
7. EVARISTO CHANDA – COMMITEEE MEMBER 0973411455
8. ROBERT SANDONGO (COUNCILLOR FUBE WARD)
0973715240

IYAYA WARD, KASENGA VILLAGE, MUNGWI DISTRICT

1. DAMIANO CHANDA
2. CASIUS BWALYA
3. ROBERT CHILUFYA
4. GEORGE BWALYA 0953 556289
5. EDITH MUKUKA
6. FRANCIS MULENGA
7. GEORGE KAPAMBWE
8. DONALD MWANGO
9. DANIEL MULENGA MUKUKA 0977 198800

NGULULA WARD, KAMINA VILLAGES, MUNGWI

1. MULENGA MWANSA
2. MARYTENDEYA 0973 158153
3. CECILIA MULENGA 0971 681286
4. VERONICA MWALE
5. JULIET NAKAWALA
6. DANIEL BWALYA 0971 700086
7. MOSES MUKUKA 0976 9182 79
8. PATRICE BWALYA 0978 958750

LUWINGU DISTRICT COUNCIL

1. SOLOMON MBEWE - SNV KASAMA
2. RONALD ZULU - COUNCIL SECRETARY
3. CHANSA MWILA - DISTRICT ADMINISTRATION OFFICER
4. BEN KAMANGA - TREASURER
5. DAVID MBULO - PLANNER
6. WESLEY SIMBAO - PROCUREMENT OFFICER

SOKO VILLAGE, MUFILI WARD, LUWINGU

1. CHONGO GODFREY - 0976 386684
2. EILIZABETH CHONGO - 1978757557
3. JOSEPHINE BWALYA
4. THERESA CHINAKILA

5. HARRIET MWAPE
6. HELLEN CHILESHE
7. JULIEN BWALYA
8. FEBIAN CHONGO
9. AMMY KEMBE
10. DANNICAN CHILISHE (HEADMAN)
11. EMMIS MATANDIKO
12. CRISPIN HAMHIBA(SAG)

IPUSUKILO WARD, LUWINGU

1. SAMUEL CHIKUNGU 0979 475754 (HEAD TEACHER, IPUSUKILO SCHL)
2. SR. BEATRICE KALOBWE 0979 092887
3. STELLA KOMBE (KAWIMBE VILLAGE)
4. ALEX MAKUMBA 0975 486527 (CHUSHI VILLAGE)

MULALASHI WARD, LUWINGU

1. CHRISTOPHER KAMBOBE 0976 102345 (HEADMAN)
2. EMMANUEL CHAMDE (PAULO MALICHANI VILLAGE/MALAILA WARD)
3. ELIZABETH MWANSA
4. JOSEPH CHANDA (MWILYE VILLAGE)
5. MULENGA EDWARD (COMMUNITY HEALTH WORKER, MWILYE VILLAGE)
6. TOBIAS MWAMBA (NAOMI MULENGA)
7. SHADERICK BWEMBYA
8. RICHARD MUSONDA 0979534180

KAMPEMBA WARD, CHEBELE VILLAGE, LUWINGU

1. STEVEN CHOMBA
2. DAVIES NDEMALE 0973 177710
3. MATHEWS NDEMALE 0976 1991378 (NHC CHAIRPERSON)
4. PATRICK CHISHALA
5. MARTIN CHISHALA
6. BEAUTY MWILA
7. MERCY CHITOSHI

KABAMBA VILLAGE – NCHELENGE WARD, MPOROKOSO

1. KABAMBA RAPHAEL (HEADMAN)
2. SELEMANI MANUEL
3. ABDON SIKAZWE VILLAGE SECRETARY
4. MOFFAT MUSONDA 0978 651265
5. JOSEPH KABAMBA
6. DANIEL MUSESHE 0978 359219 (VILLAGE COMMITTEE)
7. ALICE MUSONDA 0976 547506

MALAILA WARD (COSMAS MULENGA VILLAGE), MPOROKOSO

1. COSMAS MULENGA (HEADMAN)
2. MARY CHISHA
3. EUGENIA MULENGA
4. CHARLES CHELLA 0976 681218
5. DAVID BWALYA

CHIBANDA VILLAGE, LUNTE WARD, MPOROKOSO DISTRICT

1. JOHN CHIBANDA (HEADMAN)
2. CHONGO SYDNEY
3. REGGIE NSHINGA
4. CHONGO ANTHONY 0979 221562
5. MAGGIE MULENGA
6. MWILA KELLY
7. PRISCA MUKUPA 0978 649688

