Republic of Zambia
Ministry of Local Government and Housing

DRAFT

Sanitation and Hygiene Component of the National Rural Water Supply and Sanitation Programme (2006-2015), Zambia

Assessment of Current Rural Sanitation and Hygiene Situation and Interventions

December 2008
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<th>Full Form</th>
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<tr>
<td>ADC</td>
<td>Area Development Committee</td>
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<td>AfDB</td>
<td>African Development Bank</td>
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<td>CBO</td>
<td>Community-Based Organisation</td>
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<td>CCF</td>
<td>Christian Children’s Fund</td>
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<td>CHW</td>
<td>Community Health Worker</td>
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<td>CLTS</td>
<td>Community Led Total Sanitation</td>
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<td>CMMU</td>
<td>Community Management and Monitoring Unit</td>
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<td>CP</td>
<td>Cooperating Partner</td>
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<td>CSO</td>
<td>Central Statistics Office</td>
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<tr>
<td>Danida</td>
<td>Danish International Development Assistance</td>
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<td>DAPP</td>
<td>Development from People to People</td>
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<tr>
<td>DDCC</td>
<td>District Development Coordination Committee</td>
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<tr>
<td>DISS</td>
<td>Department of Infrastructure and Support Services</td>
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<td>DLGA</td>
<td>Department of Local Government Administration</td>
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<tr>
<td>D-WASHE</td>
<td>District WASHE Committee</td>
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<tr>
<td>EHO</td>
<td>Environmental Health Officer</td>
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<td>EHT</td>
<td>Environmental Health Technician</td>
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<td>FBO</td>
<td>Faith-Based Organisation</td>
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<td>FNDP</td>
<td>Fifth National Development Plan</td>
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<td>GDP</td>
<td>Gross National Product</td>
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<tr>
<td>GRZ</td>
<td>Government of the Republic of Zambia</td>
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<td>HH</td>
<td>Household</td>
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<td>HW</td>
<td>Hand Washing</td>
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<tr>
<td>IMS</td>
<td>Information Management System</td>
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<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
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<tr>
<td>KIW</td>
<td>Kreditanstalt für Wiederaufbau, Germany</td>
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<tr>
<td>LA</td>
<td>Local Authority</td>
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<tr>
<td>MACO</td>
<td>Ministry of Agriculture and Cooperatives</td>
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<td>MCDSS</td>
<td>Ministry of Community Development and Social Services</td>
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<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<tr>
<td>MEWD</td>
<td>Ministry of Energy and Water Development</td>
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<td>MLGH</td>
<td>Ministry of Local Government and Housing</td>
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<tr>
<td>MoE</td>
<td>Ministry of Education</td>
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<td>MoFNP</td>
<td>Ministry of Finance and National Planning</td>
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<td>MoH</td>
<td>Ministry of Health</td>
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<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
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<tr>
<td>NHC</td>
<td>Neighbourhood Health Committee</td>
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<td>NWASCO</td>
<td>National Water Supply and Sanitation Council</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>ODF</td>
<td>Open Defecation Free</td>
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<td>NRWSSP</td>
<td>National Rural Water Supply and Sanitation Programme</td>
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<tr>
<td>PCDO</td>
<td>Provincial Community Development Officer</td>
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<tr>
<td>PEO</td>
<td>Provincial Education Officer</td>
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<tr>
<td>PHAST</td>
<td>Participatory Hygiene and Sanitation Transformation</td>
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<tr>
<td>PhD</td>
<td>Provincial Health Department</td>
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<tr>
<td>PLGO</td>
<td>Provincial Local Government Officer</td>
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<tr>
<td>PTA</td>
<td>Parents and Teachers Association</td>
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<tr>
<td>P-WASHE</td>
<td>Provincial WASHE Committee</td>
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<tr>
<td>PWO</td>
<td>Provincial Water Affairs Officer</td>
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<tr>
<td>RHC</td>
<td>Rural Health Centre</td>
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<td>RWSS</td>
<td>Rural Water Supply and Sanitation</td>
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<tr>
<td>SARAR</td>
<td>Self esteem, Associative strength, Resourcefulness, Action planning, Responsibility</td>
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<tr>
<td>SHN</td>
<td>School Health and Nutrition (programme)</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<tr>
<td>TBA</td>
<td>Traditional Birth Attendant</td>
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<tr>
<td>TOR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>ToT</td>
<td>Training of Trainers</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
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<tr>
<td>VAG</td>
<td>Village Action Group</td>
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<tr>
<td>VIP</td>
<td>Ventilated Improved Pit latrine</td>
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<tr>
<td>V-WASHE</td>
<td>Village WASHE Committee</td>
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<tr>
<td>WASHE</td>
<td>Water, Sanitation and Hygiene Education</td>
</tr>
<tr>
<td>WATSAN</td>
<td>Water and Sanitation</td>
</tr>
<tr>
<td>WEDC</td>
<td>Water Engineering and Development Centre, Loughborough University</td>
</tr>
<tr>
<td>WSP</td>
<td>Water and Sanitation Programme (same administration as World Bank)</td>
</tr>
<tr>
<td>ZRCS</td>
<td>Zambian Red Cross Society</td>
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<td>ZMK</td>
<td>Zambian Kwacha</td>
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Executive Summary

The sanitation component of the National Rural Water Supply and Sanitation Programme, launched in 2007, was not fully developed, which was acknowledged by various sector stakeholders. The Ministry of Local Government and Housing (MLGH), in cooperation with the National Working Group on Sanitation and Hygiene, therefore engaged consultants in the further development of this component.

This report includes an assessment of the current rural sanitation and hygiene situation and a review of rural sanitation and hygiene interventions. It is based on research carried out in nine rural districts and two municipalities as well as interviews with key stakeholders in Lusaka and review of a number of documents. The research included interviews at provincial, district and sub-district levels, with four wards visited in each district/ municipalities. At sub-district level information was collected from EHTs, latrine builders, school managements and pupils, village key informants and village women and men. Both qualitative and quantitative research methods were used.

0.1 Legal, Policy and Planning Framework

The Public Health Act, its related Regulations and the Local Government Act complement each other in placing the responsibility for sanitation and hygiene with Local Authorities and include specific stipulations of these responsibilities. The Public Health (Drainage and Latrine) Regulations thus state that all new and rehabilitated domestic and public buildings must be provided with proper and sufficient latrine accommodation. The Regulations provide specific requirements for the ratio of latrines to school girls and boys. The Public Health Act and its Regulations give the Local Authorities the authority and duty to notify offenders and, if necessary, take them to court. The Act and Regulations do, however, not include definitions for proper or adequate latrine accommodation.

The Environmental Protection and Pollution Control Act prescribes, as one of the functions and powers of the Environmental Council, that it should give specific and general directions to District Councils in relation to collection and disposal of waste. However, the directions included in the Act and the related Regulations only relate to areas where solid waste collection systems and sewage systems are established, systems that currently do not exist in Zambia’s rural areas.

The Water and Sanitation Act is also focused on urban areas and does not specifically address rural sanitation issues.

It can thus be concluded that some of the legal framework is in place, as both domestic and public buildings are required to have proper and sufficient latrines, but that there are some deficiencies in defining the standards required and also in enforcing the legal requirements. The legal framework for disposal of solid waste and waste water is focused on urban areas and does not consider the situation in rural areas.

The National Water Policy emphasizes the importance of access to safe water supply and sanitation, but is inadequate in addressing rural sanitation. It has e.g. no overall definition of adequate rural sanitation facilities, no guidance related to use of subsidies or the roles and responsibilities in relation to rural sanitation and hygiene promotion. However, the NRWSSP does include definitions of adequate latrines and other sanitary facilities.

The FNDP does not have a separate budget line for rural sanitation, as this is included under the overall budget line for rural water supply and sanitation. However, the NRWSSP launched in 2007 has a specific budget for its Sanitation Component, namely an average annual budget of ZMK 12.4 billion.

The FNDP includes other programmes and budgets of relevance to the Sanitation and Hygiene Component of the NRWSSP, namely the Environmental Health Programme (average annual budget of ZMK 8 billion), the Health Education and Promotion Programme (average annual budget of ZMK 0.25
billion) and the Infrastructure Development Component of the Education and Skills Development Programme (average annual budget of ZMK 333 billion for all educational infrastructure).

A number of relevant sanitation and hygiene strategies and manuals are available, including the National Sanitation Strategy for Peri-Urban and Rural Areas, WASHE modules and manuals and strategies and manuals developed in connection with Area-Based RWSS Programmes and NGO projects.

### 0.2 Sanitation and Hygiene in Rural Villages

The following is based on research in nine rural districts and two municipalities.

#### Latrines and Open Defecation

#### Provincial and District Information

The provincial institutions met did not have an overview of the latrine coverage or the general sanitation situation in their provinces, with representatives in one province mentioning that the districts had the detailed information in this respect.

A few of the D-WASHE committees provided coverage figures for household latrines, but the majority were not able to provide this information. Some D-WASHEs reported significant improvements in household latrine coverage in areas with interventions, e.g. villages in Choma Municipality where UNICEF had supported the implementation of the CLTS programme. Several D-WASHEs reported that the sanitation situation varied significantly within their districts, dependent on whether the soil structure made it easy to construct durable latrines (not sandy, no rocks etc.), cultural barriers to use/sharing of latrines, level of awareness etc.

#### Village-level Information

The questionnaire survey among 522 households showed that 78% of households had a latrine of some type, ranging from 96% in Choma, Kabompo and Samfya to 10% in Sinazongwe. The most common type of latrine was clearly the traditional pit latrine with a not smooth floor surface. 45% of survey households thus had this type of latrine, followed by 13% having a traditional latrine with a smooth surface floor surface and 11% having a pit latrine with a sanplat or another smooth concrete platform and 8% of all households having a VIP latrine. Only a few households in Lufwanyama had pour-flush latrines. Using the NRWSSP’s definitions, 33% of households had adequate latrines.

The two municipalities included in the survey had the same level of latrine coverage as three of the rural districts and had a lower proportion of households with VIP latrines or pit latrines with sanplats than in some of the rural districts. The household survey thus showed that the latrine coverage and the type of latrine constructed was not related to whether the area was a municipality or a rural district. This finding should however be used with some caution, as only households in two municipalities were included in the survey.

The main reasons given for households to construct latrines were: to avoid going to the bush/ walking long distances, for privacy, for convenience, because of awareness campaigns or having been told to construct latrines, because of subsidies and/or to reduce diseases.

97% of households with latrines said they used their latrines regularly, although only 4% of all respondents had a latrine by their field side. Generally latrines were said to be used for their intended purposes, although there were a few examples of households who had converted their latrines into grain storage places. Most children were said to start using latrines from the ages of 3-5 years. It was indicated as a problem for seriously ill people to use the latrines as they were too weak to squat.

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The cultural barrier to sharing latrines with in-laws was mentioned by several village key informants, while according to several other informants there were no cultural issues related to latrine use in their
areas or they had reduced over time. Some households did, however, have two latrines either 1) one for all female members and one for all male members or 2) one for children and one for adults.

Most households had constructed their own latrines, but with some variations among districts/ municipalities. A higher proportion of households in Isoka, Lufwanyama and Chongwe had used local masons to build latrines than was the case in other districts/ municipalities.

78% of respondents had paid less than ZMK 100,000 for their latrine.

Informants in many survey areas mentioned collapsing latrines during the rainy season as a problem, especially in the districts of Kaoma, Kabompo and Sinazongwe but also in villages in some of the other districts and municipalities. The main and often only reason given for collapsing latrines was that the area was sandy. Several mentioned that most households could not afford to buy cement to line latrine.

55% of households with own latrines were satisfied, very satisfied or extremely satisfied with their latrines, while 22% were somewhat satisfied and 23% not at all satisfied. Slightly more women than men were not at all satisfied. During village FGDs and village key informant interviews, the following main reasons for dissatisfaction were mentioned: the short period that many latrines could be used because of their frequent collapse, the lack of safety and instability of latrines.

Hardly any survey households used human excreta as fertilizer, the main reasons being this was not considered safe and they did not like to do so. Some of the statements against use of human excreta as fertilizer were very strong, with participants in one FGD in Kabompo saying “We can’t use faeces as fertilizer. Do you want us to call cholera or disease to our door steps? No way! It’s not safe”. Others gave as reasons that it was unhygienic, disgusting and/ or a taboo. Some people in Mumbwa were, however, planting banana trees on old latrine pits.

Households without Latrines

The far majority of survey households without latrines used the bush (68% of adults and 71% of children), followed by a neighbour’s latrine (21% of adults and 17% of children). In some villages, households without latrines used the latrines at the school or the church. Some people used the bush at least temporarily when their latrines were full or had collapsed. In Mumbwa, some women staying with in-laws were reported to go to the bush to avoid meeting the in-laws around the latrine.

Although some households without latrines used their neighbour’s latrines, sharing of latrines among two or several households did not appear common. Reasons given were that houses were far apart, the chief or headman had given a directive that every household should have its own latrine and there was too much bush around so it was easier to use this than ask a neighbour.

Some households were said to dig a small hole behind their house to bury their faeces. This was said to be done especially by children and/ or at night time. Some used the stream or river for defecation.

53% of respondents without latrines had plans to build a latrine. The main reasons for having no such plans were that they could not afford this and that people were tired of building latrines which always collapsed. Other villagers had had their latrines washed away by floods.

Hygiene Practices

Provincial and District Information

Some of the provincial institutions provided information on the hygiene situation in their provinces, while others did not seem to have this type of information. The lack of water was mentioned as a main reason why a number of people did not always wash hands at critical times. Some reported improved hygiene practices as a result of sensitization activities carried out by various projects and in the Copperbelt by the mining social services.

Some D-WASHEs reported there had been improvements in the hygiene practices due to the hygiene education carried out by the D-WASHE and other institutions, with people now generally using the pouring method for hand-washing. Several other D-WASHEs reported that people’s hygiene practices
were not good, with many people either not washing hands or doing so from the same dish. In one district hand washing was said to be done well in schools but not at household level. Shortage of water was often cited as the main reason why people did not (always) wash hands at critical times. Low levels of knowledge and resistance to behaviour change were other reasons mentioned.

Village-level Information

Hand Washing

68% of all respondents in the household questionnaire survey had hand washing facilities, varying from 90% in Kaoma to 33% in Mansa. However, only half of households with hand washing facilities were observed to have water available at these. 32% of hand washing facilities were placed near cooking areas, 22% near to latrines and 21% near water storage containers. During FGDs, a few mentioned they used the “pouring method” with a cup for hand washing, but this did not seem common.

Secret “voting” during village FGDs and the household questionnaire survey were used to get information on people’s hand washing practices. These showed that the far majority of both women and men always washed hands before eating, while far less did the same after defecation (according to the questionnaire survey 63% of all respondents and according to the FGD voting 52% of men and 56% of women). Around 50% of women in the household survey and in the FGDs said they always washed hands before preparing food and before feeding children, while only 34% of women in the FGDs washed hands after helping children defecate (or rather cleaning them or helping them clean themselves after defecation) and 43% never washing hands at this time. The fact that 56% of women in the FGDs always washed their hands after they themselves had used the latrines, but only 34% did the same after helping their children clearly indicates that children’s faeces were considered less “dangerous” than those of adults.

Lack of water was given as the main reason for not always washing hands at critical times. Another reason was that people using the bush did not carry water for hand washing.

Very few households used soap for hand washing, as they could not afford to buy this and/ or it was not available in the village. Very few used ash for hand washing.

Bath Shelters

88% of all questionnaire survey households had bath shelters, varying from 98% in Kaoma to 38% in Sinazongwe. Only 20% of bath shelters had proper drainage or soak-away pits for waste water. Nearly all households used their bath shelters regularly. More than half of those that did not use them regularly gave as reason that there was not enough privacy, while others did not like the type of bath shelter. Most people with no bath shelters were said to bath behind their houses at night, while a few bathed in the shrub/ bush, in springs/lakes/rivers or in latrines.

Nearly all people were said to take baths every day, although it was difficult in some areas because of water shortage.

Storage and Treatment of Water

95% of households in the questionnaire survey normally stored water at their house, with some variations among districts/ municipalities. During the survey, 76% of the households observed to have water storage containers/ buckets had covered them with lids or similar. A few village key informants indicated that water was not handled in a hygienic way because “it is reused so much”.

16% of survey household said they always treated water before using it for drinking and cooking, ranging from 44% in Isoka to 0% in Kaoma. The far majority treated their water by adding chlorine, while some boiled it. Nearly half treated their water when they had money to buy chlorine while others did so when there were was an epidemic or an alert for an epidemic.

Disposal of Household Waste

Zulu Burrow Limited
58% of survey households disposed of their solid waste in rubbish pits, varying from 92% in Lufwanyama to 17% in Sinazongwe. Others disposed of it in a common dump site or the bush.

85% of survey households threw their waste water outside the house. Participants in some village FGDs indicated that it was common for households to throw their waste water on gardens/ in the field and some threw waste water, especially very dirty waste water, into rubbish pits.

**Cooking Areas**

57% of survey households were observed to have clean cooking areas, varying from 92% in Samfya to 13% in Sinazongwe. Most cooking areas were cleaned daily or twice a day.

54% kept their cooking utensils on a dish rack outside the house, while 26% had them on dish racks inside the house.

**Mosquito Nets**

30% of adults in the questionnaire households always used mosquito nets, varying from 58% in Samfya to 2% in Sinazongwe. The figures were similar for children.

The far majority of people were reported to use the mosquito nets for the intended purpose, although some people in Kabompo were said to use them as fishing nets. It appeared that most households who had mosquito nets had been provided with these through various programmes, i.e. at no cost.

**Ability and Willingness to Pay**

The village FGDs showed that both women and men gave very low priority to spending any money on constructing new or improving latrines. Most of them were able and willing to provide local materials like sand, mud bricks and poles and also labour for digging pits. Some were willing to make very small cash contributions, but the majority said materials like cement, iron bars and/or sanplats would have to be provided by others.

Some villagers were willing to take out small loans for construction of latrines, if they were on favourable conditions, while others indicated that loans, if any, should be for in-come generating activities.

Some villagers were willing to help vulnerable groups in their village construct latrines, while others saw this as the responsibility of the chief, the headman, the Government or the church.

**Sanitation and Hygiene Related Tasks of Women and Men**

It was clear from the village FGDs that women and girls had the majority of day-to-day tasks in relation to sanitation and hygiene including cleaning the latrine, bath shelters, house and surroundings, washing dishes and clothes, collecting and storing water, organising water for bathing, bathing children and educating children on sanitation and hygiene. Men and boys were mainly responsible for construction of latrines and bath shelters, digging of rubbish pits and making dish racks.

It was only in FGDs in Kabompo district that decision-making in relation to latrines and other sanitation/hygiene practices were mentioned. According to both women and men, such decisions were made together by women and men. This is in contrast to the general statements from all four male FGDs in Sinazongwe, where men were said to make all decisions within the family.

**Village Organisation and Sanitation and Hygiene Promotion**

**Provincial and District Information**

Institutions met in Luapula Province mentioned that sanitation and hygiene promotion sessions arranged by NGOs were mainly attended by women, as women were responsible for hygiene issues.
Men thus rarely attended such sessions. Copperbelt provincial institutions had taken advantage of the Keep Zambia Clean Campaign to spread messages on good hygiene practices.

All D-WASH committees reported some sanitation and hygiene promotion activities in their districts, with some referring to specific projects and approaches used in their districts while others mentioned activities more broadly. Use of participatory methods like PHAST (Participatory Hygiene and Sanitation Transformation) and CLTS (Community Led Total Sanitation) tools were mentioned by several districts. Public meetings and door-to-door activities by volunteers/ hygiene promoters were, according to several of the D-WASH committees, common communication activities or methods. Some also mentioned use of drama and outreach activities by EHTs and Neighbourhood Health Committees.

**Village-level Information**

Villagers clearly considered chiefs and headmen the most important persons in their villages, particularly the headmen as they were closer to people than the chiefs. It varied considerably from district to district and from village to village whether the V-WASH committees were considered important and active in improving the sanitation and hygiene situation in the village (further details below).

57% of respondents in the household survey had received some information on sanitation and hygiene during the last year, with slightly more men than women receiving information. There were significant variations from districts, ranging from 83% of respondents in Mumbwa, Chadiza and Kaoma to 13% in Sinazongwe having received such information.

Respondents did not receive information very often, with 39% receiving information every month, 32% on special occasions and only 18% every week. Frequency in receiving sanitation and hygiene related information was one of the only areas where there was a significant difference between the rural districts and the two municipalities, in that most municipal respondents received information on special occasions, while most rural respondents received this either every month or every week.

The topic on which most respondents had received information was hand washing, followed by disposal of solid waste, different types of latrines and use of mosquito nets. 56% of respondents had received most information on these topics from health staff, while 14% had the V-WASH and 9% the chiefs as their most important source of information. Overall there were only slight differences as to the most important source of information for women and men. There were, however, significant differences among districts/ municipalities and often also between women and men within the same district.

71% were generally satisfied with the information they had received on sanitation and hygiene, varying from 91% in Lufwanyama to 17% in Sinazongwe. Insufficient information was clearly the main reason for dissatisfaction, followed by the need for information on other topics. In line with this, the majority of respondents would like to receive additional information on various sanitation and hygiene related topics. Health staff was clearly the preferred source of information (40%), while the V-WASH came in second (21%) and the Chief third (13%). NGOs, the headman and school teachers were also mentioned by some as important sources for future information.

88% of all respondents preferred to receive information in local languages.

Subsidies for latrines had been provided in some survey villages as part of sanitation promotion activities, in the form of materials or sanplats. However, it was a general complaint that these had only been provided to very few households, which some described as being within a “closed circle”.

### 0.3 Sanitation and Hygiene in Schools

The following is based on research in nine rural districts and two municipalities.

**Latrines and Urinals**
All 44 schools surveyed had latrines, but nearly all schools had too few latrine cubicles. About one third of the schools had less than 20% compliance with the national requirements as stated in the Public Health Regulations with respect to number latrine cubicles for girls and boys, while another third of the schools had a compliance rate of 20-40%. The average compliance rate with the national requirements for the survey schools was 28%. This means that in order to comply with the national requirements, there should be on average four times as many latrines in the survey schools than there was at the time of the research.

The above calculations are related to the total number of pupils in the schools, while most schools had 2 or 3 shifts during a day. The calculation of the access to school latrines based on the average number of pupils per shift showed an average compliance with the national requirements of 56% for girls and 57% for boys. However, if using 2 or 3 shifts without sufficient number of latrine cubicles (or adequately sized pits) the individual pits will fill up faster and the latrine will have to be replaced sooner.

Only four schools had urinals, but no measurements were given so their compliance to the requirements in the Public Health Regulations cannot be assessed.

64% of the schools had VIP latrines for pupils, with a relatively similar proportion of teachers' latrines being VIP latrines. However, other 11% of teachers' were pit latrines with sanplats whereas hardly any latrines for pupils had sanplats. This is in line with information from pupils in some schools that their teachers had better latrines than they had. In 75% of the schools all latrines for pupils functioned, with a relatively similar figure for the teachers' latrines.

A significant proportion of school managements did not consider their latrines suitable for pupils, particularly not for boys and girls below the age of 10 years. Similarly many pupils were not happy with the design of their latrines, main reasons being they were unsafe, had poor ventilation, no doors, too big or too small squat holes. Many girls also complained about the lack of privacy.

Most latrines were cleaned every day by pupils, supervised by teachers or prefects. However, many pupils complained that the school latrines were not clean and had a bad smell. In some schools, there were also complaints that some pupils did not know how to use the latrines properly and in other schools that outside people used the school latrines during week-ends, but did not use them properly.

**Hygiene Practices in Schools**

**Hand Washing**

57% of the survey schools had hand washing facilities, with significant variations among the districts/municipalities. 23% of the 44 schools had only one hand washing facility and 13% of all schools had 2-3 facilities. One or two hand washing facilities for all pupils in even a small school makes it very unlikely that pupils regularly washed their hands. Furthermore, water was only observed at the hand washing facilities in eight schools, i.e. 32% of the schools with hand washing facilities.

Some pupils said they normally washed hands after using the latrines, while a considerable number of pupils said they didn’t wash hands, or only did so sometimes, because of the lack of water, no or not enough hand washing facilities or they had been broken, locked away or stolen. The research team only observed soap to be available in three of the schools, although more school managements said they normally had soap available. The main reasons given for not having soap was that there was not enough money to buy soap and the soap disappeared.

**Water for Drinking and Cleaning**

82% of the survey schools had their water source within the school grounds. Most schools used borehole water and most school managements believed that water from the school's water source was safe for pupils to drink. Only 55% of school managements said there was always had sufficient water for pupils to drink, while 64% said they always had sufficient water available for cleaning.

**Disposal of School Waste**
All except one school disposed of their solid waste in rubbish pits. Most schools also said they disposed of their waste water in an appropriate way, but still with 30% throwing it outside the school grounds.

**Sanitation and Hygiene Education**

The far majority of schools had had sanitation and hygiene education during the last year, with the main topics being personal hygiene and hand washing. The activities were mainly organised by teachers (60%) and health staff. A couple of schools also mentioned NGO staff and D-WASHE members. According to pupils, they mainly received this type of information during classes and some from inspections of latrines and during assemblies/parades. However, in some schools there were not enough teachers for sanitation and hygiene education during classes, so this was only provided during assemblies.

85% of school managements considered their sanitation and hygiene education effective because children had changed their behaviours/ had better hygiene practices.

**Pupil’s Latrine Usage and Hand Washing at Home**

It was a common statement from the pupils from homes with latrines that these were better than the school latrines because they were much cleaner and some girls also mentioned their home latrines had better privacy. Pupils without household latrines used the bush or areas just behind their houses. Many pupils said they washed hands at home before eating and after using the latrine. However, some only washed hands occasionally because they had very little water available.

Some pupils shared their knowledge about sanitation and hygiene with other family members, but several only with young family members as it was not appropriate for them to discuss such matters with adults.

**0.4 Rural Health Centres and EHTs**

**Staffing and Responsibilities**

Only 1 out of 33 EHTs (3%) considered their RHCs adequately staffed, with the majority of EHTs saying they managed the deficit in staffing by working extra hours. The main reason given for the lack of staff was that MoH had not posted the required staff to their RHC, while others contributed this to the remoteness of the RHC and the lack of adequate incentives.

Attending to patients was the most demanding activity for 30% of the EHTs, while only 18% mentioned community mobilisation and sensitisation. Most EHTs had either the traditional ruler or a CBO leader as their key village contact for community mobilisation and sensitisation, while 21% had the Neighbourhood Health Committee as the main contact.

27% of the EHTs had water and sanitation and 21% hygiene education as the main topic for their mobilisation and sensitisation activities. Nearly half of the EHTs used public meetings as their most common media for delivering messages and also considered this the most effective media. 15% considered the village crier the most effective media and another 15% community drama. None of the EHTs considered posters the most effective media although 9% used them.

39% of EHTs considered their main role in construction of latrines to be supervision, while 21% considered it to be monitoring and 18% doing designs. 18% of the RHCs provided some material assistance to latrine construction.