CHIKWEMBE VILLAGE, LUBUSHI WARD, MPOROKOSO DISTRICT

1. KAMFWA JOSEPH 0962 715136 (SECRETARY)
2. PERINO CHAPEWA (HEADWOMAN'S HUSBAND)
3. BOAZ KABWE 0973 169578
4. PENTHIAS MULENGA 0961 102769

MPOROKOSO SPECIAL SCHOOL FOR THE VISUALLY IMPAIRED

1. CINDY MULENGA – NDALAMA (SENIOR TEACHER)
2. ANDREW MUTALE (DEPUTY HEAD/ACTING HEAD)

Annex 9.8 – RESPONSES TO FOCUS GROUP QUESTIONS

QUESTIONS	KASAMA
1. What are the common hygienic practices in the communities?	<ul style="list-style-type: none"> • Most people have inadequate latrines, grass walls with no roof as was observed when administering questionnaires. <i>'This type of latrine offers no privacy and is not safe leading to OD during the different seasons of the year.'</i> Female respondent- Mwango Village, Lukasha constituency <i>'basically the practice of washing hands is non-existent '</i> Female respondent -Mwango Village, Chumba Ward
2. Which cultural factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • Most respondents showed they preferred latrines that did not require them to sit, as can be seen in Figure 4. <i>'It is considered unclean to share a toilet seat with other people.'</i>, Chanda Village, Chilunga Ward <i>'Practicing OD is good for the vegetation'</i>Chanda Village, Chilunga Ward
3. Which institutional factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • The motivating factors cited by all groups in this regard were Provision of sanitation resources. It was stated that systems which are manageable and do not make excessive demands on resources of the community could contribute towards making people adopt safe hygienic practices. <i>'Source of income is seasonal, it would be helpful if institutions could meet us half way in terms of costs.'</i>Bwembya Village, Kapongolo ward • Poor construction of latrines. Either the logs would be too short or the wrong type. Shortening the life span of the latrine. Training the target group how to construct adequate latrines and where to find the needed locally available materials to construct them could motivate change in behaviour.
4. Which economic factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • All farmers rely on a seasonal income received after harvest. All participants agreed that if the prices of needed materials such as cement were reduced through subsidies, they might be motivated to acquire safe and improved latrines. <i>'A different source of income would increase their disposable income, if a different way of earning money were to be introduced that would solve the problem'</i>
5. Which environmental factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • Reasons for the inadequate latrine's popularity are as follows: <ul style="list-style-type: none"> ➢ Heavy rains. These erode the soil weakening the structure especially when there is no roof. Introducing designs can last long at no cost would be welcome. This is one of the major reasons they choose to have inadequate latrines. They try to avoid the amount of work and energy needed to build them for them to collapse after a year. <i>'If they can show us designs that can withstand the rain and teach us how to make them we would definitely change as long as we are not required to spend any money'</i> Male respondent- Bwembya Village, Kapongolo Ward.
6. Which psycho-social factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • factors that could motivate people to adopt safe improved hygienic practices as cited by all participants, included improvement of living standards, availability of basic needs and poverty alleviation . <i>'most of the people in the target area have not used any cement in their houses, expecting them to buy cent for a latrine would be hard for them to comprehend.'</i> Male respondent- ChilongoshiVillage ,Kasenga Ward.

<p>7. Which educational factors can motivate people to adopt safe improved hygienic practices?</p>	<ul style="list-style-type: none"> • There was a consensus across all the groups that, unhygienic practices, certain cultural beliefs in relation to hygiene, fears and perceptions of hygienic practices would have to be changed through raising awareness and education. It was indicated that sanitation programmes should change long-held beliefs through mentioning the unmentionable; equally address the needs, preferences and behaviours respondents in different segments.
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QUESTIONS	LUWINGU
<p>1. What are the common hygienic practices in the communities?</p>	<p>Survey respondents cited: <i>"Lack of adequate sanitation systems which result in practicing OD in most areas"</i> survey respondents <i>"absence of hand washing facilities"</i></p>
<p>2. Which cultural factors can motivate people to adopt safe improved hygienic practices?</p>	<p><i>"It is considered unclean to share a toilet seat with other people"</i> survey respondents, Luwingu</p>
<p>3. Which institutional factors can motivate people to adopt safe improved hygienic practices?</p>	<p>sample participants noted during Focus Group Discussions: Survey respondents cited collaboration, networking and partnerships among stakeholders. <i>"Work with local authorities to administer program – chiefs/headmen; councillors and the like. Also use existing structures to communicate and enforce messages/programs – chiefs, councils and churches."</i> Technocrats, Workshop, Luwingu</p>
<p>4. Which economic factors can motivate people to adopt safe improved hygienic practices?</p>	<p>survey participants noted: De-motivating factors towards adoption of safe sanitation and hygienic practices include finances, resources (building materials) and high poverty levels. <i>"Sanitation Consumer study being undertaken by SNV complements Council efforts – Council lack resources to do such projects, reach far-flung areas. Therefore, such projects produce measurable results for planning and implementation of programs"</i> Council Secretary, Luwingu District Council <i>"Reality on the ground is that villagers in Luwingu would find it hard to afford the costs of various sanitation systems options due to high poverty levels in the area (whole Province)"</i> Council Secretary, Luwingu District Council <i>"The cost of K600 may seem small, but it is a large amount for a poor, blind villager who may not even have support e.g. Children"</i> Trigger Champions, Workshop – Luwingu <i>"Affordability of sanitation options is a big challenge for most people and especially for disabled heads of households on their own. Some people struggle to have even a simple basic latrine; what more an improved one?"</i> Trigger Champions,</p>
<p>5. Which environmental factors can motivate people to adopt safe improved hygienic practices?</p>	<p>Survey participants noted that availability of water was a challenge towards adoption of safe sanitation and hygienic practices. Access to water supply sources (e.g. tap running water, well, bore-holes, river) were said to be de-motivating factors for adoption of safe sanitation systems and hygienic</p>