55% of the EHTs in areas with ADCs played a role in the ADCs, while 44% of the EHTs were in contact with the District Council on water and sanitation and 6% on health and hygiene issues.
Disease Patterns

The diseases most commonly attended to in the RHCs were malaria and cough, followed by diarrhoea. When asked about common water and sanitation related diseases, key informants in most villages mentioned the same diseases as the EHTs, namely malaria and diarrhoea, with some also mentioning cholera and dysentery and a few scabies.

Stakeholders

According to EHTs, health associations, farmers groups and women’s associations were the most active CBOs in their areas, with only 9% mentioning water and sanitation committees. 46% of EHTs considered the health associations most engaged in sanitation and hygiene, while 15% believed this to be the water and sanitation committees and 9% the women’s associations.

ADCs had been established in 82% of the RHC catchments where EHTs were interviewed. Around one third of EHTs considered water and sanitation to be a priority for their ADCs, without specifying whether this was mainly water, mainly sanitation or both.

0.5 Private Sector

Availability and Prices of Materials

At the time of survey there was a national shortage of Chilanga Cement affecting the market price of cement. At the same time, there was an international fuel crisis which affected transport prices in general. Hence cement prices in the districts were perceived high by stakeholders.

It is noted that the prices were collected in the major market centres in the districts and that the price a household has to pay in a village will have an added value due to local transport. The added value can vary a lot depending on mode of transport, quality of road and distance from market centre to village. The survey showed that the availability of materials decreased and prices increased with the distance from the bigger distribution centres at District level. Hence less availability and higher price at Ward level. For example in Samfya and Kabompo Districts the price for cement were reported to increase from District to Ward level with 13% and 26%, respectively.

Based on prices collected in the survey districts and municipalities, two price indexes have been calculated, one for cement which is the main product used in low-cost sanitation and the other index for cement, ventilation pipes and roof sheets. The two latter products are mostly relevant for more expensive latrine models like VIP latrines, which are often promoted for school sanitation.

The price index for cement varied from 97% to 117% of the prices in Lusaka, while the combined price index for the three items of cement, vent pipes, iron sheets varied more, namely from 100% to 152% of the prices in Lusaka.

The prices of sand and stones (aggregate) for concrete varied more, as usually it was procured or produced locally and the price depended more on the local transport price (distance, local rate) than where in Zambia it was procured. In some areas there was said to be no sand, only rocks, or the other way round. Then the price for the item may be high due to transport challenges. Alternatively, the mixture of concrete may be changed to suit the available materials, which usually implies increased cement usage/ expenditure.

Availability and Capacity of Local Builders

38% of builders interviewed at ward level had very little experience in latrine building, i.e. had never participated in any official training and had constructed very few latrines. 49% were “medium-skilled” builders with more experience, both in relation to official training and the number of latrines constructed. 13% of the builders had much experience, having constructed substantially more latrines than the other builders interviewed and having been employed to construct VIP latrines at schools or
other institutions. Around half of the builders had experience in construction of school or other institutional latrines, mainly the VIP type.

Most builders had some basic hand tools. However, the toolbox may not have been complete or the tools worn out in some cases.

A large part of the builders claimed to be comfortable building sanplats and VIP latrines without giving evidence of having received adequate training for these types of latrines. Furthermore, photos from survey schools gave numerous examples of poorly constructed latrines, which may be related to lack of proper tools, poor designs or poor supervision, but were of a type that can, and should, be fixed.

Only 2 builders had participated in hygiene promotion training, while some of the others were aware of the importance of good hygiene. From the interviews, it is not possible to establish whether and how they may apply their hygiene knowledge. However, builders having and applying good hygiene knowledge may result in the construction of better-quality latrines.

Around half the builders had given households recommendations on site selection for latrines. However, only a small number mentioned the need for the pit to be dug on an elevated site to prevent rain water from flowing into the pit, which would result in flooding and potential collapse of the latrine.

46% of the builders had had their work regularly inspected by EHTs, while others mentioned less frequent inspections by the EHTs as they were too busy with other activities at the RHCs.

Access to cement was much discussed during the interviews. The main issue was that it was difficult to get and expensive. Many builders mentioned the problem of late payment or payment in non-cash items, e.g. 100 kg of maize instead of money. Several builders complained that the general poor financial situation of households and other clients combined with the elevated prices on e.g. cement made progress of work difficult. Hence the builders advocated for a subsidy for materials for latrine construction.

### 0.6 Institutional Arrangements

#### National and Provincial Levels

The Ministry of Local Government and Housing (MLGH), through its Department of Infrastructure and Support Services (DISS), has the overall responsibility for rural water supply, sanitation and hygiene promotion. However, also the Ministry of Health (MoH) plays a key role in relation to sanitation and hygiene promotion as does the Ministry of Education (MoE) in relation to sanitation and water supply and sanitation and hygiene education in schools. The Ministry of Community Development and Social Services (MCDSS) plays a role in community mobilization and sensitization activities related sanitation and hygiene, mainly through its staff at district and sub-district levels.

The roles and responsibilities of MoE and MCDSS appear relatively clear and separate from those of other ministries, while there appear to be a need to clarify the roles and responsibilities of MLGH and MoH vis-à-vis sanitation and hygiene.

All four ministries are represented at provincial level. Northern Province has, as the only province, an active P-WASHE committee which coordinates the activities of various provincial institutions. The P-WASHE is a Sub-Committee of the Provincial Development Coordinating Committee. It is facilitated by the office of the PLGO who reports to the Director DISS at MLGH. It has been supported by Irish Aid, but from mid 2008 the funding had decreased and so had its activities.

#### District and Sub-district Levels

Both the Local Government Act and the Public Health Act place the implementation and monitoring responsibility for sanitation and hygiene with Local Authorities, while the NRWSSP recommends that District Councils establish a special RWSS department within the Council. Reportedly, most Districts
Councils do not yet have such a department or unit, while several have a RWSS focal point person nominated among council staff. In most cases, this person is not working full-time with RWSS. Three out of 11 districts/municipalities visited mentioned they had established RWSS units within the council.

D-WASHE committees have been established in most districts in Zambia, including in the nine rural districts and two municipalities visited. Lack of financial resources, lack of transport and in some cases also lack of capacity were mentioned as key constraints by many of the D-WASHEs met.

Normally, the EHTs based at the Rural Health Centres (RHCs) play a key role in relation to sanitation and hygiene promotion. In the nine districts and two municipalities visited, a significant number of RHCs were however reported to be without EHTs and to be generally understaffed. In several districts/municipalities there were thus only EHTs in around half of the RHCs. At sub-district level, volunteer community health workers have been trained by MoH.

MCDSS has officers at district and sub-district levels in all 72 districts of Zambia, but has a number of vacant positions. In the nine districts and two municipalities visited, there were thus several complaints that the number of Community Development Centres in their districts was insufficient and existing centres understaffed.

MoE has a district buildings officer in each of the 72 districts, whose role it is to inter alia monitor the construction of water points and latrines. The individual schools are responsible for their own O&M.

ADCs had been established in 82% of the RHC catchments where EHTs were interviewed, i.e. in 27 out of 33 catchments. Only a few EHTs who had participated in ADC meetings reported that water and sanitation had been discussed in their ADC.

### 0.7 Sanitation and Hygiene Interventions

A review was made of 18 sanitation and hygiene interventions, based on information collected during interviews in Lusaka and in the rural districts and the municipalities visited. The interventions are very different in geographical coverage, with some interventions covering several districts while others only cover a few wards. Furthermore, for several of the interventions sanitation and hygiene promotion only constitute a small part of a larger project. A few of the interventions reviewed have been completed, but the far majority are still on-going.

#### Support Related to Household Latrines

There were mixed experiences with subsidies provided for construction of household latrines, mainly in the form of materials for construction of sanplats or a pre-fabricated sanplat. On one hand subsidies appeared much appreciated as households could not afford to buy cement, iron bars etc. On the other hand, problems had been experienced with the subsidies in some areas. This included other households waiting to receive subsidies, a few cases of materials being used for other purposes or subsidized latrines not being maintained or used for other purposes. There were also some examples of other households not being able, or willing, to replicate demonstration latrines as they found them too expensive. Based on the past experience from construction of subsidised latrines, several implementing organisations is now gradually reducing their subsidies or providing no subsidies for latrine construction.

Several organisations expressed environmental concerns about continuous tree cutting for construction of traditional latrine floors. This concern, combined with the general poverty of rural households, made some organisations advocate for a continued small subsidy for slabs.

A few organisations had introduced, or was planning to introduce, ecological latrines. One challenge in this connection is the reluctance by most households to using composted faecal materials which affects the operation and maintenance of composting latrines.
The digging of latrine pits was said to be difficult in several places due to the condition of the soil, with the three main problems being rocky underground, unstable loose sand formation or very high water table.

None of the implementing organisations described any interventions with special latrine designs for elderly, disabled or sick persons who are not able to use the normal squatting position.

Support Related to Household Hygiene

Many organisations were promoting good hygiene practices, including hand washing at critical times. In many cases, the success with introduction of hand washing facilities and promotion of hand washing was said to be moderate because of water scarcity, long traditions of defecation in the bush without hand washing and insufficient understanding of the importance of hand washing etc.

Community Sanitation and Hygiene Promotion and Training

Volunteers/ Hygiene Promoters

Several of the organisations interviewed arranged for training of V-WASHEs or other volunteers, often using a training of trainers (ToT) approach. After training, the V-WASHE and/ or other volunteers organised village meetings or went door-to-door to have discussions with other villagers.

It varied how large an area each volunteer was responsible for, some working in their own village only, while others covered several villages. Some hygiene promoters were given non-monetary incentives. According to the assessment of D-WASHE members, it worked well with the hygiene promoters as they could see improvements in the villages where they were active.

PHAST Approach

One of the participatory approaches used was the PHAST (Participatory Hygiene and Sanitation Transformation) methodology or selected tools from it. Several organisations had provided training on the use of PHAST tools, often using a training of trainers approach. Several D-WASHE members and the P-WASHE in Northern Province indicated that the PHAST method was appropriate and effective. Also the Environmental Health Unit of MoH has had positive experiences of using the PHAST approach in selected areas of Zambia.

CLTS Approach

A number of organisations have recently started using the Community Led Total Sanitation (CLTS) approach, which also uses participatory methods. The CLTS capacity building is targeting a number of local resource persons from the traditional leadership and existing institutions within the local administration. Organisations, district staff and community members mostly described the CLTS approach as successful, i.e. many households having constructed some type of household latrine after the introduction of the CLTS approach.

However, some organisations expressed concern about the quality of latrines constructed and the lack of hygiene education in the CLTS process. At the time of the research, these issues were being discussed for inclusion in the further development of the CLTS approach for use in rural areas of Zambia.

Support to School Latrines and Hygiene

School Latrines and Urinals

The latrine designs were often VIP latrines, but the “integrated latrine” model was also promoted/ used in some schools. This model consists of a double-compartment pit latrine (pit w. lid, but no vent pipe) and has a hand washing facility inside the latrine cubicle, using rain water when available. This latrine
model was developed with inputs from children to overcome the constraints of the VIP design (too dark inside). Urinals for boys, and sometimes also for girls, were constructed in the same schools.

The integrated latrine appears a good alternative to the VIP latrine, although it does face a challenge in children having to put the lid back on the latrines every time they have used them. And the volume of the pit may be too small compared to national requirements.

It appeared that the numbers of latrines constructed by different organisations in the surveyed districts did not always follow the national requirements related to latrine/pupil ratio. However, this may be a question of how best to distribute limited resources compared to the high demand for additional school latrines.

Only one of the organisations interviewed mentioned the importance of the construction of urinals. There is at least one Zambian organisation testing the urinal for girls at school (since 2007) in combination with the “integrated latrine”. Judged from photos, the design looks well developed and adequate for its purpose. All in all, it is good to have urinals at schools, as it will alleviate the use of the latrine cubicles during peak periods.

Hand Washing Facilities

Hand washing facilities for schools were often promoted/provided by organisations interviewed. However, the same organisations had often not been able to deal with the main problem of easy access to water, which meant that the hand washing facilities did not assist, to the full extent, in promoting pupils’ hand washing at critical times.

Hygiene Promotion

Some organisations used schools as entry point for hygiene promotion in the wider community. One approach used was the peer-to-peer concept, with training of children, teachers and parents. Several organisations interviewed reported that the peer-to-peer education approach was very effective.

Organisation and Cooperation

According to most D-WASHEs and NGOs/project staff there was good cooperation and coordination between organisations and local authorities, with NGOs often being members of the D-WASHE committees. There were, however, also some complaints that coordination was not as effective as it should be.

There were found to be alliances between some of the organisations interviewed, with particularly DAPP, SNV and Africare being engaged by other organisations to assist with the implementation of activities.

The following key issues and considerations are based on the research findings and the suggestions received during meetings and FGDs at different levels. They are intended to feed into the discussions in connection with the development of the Sanitation and Hygiene Component of the NRWSSP.

0.8 Key Issues and Considerations

The following key issues and considerations are based on the research findings and the suggestions received during meetings and FGDs at different levels. They are intended to feed into the discussions in connection with the development of the Sanitation and Hygiene Component of the NRWSSP.

LEGAL AND POLICY ISSUES

1. Acts, regulations and policies contain no definition of proper or adequate latrines for households and schools, whereas the NRWSSP does include definitions of adequate household latrines. Also there are no definitions in acts, regulations and policies of adequate disposal of solid waste and
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waste water in rural areas which do not have systems for collection of solid waste and sewerage systems for disposal of waste water. It appears as important to include these definitions in the legal framework (acts or regulations), both for households and schools.

2. The legal framework stipulates that both domestic and public buildings are to have proper and sufficient latrines, with clear requirements for the number of school latrines compared to the number of pupils. This is clearly not being enforced, with reportedly new schools sometimes being built without latrines or with very few latrines. Options for funding of school latrines should be identified.

3. Subsidies for household latrine construction have been provided under several ongoing interventions, but several organisations are phasing out subsidies, or planning to do so, because of the problems encountered. There are arguments both for and against having subsidies for latrines. On the one hand most rural households are very poor and have very little cash available for purchase of materials like cement, iron bars etc.; at the same time most rural households, both women and men, give very low priority to spending any money on constructing new or improving existing latrines. On the other hand, there are mixed experiences with the provision of subsidies, which some community members have indicated have been provided to a few households within a closed circle with others now waiting for similar materials/subsidies. Some materials provided for free have been misused, subsidized demonstration latrines not replicated because too expensive etc. The advantages and disadvantages of providing subsidies and their possible form as well as the option of providing loans for construction of household latrines should be discussed. Some community members expressed interest in such loans, but the question is whether they will be able to repay them.

TECHNICAL ISSUES

4. Collapsing traditional latrines during the rainy season was often mentioned by NGOs, builders and villagers and attributed to problems of stability of pits dug in sandy soil. Low-cost solutions like basket lining have been developed while other improvements related to the design of the pit and the construction quality may alleviate this problem. This would require capacity building on a large scale with emphasis on training of latrine builders in affected areas, combined with provision of appropriate standard designs for various types of pits and types of pit lining.

5. One of the WASHE manuals recommends upgrading of traditional pit latrines with cheap sanplats due to the economic situation in rural Zambia. ZRCS has introduced this type of sanplats, namely 60x60 cm sanplats (called All-in-One) for placing on the wooden floors of traditional latrines, thereby making the latrines more hygienic. This option is relative inexpensive compared to the bigger sanplats of 120 cm diameter. The estimates of price vary from 2 USD (Tanzania) in local village level production price to 4 EURO (Malawi), which total cost for production and distribution to households when using contractors. Various models of the small sanplats and modes of implementation can be used in Zambia, where the lowest level with village production at builders house for local sale with 100% cost recovery is estimated to come to a price of 3-5 USD (13,000 to 21,000 ZMK) per slab, which should be affordable for most households.

6. Ideally the 120 cm diameter sanplats (originally designed for lined pits) should be increased in diameter to 140-150 cm to suit better for unlined pits. If good sand, stones and wire mesh/iron is available it is possible using only 25 kg cement to make a 140 cm diameter sanplat fit for unlined pits. The 140 cm diameter sanplat can be made for subsequent upgrading to VIP feature. Builder’s special tool kit is about 25 USD and can be used for production of up to 3 slabs per day.

7. As done in the design of the integrated latrine model, it may be considered to add a hand washing facility inside the latrine cubicle to the VIP design for school latrines.

ISSUES RELATED TO SANITATION AND HYGIENE PROMOTION

8. Sanitation and hygiene promotion should be intensified, with much more frequent information being provided than was the case at the time of the research. The best modalities for doing so need to be carefully considered, taking into account that the far majority of community members preferred
face-to-face communication; the fact that many RHCs do not have any EHTs is a clear constraint in this connection as one of their major tasks is hygiene promotion; as it is not assumed that this situation can be improved in the short-term, other options should also be considered, e.g. whether it is possible for other extension staff or other external organisations to train community health workers and/or other volunteer hygiene promoters, using the experience from several NGO projects. It will, however, still be important to involve and build on the experiences of the EHTs, where they are available, and to also increase their numbers and skills so they can play the key role in hygiene and sanitation promotion that they are mandated to.

9. Involvement of traditional leaders in sanitation and hygiene promotion activities is clearly important. Currently, several chiefs and/or headmen have issued instructions for all households to have latrines and some key informants have suggested they should also include hand washing facilities in these instructions. In some areas, people are punished if they do not comply with the instructions. While there are advantages in having instructions and punishment for offenders, it should be considered to extend the role of the chiefs and their representatives to focus more on promotional activities as has been done as part of the CLTS approach in Choma district.

10. The promotion of household latrines need to consider that the proportion of households with some type of latrine is relatively high, so efforts should be put into both promoting ODF villages and upgrading existing latrines/constructing improved latrines; also cultural barrier which exist in some areas should be addressed, particularly the reluctance/taboo of sharing latrines with in-laws.

11. The promotion of hand washing after using the latrine should be given high priority, with particular focus on washing hands after own defecation and after helping children defecate (or rather cleaning them or helping them clean themselves after defecation); this is to include promotion of simple hand washing facilities placed close to latrines both at household and school levels. It could be considered to have a national hand washing campaign which has been successful in other parts of the world; one option could be to link this to the Keep Zambia Clean Campaign. Considering that lack of water was often cited as the main reason for not washing hands at critical times, it should be considered how best to link the promotion of hand washing with improvements in water supply.

12. Affordable standard designs for bath shelters including drains or soak-away pits for waste water should be promoted. Drains should be made in a way that water can be reused for watering vegetable gardens or fields.

13. Sanitation and hygiene promotion activities are to consider the sanitation and hygiene related tasks normally allocated to women and men, but should at the same time promote that both women and men are involved in making decisions related to construction and location of latrines, digging of rubbish pits, making of dish racks etc.

14. Schools are often good entry points for improving sanitation and hygiene behaviour practices both among school children and in the surrounding community. The experience with the peer-to-peer education approach should be discussed in further detail. However, many pupils mentioned that their household latrines were better than their school latrines, so there is clearly a need to improve the number, standards and cleanliness of many school latrines before they can be considered as good examples to be followed by local communities. It is a well-known fact that it is often easier to achieve behaviour change among children, so improved sanitation facilities at schools and activities to promote good hygiene practices among pupils will also be an investment in future generations.

INSTITUTIONAL ARRANGEMENTS

15. There appears to be a need to clarify the roles and responsibilities of MLGH and MoH vis-à-vis sanitation and hygiene, while the responsibilities of MoE and MCDSS appear relatively clear and separate from those of other ministries; there may also to be a need to clarify the role of the provincial level in sanitation and hygiene promotion, especially when DISS/MLGH places RWSS staff at this level. The responsibilities for training and supporting EHTs in relation to their sanitation and hygiene related tasks also need clarification.
16. The establishment of the RWSS departments/ units within the Councils is a welcome development. However, most of the Councils in the survey districts/ municipalities were found to be still struggling to find sufficient resources to support this structure. Funding should be provided to ensure that these structures are operational. Capacity strengthening for District Council staff is also required for them to be able to take the lead in sanitation and hygiene promotion.

17. The roles of the Council and the District Health Office should be clarified until such a time where health staff are transferred to the District Council as part of the decentralisation process.
1 Introduction

The Government of the Republic of Zambia (GRZ) through the Ministry of Local Government and Housing launched the National Rural Water Supply and Sanitation Programme (NRWSSP), in November 2007. However the sanitation component of the NRWSSP was not fully developed, which was acknowledged by various sector stakeholders.

The Ministry of Local Government and Housing, in cooperation with the National Working Group on Sanitation and Hygiene, therefore engaged consultants to assist in developing the sanitation and hygiene promotion component of the NRWSSP.

The overall objective of the consultancy, as stated in the Terms of Reference (TOR), is to prepare the National Sanitation and Hygiene component of the NRWSSP to include relevant investment and dissemination plans.

Specific objective are as follows:

(i) To assess the current sanitation and hygiene situation of rural communities in Zambia
(ii) To review and evaluate the performance of past and on-going interventions in rural sanitation and draw out key lessons for future interventions
(iii) To formulate the Sanitation and Hygiene component of NRWSSP with relevant detailed investment, launch and disseminations plans
(iv) To facilitate stakeholder consultations aimed at gaining consensus on the proposed National Rural Sanitation & Hygiene Promotion component.

This report covers the first two specific objectives of the consultancy. It is based on research carried out in nine rural districts, one from each province, and two municipalities as well as interviews with key stakeholders in Lusaka and review of a number of documents.

Separate research reports have been prepared for each of the nine rural districts and two municipalities. This report contains key points from these reports and comparisons between the situations in the different districts/ municipalities where research was carried out. It also includes a review of rural sanitation and hygiene promotion interventions, based on the information collected during the research in nine districts and two municipalities and from Lusaka-based organisations.

This report is divided into the following chapters:

Chapter 1: Introduction (this chapter)
Chapter 2: Legal, Policy and Planning Framework
Chapter 3: Research Methodology and Constraints
Chapter 4: Provincial Sanitation and Hygiene Situation
Chapter 5: District Sanitation and Hygiene Situation
Chapter 6: Village-level Sanitation and Hygiene Situation
Chapter 7: School Sanitation and Hygiene
Chapter 8: Rural Health Centres and EHTs
Chapter 9: Private Sector
Chapter 10: Sanitation and Hygiene Interventions
Chapter 11: Institutional Arrangements
Chapter 12: Overall Conclusions
Chapter 13: Key Issues and Considerations
A list of annexes is included as part of the table of contents.

2 Legal, Policy and Planning Framework

The following acts and policies of relevance, or potential relevance, to the Sanitation and Hygiene Component of the NRWSSP have been reviewed:

- Public Health Act and Public Health (Drainage and Latrine) Regulations
- Local Government Act
- Village Act
- Water Supply and Sanitation Act
- Environmental Protection Act and Regulations
- Town and Country Planning Act
- Vision 2030
- National Water Policy
- National Decentralisation Policy
- National Gender Policy
- Fifth National Development Plan 2006-2010
- National Sanitation Strategy for Peri-Urban and Rural Areas
- WASHE Manuals and Modules
- Various Programme/Project Manuals

2.1 Acts and Regulations

2.1.1 Public Health Act and Public Health (Drainage and Latrine) Regulations

The Public Health Act from 1995 states that it is the duties of the Local Authority (LA) to maintain cleanliness and prevent nuisances, including inter alia those related to water closet, earth closet, privy, urinal, cesspool, soak-away pit, septic tank, cesspits, refuse-pits and breeding places of mosquitoes. The LA is to notify offenders and, if they do not comply with the notice, take them to court.

The Public Health (Drainage and Latrine) Regulations state that all new and rehabilitated domestic and public buildings must be provided with latrine accommodation. The following is the exact wording “it shall not be lawful newly to erect any domestic building or public building or to re-erect any domestic or public building, …without proper and sufficient latrine accommodation so situated as to be conveniently accessible to all persons to be employed or accommodated therein” (section 78, item 1).

The Regulations specifically state that the owner or occupier of every school shall provide this with proper and sufficient latrine accommodation, giving the following required number of latrines according to the number of pupils, girls and boys, urinal accommodation, and depth of pits.

---

1 The paragraph is based on sections 65-69, 72 and 108 of the Public Health Act.
2 This and the following box is from section 81 of the Public Health (Drainage and Latrine) regulations.
Figure 2.1 Public Health Regulations, Requirements for School Latrines

Water closets and pit latrines SCHOOL GIRLS GUIDELINE
1 closet or seat for every 10 or part of 10 for the first 30
Over 30 and under 50 - 4 closets or seats
Over 50 and under 70 - 5 closets or seats
Over 70 and under 100 - 6 closets or seats
And thereafter 1 closet or seat for every 25 or part of 25

Water closets and pit latrines SCHOOL BOYS GUIDELINES
1 closet or seat for every 20 or part of 20 for the first 100
and thereafter 1 closet or seat for every 30 or part of 30.

In addition the male sanitary block shall be provided with
urinal accommodation to the extent of 0.6096 metres (2 feet)
of urinal for every 20 males or part of 20.

Where pit latrines are installed pits shall be to a depth of
not less than 6.096 metres (20 feet).

The Regulations also stipulate that if the regulations are not complied with, the LA should serve a notice on the school to provide sufficient latrine accommodation. If the school fails to comply with the requirements of such notice it is guilty of an offence.

The required number of cubicles according to the number of school girls and boys can be represented graphically as below.

Figure 2.2: Public Health Regulations on Ratio of Latrines to Pupils

If for example a school has 250 girls and 250 boys there should be 12 cubicles for girls and 10 for boys, while a school with 400 girls and 400 boys should have 18 cubicles for girls and 15 for boys.

In the last example with 400 boys there should also be some 12 m of urinals (400/20 x 2’ = 40 feet).

The Public Health Regulations prescribe that pits should be not less than 6 metres (20 feet), but do not indicate the diameter of the pit. It is, though, assumed that the Regulations refer to excavation of unlined pits, which are often recommended to be a minimum 20 feet, with a diameter of 100 cm. Then the depth (20 feet) can be converted to a volume and evaluated.

In general the requirements for school sanitation are well designed and in line with guidelines from other neighbouring countries, like Tanzania and Zimbabwe. So it can be said that:

- The requirements for cubicles per pupil for both girls and boys will work out fine when applied.
- The requirement for urinals for boys alleviates use of the latrines for boys, increases hygiene and facilitates cleaning when applied.
The requirement related to depth of the pit of a school latrine makes sense when converted to a volume, and will secure a long life-span of the pit when used according to the guidelines above.

2.1.2 Local Government Act

The Local Government Act of 1991 stipulates that the functions of a Council include:

- To establish and maintain environmental health services (as amended by Act No. 22 of 1995);
- To take and require the taking of measures for the preservation and improvement of public health and the prevention and abatement of nuisances including measures for the extermination of mosquitoes and other insects, rats, mice and other vermin;
- To establish and maintain sanitary convenience and ablution facilities, and to require, whenever necessary, the establishment and maintenance of such facilities;
- To establish and maintain sanitary services for the removal and destruction of, or otherwise dealing with, all kinds of refuse and effluent, and compel the use of such services;
- To establish and maintain drains, sewers and works for the disposal of sewerage and refuse;
- To take and require the taking of measures for the drainage of water;
- To require and control the provision of drains and sewers and to compel the connection of any drains and sewers established by the council.