	<p>practices.</p> <p><i>"Current sanitation situation is pathetic! Chambeshi water and sewerage company has done very little to install/maintain a workable sewer system even in Luwingu Central Towns (peri-urban). As a result, about 95% of households have resorted to traditional latrines – just like the ones in far-flung villages: mud or grass structures, some with no roofs. 5% have flush toilets. This case therefore, sharply contradicts the widely held notion that most peri-urban households have flushable toilets or VIPs. VIPs are non-existent here. "</i> Local government official, Luwingu District</p>
6. Which psycho-social factors can motivate people to adopt safe improved hygienic practices?	
7. Which educational factors can motivate people to adopt safe improved hygienic practices?	<p>survey respondents commented:</p> <p>Motivating factors noted by survey participants towards adoption of safe sanitation and hygienic practices include training, sensitization, and mobilization.</p> <p><i>"We need SNV team to come to our villages to conduct training sessions on these 'informed choices'. Our people may listen to you than to us who come from those communities. Other trigger champions suggested through themselves, headmen, church gatherings, village gatherings organized by champions to be addressed by SNV staff/consultants, train champions who in turn train villagers, encourage village literacy programs to make information dissemination easier"</i></p> <p><i>"There is need for a strategy, to do a pilot with a few selected households so that the community observes how it works out"</i> Technocrats, Workshop, Luwingu</p>

QUESTIONS	MPOROKOSO
1. What are the common hygienic practices in the communities?	<p>Survey respondents cited:</p> <p><i>"Lack of adequate sanitation systems which result in practicing OD in most areas"</i> survey respondents</p> <p><i>"absence of hand washing facilities"</i></p>
2. Which cultural factors can motivate people to adopt safe improved hygienic practices?	<i>"It is considered unclean to share a toilet seat with other people"</i> survey respondents, Mporokoso
3. Which institutional factors can motivate people to adopt safe improved hygienic practices?	<p>The institutional factors cited by survey respondents were collaboration, networking and partnerships among stakeholders. Some participants commented:</p> <p><i>"To adopt and maintain safe sanitation and hygiene practices we need assistance from well-wishers"</i> Staff Members – Mporokoso Special School for the Visually Impaired</p>
4. Which economic factors can motivate people to adopt safe improved	<i>"If all pupils paid school fees, it would be easier! But with so few paying, it is a big challenge, so we will need assistance from well wishers."</i> Male Acting Head, Mporokoso Special