The Local Government Act also empowers local authorities to make by-laws, set standards and guidelines for provision of services.

The Local Government Act and the Public Health Act thus complement each other in placing the implementation and monitoring responsibility for sanitation and hygiene with the Local Authorities.

2.1.3 Village Act

The Registration and Development of Villages Act of 1971 provides for the registration of villages and the inhabitants thereof, the establishment of Village Productivity Committees, Ward Councils and Ward Development Committees and matters connected with or incidental to the foregoing. This Act does not seem to contain any particular stipulations of relevance to the Rural Sanitation and Hygiene Component.

However, reportedly the Regulations of the Villages Development Act include stipulations that each house is required to have a latrine. At the time of completing this report, it had not been possible to obtain a copy of these. The consultants are continuing their efforts to obtain these regulations.

2.1.4 Water Supply and Sanitation Act

The Water Supply and Sanitation Act of 1997 establishes the National Water Supply and Sanitation Council (NWASCO) and defines its functions, provides for the establishment, by local authorities, of water supply and sanitation utilities and provides for the efficient and sustainable supply of water and sanitation services under the general regulation of NWASCO.

The Water Supply and Sanitation Act is thus focused on urban water supply and sanitation and does not specifically address rural sanitation issues.

2.1.5 Environmental Protection and Pollution Control Act and Regulations

The Environmental Protection and Pollution Control Act of 1990 establishes the Environmental Council and prescribes the functions and powers of the Council, which inter alia include:

3 Local Government Act of 1991, Second Schedule, section 61, items 40, 43, 50-54
Water\(^4\)
- Establish water quality and pollution control standards
- Formulate rules for the preservation of drinking water resources and reservoirs
- Order or carry out investigations of actual and suspected water pollution including the collection of data

Waste\(^5\)
- Give specific and general directions to District Councils regarding their functions relating to the collection and disposal of waste operations under the Local Government Act. This includes:
  - Formulation and provision of standards on the classification and analysis of wastes
  - Advice on standard disposal methods and means
  - Monitoring the contamination and degradation of the environment arising from the operation of any disposal site
  - Publicising the correct means of storage, collection and disposal of any class of wastes

The associated Regulations stipulates that a Local Authority intending to operate a sewage system or owner or operator of any industry licence or trade which will discharge effluent into the aquatic environment shall apply for a licence. Monitoring of effluent discharges is done by inspectors from the Environmental Council.

Neither the Act nor the Regulations contain any stipulations relating to rural households’ disposal of solid waste or waste water in areas where there are no systems for collection and disposal of solid waste or any sewage system for disposal for waste water.

2.1.6 Town and Country Planning Act

The Town and Country Planning Act of 1962 makes provision for appointment of planning authorities, establishment of a Town and Country Planning Tribunal, preparation, approval and revocation of development plans, control of development and subdivision of land, assessment and payment of compensation in respect of planning decisions, preparation, approval and revocation or modification of regional plans and matters connected with and incidental to the foregoing.

The Act does not seem to contain any particular stipulations of relevance to the Rural Sanitation and Hygiene Component.

It can thus be concluded that some of the legal framework is in place, as both domestic and public buildings are required to have proper and sufficient latrines, but that there are some deficiencies in defining the standards required and also in enforcing the legal requirements. The legal framework for disposal of solid waste and waste water is focused on urban areas and does not consider the situation in rural areas.

2.2 Policies

2.2.1 Vision 2030

The people of Zambia have articulated a National Vision dubbed ‘Vision 2030’ in which they aspire to be “A prosperous middle income Nation by 2030”. The vision is based on seven key principles:

\(^4\) This part is based on the Environmental Protection and Pollution Control Act, section 23
\(^5\) This part is based on the Environmental Protection and Pollution Control Act, sections 48 and 49
Despite the seemingly long time in which the vision will be implemented, its realization will depend on the actions and measurers that government, Cooperating Partners, the Private Sector, Civil Society, NGOs and individuals will take through short and medium term plans. The vision therefore serves as a guide to all development efforts.

In regard to water supply and sanitation, the vision states: “A Zambia where all users have access to water and sanitation and utilize them in an efficient and sustainable manner for wealth creation and improved livelihood by 2030”

### 2.2.2 National Water Policy

The National Water Policy from 1994 highlights the role of water in national development and the water resource base in Zambia, provides policy measures, outlines strategies for implementation and presents the institutional and legal reforms needed. It stresses the importance of access to safe water supply and sanitation for health and economic reasons and gives a number of key sector principles and policy measures and strategies for achieving the goal for rural water supply and sanitation of “universal access to safe, adequate and reliable Water Supply and Sanitation Services”.

However, as pointed out in the NRWSSIP, the National Water Policy is inadequate in addressing rural sanitation. It has for example no overall definition of what constitutes adequate rural sanitation facilities, no guidance whether investment support (subsidies) should be provided for household sanitation facilities and no stipulations or guidance on roles and responsibilities in relation to rural sanitation.

### 2.2.3 National Decentralisation Policy

The National Decentralisation Policy, developed in 2002 and launched officially in 2004, aims at decentralising government responsibilities and functions to lower levels and confirms the Local Authorities as responsible for water supply and sanitation. It states that the Government is to decentralise functions to the district with matching resources.

The Decentralization Implementation Plan for 2006-2010 includes a Fiscal Decentralisation Component, which according to the Water and Sanitation Sector Capacity Study from October 2007 is based on the Intergovernmental Fiscal Architecture. According to this, the following grants are to be provided to Local Authorities:

- **Restructuring grant** - this is assistance to pay off debts, improve facilities, housing etc.
- **Recurrent grant** – this is assistance to pay salaries and other operational costs
- **Capital grant** – this is for priority investments defined in the district development plans

The release of grants is likely to be conditional on the performance of the individual Local Authorities in relation to a number of indicators. The FNDP thus states that “in spite of the urgency to devolve power and authority to lower levels, it is the Government’s view that it is not appropriate to transfer all functions and finance matters to those local authorities that still suffer from severe human resource capacity shortfalls. It is in this vein that the issue of capacity building prior to, and during the implementation of, a decentralised system shall receive particular attention during the FNDP implementation.” (FNDP p. 243). As part of the capacity development efforts, it was at the time of the
Sector Capacity Study the intention to provide special capacity development grants to Local Authorities based on an assessment of needs.

2.2.4 National Gender Policy

The National Gender Policy from 2000 states that “the vision of the Government on gender is to achieve full participation of both women and men in the development process at all levels in order to ensure sustainable development and attainment of equality and equity between the sexes”.

The policy measures in relation to water and sanitation include the following:
- Promote and encourage the involvement of women in the decision making processes in the provision of safe and clean water and improvement of sanitation facilities
- Encourage partnership between women and men in the provision of water and sanitation
- Ensure use of gender friendly technology in water supply and sanitation to all members of the community especially persons with disabilities

The mentioned policy measures have been incorporated into the NRWSSP and will provide an important background for the more detailed Sanitation and Hygiene Component of the NRWSSP.

A Strategic Plan of Action for the National Gender Policy (2004-2008) was developed in 2004.

2.3 Fifth National Development Plan 2006-2010

The Fifth National Development Plan (FNDP) 2006-2010 states that public spending on water and sanitation as a percent of GDP will be maintained around 0.5 percent while the proportion of the Government budget would be raised to at least 0.6 percent from a low of 0.2 percent in 2006. It is specified that most of the priority interventions during the FNDP in this area will be on rural water supply (section 3.4.1.5).

The FNDP does not have a separate budget for rural sanitation and hygiene promotion. Instead this is covered under the overall budget line for rural water supply and sanitation. The total budget for this for the 5-year period of 2006-2010 is ZMK 292.6 billion, with ZMK 25.2 billion to come from GRZ and the remaining ZMK 267.4 from donors. The National Rural Water Supply and Sanitation Programme (NRWSSP) launched in 2007 does, however, include a separate budget for its sanitation component, as specified in section 2.4 below.

The FNDP lists under the Health Sector two programmes of particular relevance to the Sanitation and Hygiene Component of the NRWSSP, namely the Environmental Health Programme and the Health Education and Promotion Programme. One of the strategies of the Environmental Health Programme is thus to promote the establishment of new and strengthening of existing WASHE Committees at national, provincial, district and sub-district levels. The total budget for the Environmental Health Programme for the 5-year period is ZMK 40.3 billion, while it is ZMK 1.2 billion for Health Education and Promotion.

One of the programmes listed in the FNDP under the Education and Skills Development Programme is Infrastructure Development, which inter alia includes provision and maintenance of water and sanitation facilities in basic education, high school and tertiary education institutions. The total budget for infrastructure development for the 5-year period is ZMK 1,655 billion, with ZMK 488 billion funded by GRZ and 1,166 billion by donors.

2.4 National Rural Water Supply and Sanitation Programme

One of the three specific objectives of the NRWSSP for 2006-2015 is:
To increase and improve the number of proper sanitation facilities in rural areas through promotion of household latrine construction, health and hygiene education, and strategic demonstration facilities

The outcomes/results for the Sanitation Component, as now described in the NRWSSP, include increased number of sanitation facilities and sanitation and hygiene promotion to achieve behaviour change. However, the overall description of the elements of the Sanitation Component appear as focusing more on disposal of human excreta (latrines) than other forms of sanitation and hygiene practices like disposal of domestic waste, hand washing and other personal hygiene practices.

The total budget for the NRWSSP is ZMK 923 billion, with ZMK 124 billion (13%) for the Sanitation Component. This gives an average annual budget of ZMK 12.4 billion for sanitation (and hygiene).

Further details on the NRWSSP of relevance to the further development of its Sanitation and Hygiene Component are included in Annex 3.

2.5 Strategies and Manuals

2.5.1 National Sanitation Strategy for Peri-Urban and Rural Areas

A National Sanitation Strategy for Peri-Urban and Rural Areas in Zambia was developed in 1997 and has the objective “to create an enabling environment with support mechanisms to facilitate individuals, households and communities to effectively improve their environmental sanitation conditions and hygiene practices by erecting barriers to prevent the transmission of disease agents”, or put more simply “Environmental Sanitation for All”.

For various reasons, the 1997 National Sanitation Strategy for Rural and Peri-urban Areas was never fully implemented. However, several of the WASHE manuals and modules developed by the Community Management and Monitoring Unit (CMMU) used elements from the strategy.

The strategy document includes several chapters that will be very relevant for the development of the Sanitation and Hygiene Component of the NRWSSP. Further details on the strategy are included in Annex 4.

2.5.2 Various Strategy Documents, Guidelines and Manuals

The WASHE concept was developed in Western Province of Zambia in 1986 and spread to other parts of the country in the 1990’s. Five core WASHE training manuals and a number of supplementary modules were developed by the CMMU. Most of the latest editions of these are from 1998-2000. The target groups for the supplementary models are organisations and individuals directly involved in the planning and implementation of rural water supply, sanitation and health education, including district councils, D-WASHE committees, specific line ministries, NGOs, donors, volunteer agencies and development organisations.

The following WASHE modules and manuals are of particular relevance for the Sanitation and Hygiene Component of the NRWSSP.

- 5a Options for Excreta Disposal Facilities
- 6a Participatory Health and Hygiene Education (Theory)
- 6b Participatory Health and Hygiene Education (Practical)
- Manual for the Construction of Pit Latrine Using Sanplat

In the view of the consultants, the four modules/manuals reviewed include good information and tools for promoting improved sanitation and hygiene practices. However, according to several stakeholders, these (and other) WASHE manuals are not available in most of the districts, which is also the consultants’ experience.
Furthermore, the WASHE materials do not seem to include relatively brief descriptions of technical elements, their costs as well as advantages and disadvantages of different types of appropriate latrines – descriptions that could be used for community presentations, discussions and informed choice. The Guidelines for Implementing Community Water Supply and Sanitation Projects in Rural Areas from 2002 do, however, include a brief description of different latrine technologies.

Further details from the mentioned WASHE modules and manuals are included in Annex 4.

A number of relevant strategies and manuals have also been developed in connection with Area-Based Programmes, including the North-Western Water Supply Project and the RWSS Component of the Water Sector Programme Support for Western, Lusaka and Southern Provinces. Also UNICEF and a number of NGOs have developed a number of relevant tools and materials. A review of interventions is included in chapter 11 of this report.

3  
Research Methodology and Constraints

3.1  Research Methods and Sampling

Based on random sampling, the NWGSH selected the following nine rural districts and two municipalities for the research:

Rural Districts

i. Southern Province   Sinazongwe  
ii. Western Province   Kaoma  
iii. Luapula Province   Samfya  
iv. North Western Province   Kabompo  
v. Eastern Province   Chadiza  
vi. Northern Province   Isoka  
vii. Copperbelt Province   Lufwanyama  
viii. Lusaka Province   Chongwe  
ix. Central Province   Mumbwa

Municipalities

i. Luapula Province   Mansa  
ii. Southern Province   Choma

Both quantitative and qualitative research methods were used to collect information from different informants. The following table provides an overview of the research that was carried out:

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>INFORMANTS</th>
<th>METHOD/ TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Province</td>
<td>Permanent Secretary, alternatively the Assistant Permanent Secretaries or their representatives</td>
<td>Short courtesy meeting</td>
</tr>
<tr>
<td></td>
<td>Provincial institutions: PLGO, PHD, PEO, PWO, PCDO</td>
<td>1 key informant interview/meeting, Checklist of questions, Two forms for collection of statistical data on household latrines and schools</td>
</tr>
<tr>
<td></td>
<td>Suppliers of materials in provincial town</td>
<td>Form for collection of prices of materials</td>
</tr>
<tr>
<td></td>
<td>Chief/representative</td>
<td>Relatively brief meetings with a few chiefs were planned, but due to time constraints this was</td>
</tr>
</tbody>
</table>
Sanitation and Hygiene Component, National RWWS Programme, Zambia
Assessment of Existing Sanitation and Hygiene Situation and Interventions

LEVEL | INFORMANTS | METHOD/TOOL
--- | --- | ---
**Traditional Leadership** | (village headman will be among the village key informants) | not possible. Meetings were held with village headmen. Meetings with a few chiefs will be arranged after submission of this report

**District/Municipality**

- **District Council Secretary/Municipal Council Town Clerk**
  - District Council Secretary/Municipal Council Town Clerk
  - Short courtesy meeting

- **D-WASHE, including District Council staff**
  - 1 key informant interview/meeting
  - Checklist of questions
  - Two forms for collection of statistical data on household and school latrines

- **Projects and NGOs**
  - Key informant interview, depending on relevant projects and NGO activities in the district
  - Checklist of questions

- **Suppliers of materials in district town**
  - Form for collection of prices of materials
  - Checklist of questions for builders

**Sub-district/Ward**

4 wards in each district/municipality, selected with the following criteria:
- 2 wards w. intervention and 2 wards with no/ little/ other intervention
- different geographical characteristics
- different population characteristics, especially level of population density

In each ward:
- 1 village for collection of all types of data
- 1 basic school

The selected village in a ward is to have the same characteristics for which the ward was selected (e.g. if the ward was selected because it was close to a lake/river, then the village should be close to a lake/river).

- **EHT**
  - 1 questionnaire/ward, in total 4 questionnaires per district planned

- **Builders at ward level**
  - 1 interview/ward, total 4 interviews/district and municipality
  - Checklist of questions

- **School Management/ staff**
  - Questionnaire for 1 school/ward, in total 4 schools/district and municipality
  - 2 FGDs in each school, one with girls and one with boys; in total 8 FGDs/district
  - Checklist of questions
  - Photos of latrines and other sanitation facilities/ practices

- **Village key informants, incl. village headman, V-WASHE member, CBO/ FBO representative(s)**
  - Up to 3 interviews/meetings per village, in total around 12 meetings/district and municipality
  - Checklist with questions
  - Taking photos of latrines and other sanitation facilities/ practices

- **Households**
  - 12 household questionnaires/village, giving 12/ward x 4 wards = 48 households/district and municipality.
  - Questionnaire and observation list

- **Households**
  - 2 FGDs in each village, one with women and one with men; In total 8 FGDs/district and municipality. 6-10 participants in each FGD

**Table 3.2: Total sample in 9 provinces/districts and 2 municipalities**

<table>
<thead>
<tr>
<th>Informants</th>
<th>Number of meetings/interviews/questionnaires etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincial Permanent Secretary or their representatives</td>
<td>9 meetings</td>
</tr>
<tr>
<td>Provincial key informants</td>
<td>10 meetings</td>
</tr>
<tr>
<td>District Council Secretary/Municipal Council Town Clerk or their representatives</td>
<td>11 meetings</td>
</tr>
<tr>
<td>D-WASHE Committees</td>
<td>11 meetings, including collection of statistical data and reports</td>
</tr>
<tr>
<td>Projects/NGOs</td>
<td>14 meetings</td>
</tr>
<tr>
<td>Builders</td>
<td>43 interviews at ward level</td>
</tr>
</tbody>
</table>

26
Informants | Number of meetings/interviews/questionnaires etc.
---|---
Suppliers of materials | Collection of prices of materials in provincial and district/ municipal towns
EHTs | 33 EHTs in questionnaire survey
Schools | 44 schools in questionnaire survey
88 focus group discussions with school children, with in total 435 girls and 438 boys
Village key informants | Interviews with 86 male and 27 female village key informants
Households | 522 households in questionnaire survey
Households | 88 focus group discussions, with in total 434 women and 417 men

The following are the research tools which were used for the above:

### Table 3.3: List of Research Tools

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Checklist for meetings with provincial institutions</td>
</tr>
<tr>
<td>001/1</td>
<td>Form for collection of provincial statistical data on household latrines</td>
</tr>
<tr>
<td>001/2</td>
<td>Form for collection of provincial statistical data on latrines in schools</td>
</tr>
<tr>
<td>001/3</td>
<td>Form for collection of prices of materials in provincial and district towns</td>
</tr>
<tr>
<td>002</td>
<td>Checklist for meetings with Councils (used during D-WASHE meetings)</td>
</tr>
<tr>
<td>002/1</td>
<td>Checklist for meetings with D-WASHE</td>
</tr>
<tr>
<td>002/2</td>
<td>Form 1 for collection of district statistical data on household latrines</td>
</tr>
<tr>
<td>002/3</td>
<td>Form 2 (Schools) for collection of district statistical data on latrines in schools</td>
</tr>
<tr>
<td>002/4</td>
<td>Checklist for meetings with project staff/ NGOs</td>
</tr>
<tr>
<td>003</td>
<td>Questionnaire for Environmental Health Technicians</td>
</tr>
<tr>
<td>004</td>
<td>Checklist for builders/masons</td>
</tr>
<tr>
<td>005</td>
<td>School questionnaire, incl. observation list</td>
</tr>
<tr>
<td>005/1</td>
<td>Checklist for meetings with school pupils (boys and girls)</td>
</tr>
<tr>
<td>006</td>
<td>Checklist for meetings with village-level key informants</td>
</tr>
<tr>
<td>007</td>
<td>Household questionnaire, incl. observations</td>
</tr>
<tr>
<td>008</td>
<td>Checklist for focus group discussions with village women and men</td>
</tr>
</tbody>
</table>

The data were collected in September-October 2008 by two research teams, spending approx. one week for each district/ municipality. Some additional data were collected through telephone interviews in November 2008.

The data collected through questionnaires were all entered into and analysed using the Statistical Package for Social Sciences (SPSS). Qualitative information from interviews/meetings and focus group discussions (FGDs) were recorded on special note forms, one for each interview/meeting/FGD. The information was then compiled into summary sheets in Words, with separate summary sheets for different types of interview/meeting/FGDs.

To ensure that regional differences were brought out in the data analysis, the compilation and analysis were first done at district/municipal level, with the preparation of one report for each district/ municipality, 11 reports in total. These district/municipal reports were used for the preparation of this overall report.

There have also been meetings with MLGH, MoH, MEWD/DWA, MoE, MCDSS and a number of Cooperating Partners, project staff/ consultants and NGOs as listed in the list of key persons met.

### 3.2 Research Constraints

The following is a list of the main constraints encountered in connection with the research:
• The start of the data collection was delayed because of the funeral arrangements for the late President
• The preparations for the Presidential elections meant it was not possible to meet with some provincial and district key informants
• Some provincial institutions required an introductory letter from their Ministry Head Quarters before participating in a meeting and did not consider the introductory letter from MLGH sufficient
• Only very few provincial institutions and D-WASHE committees were able to provide statistical data on latrine coverage at household level and in schools
• Due to time constraints, it was not possible to meet with any chiefs, but village headmen were met. Meetings with a few chiefs will be arranged after submission of this report
• The poor road access to some villages delayed the start of some data collection activities
• In some areas, differences in languages caused some constraints in probing issues
• It was not possible to organise meetings with some Lusaka organisations, or with the most appropriate persons within these organisations, due to their busy schedules

4 Provincial Sanitation and Hygiene Situation

The following is based on meetings/interviews with provincial institutions in five provinces, namely Lusaka, Copperbelt, North-Western, Luapula and Northern Provinces. The information received during these meetings varied considerably, depending on which institutions were represented in the meetings. Interviews with provincial-level institutions in the remaining provinces were not possible because many people were away for workshops and meetings and in some cases the Provincial Health Department required to be presented with an introductory letter from MoH before they could participate in a meeting (and not a letter from MLGH as the research team had). Eastern Province did, however, provide some statistical information on latrines at household level and in schools.

4.1 Latrines and Open Defecation

Household Level

Lusaka Province: Provincial institutions mentioned that districts had the detailed information on the usage of latrines at household level. The provincial representatives present were thus not able to provide any information on the usage of latrines in the rural areas of the province.

Copperbelt Province: The participants in the meeting were from the Provincial Department of Education and the Provincial Planning Department. No information was therefore received on latrine usage at household level.

North-Western Province: Institutions reported the general sanitation and hygiene situation in the province to be not good and having deteriorated over the previous two years. Much of the province thus had no safe drinking water and the situation with latrines was even worse. The latrine situation was said to be particularly bad in Chavuma, Kabompo and Zambezi.

Luapula Province: The sanitation situation was said to be very poor as the rivers were used for defecation and in some other cases very temporal structures constructed near the rivers were used as latrines. Parts of Luapula were also sandy and as such constructing latrines was said to be a ‘nightmare’, with latrines often collapsing during the rainy season. People were said to give low priority to constructing improved latrines because they were too expensive.

Eastern Province: According to the statistical data provided, there were significant variations from in the household latrine coverage, ranging from 17% in Chipata and 18% in Chadiza to 84% in Mambwe. The data received do not indicate what types of latrines were included as part of the coverage data.
Northern Province: The general sanitation and hygiene situation in Northern Province was reported not to be good, particularly not in Isoka District. The most common type of latrines at household level was the traditional pit latrine.

Schools and other Public Places

Lusaka Province: The provincial institutions indicated there were discrepancies in the designs for school buildings, toilets and other structures.

Copperbelt Province: The provincial institutions indicated that the provincial level was not directly involved in school sanitation and hygiene as it worked through the district councils who were said to be solely responsible for the construction of latrines in schools. Most schools were reported to be quite urban and have water-borne toilets, except for a few community and rural schools particularly in Masaiti and Lufwanyama. Those constructing community schools just dug temporary pits because there were insufficient funds to construct VIPs or even traditional pit latrines. Standards of sanitation and hygiene were reported to be higher in private schools and mission schools compared to those run by Government. The reasons why some schools were constructed without latrines was said to be a result of the demand by communities to put up learning centres, so classes would commence before all structures were fully complete. Furthermore, latrines were the last structures to be put up and at times they were not even built. The provincial institutions emphasized that the decentralisation process should include matching resources to districts and sub-districts but that had not been done and there was therefore a huge discrepancy between the number of latrines and the number of teachers, boys and girls.

Northern Province: School sanitation and hygiene was said to have been boosted by the development of the “School Sanitation Strategy Paper of 2002” by the P-WASHE with support from Irish Aid. The strategy emphasizes the integration of soft and hardware activities in water and sanitation at schools and in the communities and mentions the creation of demonstration centres at schools for communities to learn from. As part of the strategy/programme, VIP latrines had been constructed in 10 selected schools in each of six districts. A survey conducted in 2002 by the PEO’s office revealed that the majority of the 188 schools visited had no proper toilets and water supply, with 30% of the schools having no latrines at all.

Luapula Province: In schools pupils were said not to be provided with the standard of 1 pit latrine per 25 pupils. Instead, the scenario was that 1 pit was shared by 200 to 250 pupils. Some schools had benefited from the integrated VIPs and sanplats latrines, with structures of solid bricks, iron or asbestos sheet, cement floors and vents, but there were not enough and their maintenance was low. Other schools had very poor-quality latrine structures made of burnt bricks or grass and with thatched roofs. It was reported that there were some attempts to improve sanitation in markets and at bus stops, but these had been constrained by the inadequate water available. As a result, the sanitation in the public places was reported to not meet minimum standards.

Eastern Province: All schools were reported to have latrines. The type of school latrines varied considerably from district to district, but with the majority of schools having traditional pit latrines. In Chama District, 77% of schools thus had traditional pit latrines, while in others a considerable proportion of schools had VIP latrines. In Chadiza, 38% of the schools were thus reported to have VIP latrines, while 43% had traditional latrines, 14% latrines with sanplats and 5% pour flush latrines.

4.2 Hygiene Practices

Household Level

Copperbelt Province: People living in the urban areas were said to have the habit of washing hands regularly after using the toilet, which was mainly due to the influence of the mining social services promoting good hygiene among its workers. However, many people in rural areas were said not to wash hands regularly as they faced problems of access to safe and clean water.
North-Western Province: People were said to have taken up hand washing though not all people were washing hands after defecation. According to provincial institutions, there were good results from the sensitization activities carried out by SNV, World Vision, the North-Western Rural Water Supply Project and community groups on the need for good hygiene practices and the construction of latrines.

Luapula Province: Many people in the province were said not to wash their hands after using the latrine due to their attitudes and poor access to water where people often had to collect water from far away. People rarely used soap for hand washing. Only few households were said to have put up dish racks as most of them keep their utensils in dishes inside the house or kitchen. Very few households treated their drinking water because chlorine was not affordable. Rubbish pits were said to be common, but many households did not keep them properly so they became a health hazard. People's literacy levels were relatively low and their uptake of information was therefore said to be limited and the change in behaviour slow.

Northern Province: People were said to be practicing good hygiene but the main problem was inadequate water supply.

Schools

Copperbelt Province: Mission schools were reported to have in-built basins for hand washing in their toilets, while government-run schools did not have the same services. Also water was often a problem in these schools. The Provincial Education Office was aware of the need to construct facilities for the girl children to cater for their special needs like disposal of sanitary pads and a shower to help them keep good personal hygiene. There were clubs in some schools and general broad-based programmes on health which encompassed the topics of hand washing after defecation and personal hygiene.