hygienic practices?	School for the Visually Impaired <i>"Not all people in communities have the same means"</i> Male Trigger Champion – Workshop, Mporokoso
5. Which environmental factors can motivate people to adopt safe improved hygienic practices?	Survey participants noted that availability of water was a challenge towards adoption of safe sanitation and hygienic practices. Access to water supply sources (e.g. tap running water, well, bore-holes, river) were said to be de-motivating factors for adoption of safe sanitation systems and hygienic practices. Staff members for the Special School for the Visually Impaired in Mporokoso noted: <i>"Water supply is a real challenge, not available the whole day. What is needed is an overhaul of the current system – especially replacing corroded pipes".</i> <i>"Hand washing facilities are placed in front of classrooms, as well as near water-borne toilets. Pupils are also encouraged to use the hand pump. (Girls seem better organized than boys are in that regard. Soap is used for hand washing)"</i> Senior Female Teacher (Mporokoso Special School for the Visually Impaired) <i>"People in sandy-soil areas can build on/near anthills where structures last longer. Pits must not be too wide – allow room for logs across to form firmer support and avoid collapsing into the pit when logs are too short. "</i> Trigger Champion - Workshop, Mporokoso
6. Which psycho-social factors can motivate people to adopt safe improved hygienic practices?	<i>"If we are present, we can manage to build VIPs, so can others in our communities. We must lead by practical examples "</i> Trigger Champion - Workshop, Mporokoso
7. Which educational factors can motivate people to adopt safe improved hygienic practices?	<i>"we are not saying all must have VIPs, what is important is to 'persuade' all to accepting change to improved sanitation types – choose from options, depending on preference and affordability of individual households. Bear in mind, it is not an overnight success to effect such change in society. It has been achieved over a period of time and the process is still ongoing, so we must persist, till we gradually succeed!"</i> Trigger Champion - Workshop, Mporokoso <i>"Affordability hurdle towards VIPs can be overcome through training, i.e. very clear presentation on materials required, costs – this way, target communities will make informed choices; and may realize that they can after all afford even the VIP. Champions must be in the forefront setting an example for the community to emulate – be persuaded that it can be done. "</i> Champions, Workshop, Mporokoso

QUESTIONS	MUNGWI
1. What are the common hygienic practices in the communities?	<ul style="list-style-type: none"> About 50% of the people according to the Fube ward councillor practice OD. Others have inadequate latrines, grass walls with no roof and adequate ones made from mud and burnt bricks. However a committee has been put in place that has been

	carrying out sensitization campaigns to help people understand the importance of latrines. (Audio 127)
2. Which cultural factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • Most respondents stated that a latrine that required them to squat was preferred to one that required them to do so.(diagram 'preference/Households'). it was stated that some of the cultural challenges were: <ul style="list-style-type: none"> ➢ <i>They considered unclean to share a toilet seat with other people.</i> ➢ <i>They thought it was inappropriate to use the same latrine as their daughter in-law</i> ➢ <i>Their children should not see them enter the latrine</i> <p>All of these contributed to their cultural restrains. Strong sensitization was required to tackle such issues.</p>
3. Which institutional factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • Provision of sanitation resources was the motivating factors cited by all groups in this regard were. It was stated that systems which are manageable and do not make excessive demands on resources of the community could contribute towards making people adopt safe hygienic practices. 'Source of income is seasonal; it would be helpful if institutions could meet us half way in terms of costs.' Bwembya Village, Kapongolo ward • Poor construction of latrines. Either the logs would be too short or the wrong type. Shortening the life span of the latrine. Training the target how to construct adequate latrines and where to find the needed locally available materials to construct them could motivate change in behaviour. (audio 116) • It was noted that training them to construct the improved latrines with locally available materials would be more effective than if they were expected to do so with purchased materials.
4. Which economic factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • All farmers rely on a seasonal income received after harvest. All participants agreed that if the prices of needed materials such as cement were reduced through subsidies, they might be motivated to acquire safe and improved latrines. 'A different source of income would increase their disposable income, if a different way of earning money were to be introduced that would solve the problem'
5. Which environmental factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • Reasons for the inadequate latrine's popularity are as follows: <ul style="list-style-type: none"> ➢ Sand soil. Most of the area in Mungwi is covered in soil which makes the earth weak to support latrines. The rain erodes the soil or sinks the latrine weakening the structure especially when there is no roof. Introducing designs can last long at no cost would be welcome. This is one of the major reasons they choose to have inadequate latrines. They try to avoid the amount of work and energy needed to build them for them to collapse after a year. 'If they can show us designs that can withstand the rain and teach us how to make them we would definitely change as long as we are not required to spend any money' Male respondent- Bwembya Village, Kapongolo Ward.
6. Which psycho-social factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • factors that could motivate people to adopt safe improved hygienic practices as cited by all participants, included improvement of living standards, availability of basic needs and poverty alleviation . 'Most of the people in the target area have not used any cement in their houses, expecting them to buy cent for a latrine

	<i>would be hard for them to comprehend.'</i> Male respondent-Chilongoshi Village, Kasenga Ward.
7. Which educational factors can motivate people to adopt safe improved hygienic practices?	<ul style="list-style-type: none"> • There was a consensus across all the groups that, unhygienic practices, certain cultural beliefs in relation to hygiene, fears and perceptions of hygienic practices would have to be changed through raising awareness and education. It was indicated that sanitation programmes should change long-held beliefs through mentioning the unmentionable; equally address the needs, preferences and behaviours respondents in different segments.