Northern Province: Less than half of the schools in the province were reported to have adequate water supply in the form of boreholes or piped water, with the rest depending on wells and streams. Some of these streams dried up during the hot season. Hand washing was there a challenge. Some schools had introduced hand washing facilities, but several of them had been damaged or stolen. Construction of bath shelters is being promoted in schools, for both girls and boys. According to the P-WASHE, some of these shelters were however not being used for their intended purpose, as some schools did not have water available and in other schools because of some beliefs associating girls' disposal of sanitary towels with witchcraft.

4.3 Sanitation and Hygiene Promotion and Communication

Copperbelt Province: MoE was reported to use the SHN Programme to disseminate information on hygiene education in schools and the province had also taken advantage of the Keep Zambia Clean Campaign to spread messages on good hygiene practices such as throwing rubbish in designated places.

In Luapula Province: NGOs were said to promote sanitation and hygiene, but such sessions were rarely attended by men, as issues pertaining to hygiene were among women's ‘designated roles’ such as cleaning surroundings, washing, drawing water etc., while men were responsible for slashing grass, dig pits, construct latrines etc. Young people were said to have little time for sensitization messages, as they would rather go fishing for quick money. In schools, the SHN programme was said to be a good initiative and school managers had been encouraged to enforce it and monitor its impact and the behavioural change among school-going children. Good hygiene practices were supposed to spill over into communities by pupils demonstrating good hygiene practices at home.

Northern Province: Most of the P-WASHE and D-WASHE members had, with support from Irish Aid, been trained in the basic WASHE skills including participatory health and hygiene education (PHHE) and PHAST. District staff had then trained V-WASHE committees. However, in 2008 funding for these activities had been erratic. The School Health and Nutrition (SHN) programme, which is supposed to be implemented in all schools, was according to the P-WASHE not implemented in many schools in Northern Province or they only had a few activities. Although a small percentage of the school grants
was for hygiene related activities, schools often seemed to have other priorities and furthermore the support from MoE to the SHN programme was said to have done down.

4.4 Key Organisations and Cooperation

Copperbelt Province: There was reported to be poor coordination among keys players in relation to implementation of the Government’s rural water and sanitation programme. For example, some NGOs executed programmes in schools pertaining to sanitation and hygiene and used approaches different from those used by other NGOs in the adjacent community on the same subject. According to the Provincial Education Office, this led to lack of consistency and progress in the area of school health and sanitation. Traditional leaders were said to have defined their own rules and responsibilities pertaining to sanitation in the chiefdoms, paying particular attention to construction of household latrines and digging of rubbish pits, but not paying much attention to sanitation and hygiene in schools.

North-Western Province: The Provincial WASHE Committee (P-WASHE) was reported not to be active at all, with no meetings unless a donor invited members to a workshop. The D-WASHE committees existed, but some of them were said to have had a problem in accounting for use of public funds. The staffing at RHCs was very poor and because of the lack of EHTs most communities were said not to have benefited from hygiene promotion and other health promotion programmes. In addition, many EHTs complained that report writing was taking up the time that should be used for community public health activities. According to Provincial Institutions, there was very poor coordination between the Government and donor agencies such as SNV, World Vision and others. The reason for the poor coordination was said to be the lack of an active P-WASHE committee.

Luapula Province: The P-WASHE was not active in Luapula Province because of lack of funds. UNICEF was said to have provided funds to both the V-WASHE and the P-WASHE in the past but had over time diverted funding to NGO’s. There had been an exchange programme planned with the Northern Province P-WASHE but it never took place due to lack of funds. Organisations active in the province included DAPP, Caritas Mansa, Plan Zambia and Africare.

Northern Province: The key organisations were said to be the P-WASHE and the Sub-district or Village WASHEs, although D-WASHE and the Sub-district WASHE committees were said to be less active than the P-WASHE. This was established in 2000 as a Sub-Committee of the Provincial Development Coordinating Committee, comprising representatives from different line ministries and facilitated by the office of the PLGO, who in turn reports to the Director DISS at MLGH. The P-WASHE has a number of sub-committees. According to P-WASHE members the P-WASHE arrangement had ensured close coordination and effective inter-sectoral collaboration on water and sanitation in the province. It had provided oversight, capacity building and monitored activities, with support from Irish Aid. However, from mid 2008, funding to the P-WASHE had been quite poor and it had therefore not been able to effectively perform its mandate. There were various NGOs/Cooperating Partners operating in the province in water and sanitation, including Care, World Vision, SNV and JICA.

4.5 Key Issues and Suggestions

The following are the main key issues and suggestions mentioned by institutions in three provinces, namely Lusaka, Northern and North-Western Provinces:

- There should be better coordination between provincial stakeholders; institutions in one province suggested the P-WASHE should revive its coordinating and monitoring activities.
- Funding for sanitation and hygiene was erratic and should be improved.
- Sometimes programmes had targets to construct the right number of latrines in a particular school, but due to political consideration the number of new latrines had to be shared with other schools; one province mentioned it was planned to build 45 new schools without any plans for sanitation facilities.
- There needs to be adequate safe water supply in order to fully address sanitation and hygiene issues.
Transport should be provided in order for community mobilisers to reach communities who lived scattered and in difficult terrain.

5 District Sanitation and Hygiene Situation

The following is mainly based on interviews/meetings with D-WASHE committee in 11 districts.

5.1 District Institutions and Committees

District Council RWSS Staffing
Sinazongwe and Kabompo District Councils as well as Mansa Municipal Council mentioned they had established RWSS Units within their councils. The RWSS Unit in Sinazongwe was formed in May 2008 and at the time of the research had two members, one of whom was the D-WASHE coordinator. It was newly established so had not yet implemented many activities. The RWSS Unit in Mansa was also newly formed and facing teething problems, including inadequate staffing and inadequate funding, with salaries not having been paid for months and no money to buy fuel for the vehicle attached to the Unit. Kabompo District RWSSU was established in 2005 and was supported by staff from the North-Western RWS Project. The RWSS Unit in Kabompo was implementing a number of sanitation and hygiene activities, both at school and community levels.

The other survey districts and municipalities also had Council staff involved in RWSS activities, e.g. by participating in D-WASHE activities and meetings.

D-WASHE Committees
There were D-WASHE committees in all nine rural districts and the two municipalities visited. At the time of the research, the number of members ranged from 12 to 21, who came from the District Council, different ministry departments, NGOs and sometimes business sector representatives and youth or women’s associations. In Sinazongwe, they had an executive committee of the D-WASHE consisting of seven persons. Information on the number of members was, however, not obtained in all districts. Furthermore, some districts reported frequent changes in their members inter alia because of staff changes within departments. The proportion of female members in the D-WASHE committees ranged from 17-35% in the districts where this information was collected (Chongwe, Choma, Sinazongwe, Mumbwa, and Mansa). Women held key positions as treasurer or secretary in a couple of D-WASHE committees.

Some D-WASHE committees held regular meetings either quarterly or monthly. However, several of them did not appear to hold regular meetings, some of them reporting that they had held no meetings in 2008. The level of activity and frequency of meetings appeared to depend on the availability of project funding. The Chadiza D-WASHE had e.g. held monthly meetings until 2008 when UNICEF pulled out of the district, but after this time meetings were not held very often.

Some D-WASHE committees submitted regular - or relatively regular reports - to the District Development Coordination Committee (DDCC), while in other districts like Sinazongwe reports were submitted separately for different projects, often by the individual NGO. It appeared that often there were no reports from the D-WASHE if there was no specific project in a district. The Chadiza D-WASHE thus used to submit reports quarterly, but said “this was when UNICEF was providing support”.

Several D-WASHE members had received some relevant training in connection with support from various projects. However, in some districts the persons trained were no longer members of the D-WASHE. Many D-WASHE committees complained they lacked financial resources and transport - and some also the capacity - to carry out planned activities. An example is the D-WASHE in Sinazongwe which in the past had been involved in the construction of latrines, but since UNICEF pulled out in 2005 there had been almost no D-WASHE activities. Some D-WASHE members were also said to give priority to the activities of their line departments.
Rural Health Centres and Community Development Centres

A significant number of Rural Health Centres (RHC) were reported to be without EHTs and generally understaffed. In several districts/ municipalities, there were only EHTs in around half of the RHCs. The worst situation was in Kabompo, where there were reported to be 14 RHCs, but only 4 EHTs.

Information on Community Development Centres was only obtained from a few districts, with Choma and Chadiza reporting that the number of Community Development Centres was insufficient and existing centres were understaffed.

5.2 Latrines and Open Defecation

Household level

In Choma Municipality, the D-WASHE gave the following figures for latrine coverage: 24% of households had traditional latrines, 8% traditional pit latrines with sanplats and 5% VIP latrines. The proportion of households with latrines was reported to have increased significantly due to the Community Led Total Sanitation (CLTS) programme supported by UNICEF. In villages where the CLTS programme was being implemented around 80-100% of the population were reported to have latrines. Two chiefdoms were said to have done particularly well in eliminating open defecation so that by now nearly all households in their chiefdoms had latrines. The D-WASHE believed that in addition to sensitization activities, there was a need to also provide sanplats to vulnerable groups as was done by DAPP.

In Sinazongwe District, the D-WASHE reported that the majority of households in the district practiced open defecation. According to the D-WASHE inventory from 2005, 8% of households in the district had traditional pit latrines with sanplats, 4% had traditional pit latrines and 0.3% had VIP latrines, while 88% practiced open defecation. The traditional latrines were said to be generally poorly constructed. The Eastern part of the district was rocky so most people practiced open defecation in this part, while there reportedly were more latrines in the Western part of the district where the soil was better. The D-WASHE reported a number of barriers to increased use of latrines, namely insufficient sensitization activities as the D-WASHE did not have sufficient funds to do such activities, latrines collapsed easily because of the sandy soil, people were not able to afford to buy cement for latrines, traditional beliefs e.g. that a latrine could not be shared with in-laws, open defecation in the bush to create food for dogs, some fishermen not wanting to put up permanent structures like latrines.

In Chadiza District, the proportion of households with latrines was according to the D-WASHE very low. Many people were willing to construct latrines, but the main problem was said to be that many latrines were poorly constructed and easily collapsed, so people considered it a waste of money to construct new latrines. UNICEF had earlier provided subsidies for latrines to some areas of the district, but had pulled out of the district, so there were very few on-going sanitation and hygiene interventions in the district.

In Kaoma District, the D-WASHE reported that an increased number of households now had latrines after Oxfam had started their support in three wards for construction of latrines for vulnerable households. However, several households were reported to still use the bush especially households on the plains where there was a problem with the soil structure (sandy).

In Mumbwa District, the D-WASHE reported 75% latrine coverage for the district as a whole. In some areas like the South-Eastern part of the district the latrine coverage was lower, mainly due to cultural practices and most people there being fishermen who normally stayed for a short period of time only. The Central and Northern parts of the district were reported to have good latrine coverage. The D-WASHE considered it a problem for people to meet the full costs of materials for latrine construction.

In Mansa Municipality, most households were reported to use traditional pit latrines, while those without latrines used the river banks or the bush depending on where they lived. In some areas with sandy soils, people found it difficult to put up long-lasting latrines. The D-WASHE also explained that the fishing camps were particularly bad in relation to sanitation and hygiene practices as only temporal...
structures were erected. Many residents in the camps were said to use the rivers for defecation, which made the contamination levels of the water sources very high.

In Samfya District, many households in the Northern part of the district were said to have latrines, the most common type being traditional latrines. In the Southern part of the district, latrines were reported to only last one year due to poor soil as it was not able to support the superstructure of the latrine; here the majority of people had no latrines and instead used the bush. Another area faced the problem of having a high water table so the pits had to be shallow, while in the swamps and islands around the lake, it was common for people to defecate in the rivers and lakes and also dispose of their household waste in the same. According to the Samfya D-WASHE, the VIP concept was donor driven and VIP latrines were not based on the demand from people. Generally, VIP latrines made with bricks, cement asbestos/iron sheet roof and doors out-classed the mud and pole houses with thatched grass roofs that the communities lived in, sometimes leading to them vandalising the latrine doors. The latrines themselves were said to often be turned into storage barns for crops such as maize and ground nuts.

In Chongwe District, the D-WASHE reported that households in certain areas had VIP latrines, while others used the bush because latrines were too expensive for them. People, who lived close to the town, were said to use latrines, while many of those who stayed far from the town used the bush. People near the town thus had access to materials like cement that was needed to build permanent latrines, while people in more rural areas often used grass and poles only if they had latrines. There were said not many cultural barriers to using latrines, although in some families, in-laws (bapongoshi) could not use the same latrine.

In Isoka District, the D-WASHE indicated that traditional latrines were the most common type of latrines in rural communities, while VIP latrines were only found in schools. Mostly latrines were constructed by households themselves, although some did engage local builders who however did not have much skill.

Lufwanyama District: Most households were reported not to have proper latrines. The few D-WASHE members present at the meeting mentioned as challenges that latrine foundation walls were not built using concrete blocks which led to their collapse especially in the rainy season, substandard materials were used for construction of latrines, there was a lack of standard plans for latrine construction, and a lack of awareness on the need for sanitation facilities in certain parts of the district.

Schools and Other Public Institutions
Most survey districts and municipalities reported that most or all their schools and other public institutions had latrines, but that the number of latrines was too low in the far majority of them and some of them were also inadequate in design. In Sinazongwe it was thus reported that MoE did not have special funding to construct latrines in schools, so they had to depend on NGOs, e.g. DAPP, World Vision, ZRCS and UNICEF. Normally, communities were asked to contribute 5% in the form of materials or similar. However, people were often unable to contribute, especially bricks, so many school latrines in Sinazongwe were inadequate. The situation was similar in other districts. The Isoka D-WASHE mentioned that the hygiene condition of school latrines left much to be desired as most of them had a strong smell and were not properly maintained. The Council was, however, not able to undertake regular inspections of these facilities as they lacked the necessary resources.

5.3 Hygiene Practices
In Choma Municipality, the D-WASHE mentioned that the CLTS programme had resulted in improved hygiene practices, e.g. hand washing before eating and after defecation, clean surroundings, digging of rubbish pits etc.

In Sinazongwe District, the hand washing practices in a typical village were according to the D-WASHE not good as people were just washing hands from the same dish. In some areas where people had been sensitized they used the pouring method. Furthermore, people who used the bush did not wash hands after defecation. Pupils were said to normally wash hands at school if they had hand washing facilities, but not at home. Very few households were reported to have bath shelters so they bathed at
night or used the streams. Rural households normally threw their solid waste behind their houses, while households in towns where there had been "Keep Zambia Clean" campaigns may use rubbish pits.

In Chadiza District, people knew and understood according to the D-WASHE the importance of e.g. hand washing. The D-WASHE had educated people on good hygiene practices and people were continuing with these, e.g. not washing hands in the same basin of water. However, soap was often not used because of the financial situation of the households. At gatherings like funerals, soap was available. Soap was said to normally be available for hand washing in schools. Very few households were said to have rubbish pits, but in cases of epidemics they would dig such pits. Waste water was just thrown anywhere.

In Kaoma District, the D-WASHE reported that the hand washing facilities used by households were not good, as they were normally dishes, clay pots or buckets. Hand washing was said to be practiced well in schools, but not so well at household level. Soap was used for hand washing after eating, but not before eating because people felt it had a bad smell. Nearly all households were reported to have bath shelters and take baths, although there was sometimes lack of water.

In Mumbwa District, the D-WASHE mentioned there had been an improvement in hygiene practices in all parts of the districts, due to the hygiene education carried out by the D-WASHE and V-WASHEs. Most people thus understood the importance of washing hands, with some using the pouring method while others used the usual one (the same basin or dish). The disposal of solid waste was said to vary within the district, with areas close to the district town normally throwing it into rubbish pits while others may not have rubbish pits.

In Mansa Municipality, the D-WASHE mentioned that there were campaigns in the municipality to promote hand washing, but this was not easy because of the critical shortage of water. In Mansa town there were therefore no reliable hand washing facilities in public places. Using soap to wash hands was not a common practice and even when the soap was available, people were said to still just use water. Moreover, most of the water sources, which were shallow wells, were said not to be safe. Literacy levels were very low in the fishing camps which, according to the D-WASHE, contributed to resistance to change in behaviour patterns. Although Local Authorities had the mandate to collect refuse, this was not done in Mansa due to lack of fuel. Lastly the D-WASHE mentioned that the Council had not been able to enforce the Public Health Act.

In Samfya District, the D-WASHE believed that most households did not wash hands because they did not know the importance of this or they had no water available. In three wards, the hand washing practices were said to be better as DAPP had effectively promoted hand washing by encouraging people to hang plastic coca-cola bottles filled with water outside their latrines so they could use this water for hand washing.

In Luwanyama District, it was reported to be common for people to wash their hands after using the toilet, while a significant number of households were said to have dish racks.

In Chongwe, the D-WASHE reported the hygiene situation to be not good as the district faced a critical water shortage. Some people therefore regarded hand washing as a luxury. Before eating, some people were said to wash hands from the same dish, the one with the dirtiest hands washing last. In some schools, the SHN programme had assisted in improving the sanitation and hygiene situation.

5.4 Promotion, Education and Communication

In Choma Municipality, the D-WASHE explained that the sanitation and hygiene promotion activities in the district were mainly related to the CLTS approach. This involved the traditional leaders, civic leaders and EHTs (technocrats). Community meetings were organised in a central village, where there were discussions on sanitation and hygiene and people themselves were to suggest an affordable latrine model. There were also so-called "walks of shame" where villagers went on walks in the bush so they could see the situation with open defecation and appreciate the need for latrines. The D-WASHE
considered it very important to allocate sufficient funds to education and communication activities as there were many misunderstandings related to sanitation and hygiene.

In Sinazongwe District, the D-WASHE reported that sanitation and hygiene promotion and communication activities were mainly conducted by the EHTs. Also councillors encouraged people to construct latrines and improve their hygiene practices. The main communication channels and activities were public meetings, training of hygiene promoters and PHAST groups, door-to-door promotion and monitoring by the hygiene promoters, posters and t-shirts. World Vision had thus trained 20 hygiene promoters in each of three wards and two PHAST groups in each village.

In Chadiza District, hygiene promotion and communication was reported to be done by MoH and MoE within their catchment areas. At school, there was the SHN programme and according to the D-WASHE pupils would teach what they learnt at school to other members of their households. There was also HIV/AIDS education in which many institutions were involved.

In Kaoma District, the D-WASHE reported the main sanitation and hygiene promotion activities in the district were outreach sessions three times per month, where promoters walked from door to door. Other activities were public meetings and village health clubs that worked with the Neighbour Health Committee (NHC) and the EHT. It was mentioned as a problem that the NHC had to cover large areas with very few members. The PHAST approach was used to encourage people to e.g. construct their own latrines.

In Mumbwa District, the D-WASHE explained that public meetings and drama activities were the main sanitation and hygiene promotion and communication activities. They were reported to have been effective in that almost everyone had received the messages. The D-WASHE had met with all the chiefs and headmen and they had then influenced people to change their behaviours, e.g. by punishing them if they did not have latrines; the punishment was e.g. that they had to “pay” a chicken. HIV/AIDS and malaria messages had been part of the campaigns.

In Mansa Municipality, the D-WASHE indicated that generally, it had not been in a position to carry out effective sanitation and hygiene promotion due to logistical and resource problems, although some activities were carried out during wet season due to cholera alerts. These campaigns were spearheaded by MoH. The launch of the Keep Zambia Clean Campaign had, to some extent, boosted the D-WASHE’s ability to undertake campaigns.

In Samfya District, the D-WASHE explained that DAPP was promoting improved sanitation and hygiene practices in four out of eight wards. Volunteers were thus trained for one week in i.a. installation of improved hand washing facilities (empty coca-cola bottles) near every household latrine. The sensitization messages also included use of clean water and the importance of living in a clean environment.

In Chongwe District, the D-WASHE had observed that some adults were very reluctant to change their hygiene practices and often mocked hygiene promoters that they had been using the bush all along and never got sick or died. Sensitization activities in schools were much easier because drama, poems, sketches and songs were used to educate the pupils. Villagers were said to listen more to their headman than to the EHT. Hygiene promotion and HIV/AIDS messages were said to link well but some people responded more to HIV/AIDS messages than to sanitation and hygiene messages because they believed HIV/AIDS was a matter of life and death.

In Lufwanyama District, there were reported to be monthly and quarterly Neighborhood Health Committee (NHC) meetings on sanitation and village inspections of sanitary facilities by NHC and the traditional Chiefs and their representatives.

In Isoka District, the D-WASHE shared hygiene practice information with the community, urging people to take baths, practice the pouring method when washing hands, keep their food safe and generally ensure that their surroundings were clean. Occasionally, the D-WASHE worked in collaboration with the Cholera Task Force, undertaking hygiene promotion activities within the town. However, these activities were said to be of little impact because they were more of a reactive nature than proactive. They were only done when a cholera outbreak is looming. Communication activities included public
gatherings at special occasions, where communication tools like the sanitation ladder and Johari’s window was used.

5.5 Key Organisations and Cooperation

In Choma Municipality, the D-WASHE considered UNICEF, ZRCS and DAPP as key organisations involved in capacity building related to water and sanitation. They were said to do a lot of good activities, but there was a need for more to be done to sustain activities. More support was e.g. needed to cover the costs of fuel for transport. The D-WASHE and Community Development Officers monitored activities and there were quarterly meetings with the V-WASHE committees. The V-WASHE committee monitored progress in the village and reported to the EHT, who reported to the ADC, which then informed district level. Different departments were said to have budgets for monitoring of water and sanitation related activities.

In Sinazongwe District, the D-WASHE considered the Council, DAPP, ZRCS, World Vision, ADRA, Department of Agriculture and Southern Water and Sewerage Company to play important roles in sanitation and hygiene promotion in the district. Also the chiefs were considered important as headmen would e.g. involve the chiefs if there were any problems. The D-WASHE complained that due to lack of resources it was not possible for the D-WASHE to meet very often, which hampered the coordination which was to take place during these meetings. The D-WASHE had made its own monitoring forms as it found that the Government monitoring forms were changed frequently and the D-WASHE might not get the updated forms or might get them late. Due to lack of financial resources, the D-WASHE was not able to do much monitoring.

In Chadiza District, Plan International, MoE and the Council itself were, according to the D-WASHE, the key organisations involved in sanitation and hygiene promotion, while the Lutheran World Federation and UNICEF had pulled out. All key organisations were members of the D-WASHE and coordinated their activities through D-WASHE meetings. The D-WASHE was said to monitor sanitation and hygiene promotion activities through the Disaster Management Unit. The D-WASHE had some monitoring tools, but they were not used. Instead each ministry had developed their own tools.

In Kaoma District, the D-WASHE mentioned Oxfam as an important organisation with a project that was running well. Also the NRWSSP was important because of its projects in the district, while World Vision was yet to start its activities. The V-WASHEs were considered important committees at community level. The D-WASHE had been given monitoring forms for reporting and had also carried out monitoring of its own projects.

In Mumbwa District, the D-WASHE mentioned World Vision and Christian Children’s Fund (CCF) as organisations that played important roles in sanitation and hygiene promotion. Their main target groups were said to be children, but they also supported the community in which children lived by providing information on sanitation and hygiene issues and also some boreholes. World Vision was a member of the D-WASHE. Monitoring was done through line ministry staff, using inter alia monitoring tools developed by district health staff and through reports received from EHTs. The monitoring data were later presented during D-WASHE meetings.

In Kabompo District, the D-WASHE commended the North-Western Rural Water Supply Project for many good activities although it was said not to be into sanitation infrastructure. World Vision was also active in the district, but was criticized for working too independently with very little collaboration with the Council.

In Mansa Municipality, the D-WASHE reported that the stakeholder collaboration had been weakened by the failure of the RWSS Unit and D-WASHE to perform their functions effectively. Since the D-WASHE meetings were rarely held, there was no sharing of ideas and very little information on the activities of the various partners. However, these partners did meet during the DDCC meeting which

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7 This is not quite correct as the North-Western Rural Water Supply Project has supported a small pilot project with construction of some demonstration latrines.
was held quarterly. The disadvantage of this forum was said to be that it discusses a lot of other issues and sanitation and hygiene issues ran the risk of being glossed over. The D-WASHE mentioned as challenges that there were no feedback to reports submitted to higher authorities and that the Government released money late in the year giving no room for effective implementation of programmes.

In Samfya District, the D-WASHE mentioned DAPP as a key organisation in supporting the construction of sanplats and in promoting good hygiene practices, particularly hand washing. MoH was also actively involved through the RHCs, while MoE had several programmes with construction of sanplats and hygiene promotion, e.g. the SHN programme. According to the D-WASHE, there was improper collaboration among executive agencies even though structures such as D-WASHE existed. There was a need for consultations to avoid duplication of tasks, borrow from best practices and learn from lessons learnt.

In Chongwe, the D-WASHE mentioned CCF and World Vision as organizations that played key roles in sanitation and hygiene promotion in the district. CCF had children as their target groups and also the community in which they lived whereas World Vision drilled bore holes, constructed VIP latrines at household level and supported Care Givers.

In Isoka District, the D-WASHE reported Irish Aid as the only organization that played a key role in sanitation and hygiene promotion in their area. The community itself as well as MACO and MoE officials assisted the D-WASHE in monitoring activities.

### 5.6 Key Issues and Suggestions

The following are the main issues and suggestions mentioned during meetings with D-WASHE committees in 11 districts:

- Funding for D-WASHE activities insufficient and in some districts no funding for D-WASHE activities, one D-WASHE also mentioning that the Government released money too late in the year making it difficult to effectively implement programmes; another D-WASHE found the resource allocation unfair as urban areas received a larger proportion of the funding than did rural areas.
- D-WASHEs lacking transport for their activities, making it difficult to reach people and monitor activities; some suggested provision of more vehicles or motor bikes, while others indicated the problem was lack of funds for fuel.
- Sensitization activities to be continued and strengthened as it took a long time to change people’s behaviour, one D-WASHE specifically mentioning that people gave much lower priority to construction of latrines than to paying for improved water supply, another D-WASHE mentioning that sensitization materials on sanitation and hygiene was in short supply.
- Materials/subsidies to be provided for construction of good and appropriate latrines, as materials like cement were too expensive for (many) people to buy; people could provide local materials.
- Capacity building needed at community level and for implementers/D-WASHE members.
- Water and sanitation to go hand in hand; without water, sanitation and hygiene cannot be improved.
- Need for some latrine standards to be developed/made available as some latrines were of poor standards; one D-WASHE mentioning that there was a need to come up with an effective technology to solve the sandy soil problem.
- Inadequate collaboration among executive agencies even though structures such as the D-WASHE exist; one D-WASHE mentioning that the same approach should be used by all organisations to avoid confusion among local communities and the D-WASHE should be informed before MoUs were signed in Lusaka.
6  Village-level Sanitation and Hygiene Situation

Information at village-level was collected through a household questionnaire survey among 522 households, with approximately 48 household questionnaires\(^8\) administered in each of the nine districts and each of the two municipalities and through interviews with village key informants and FGDs with women and men.

6.1  Respondent Background and Socio-Economic Situation

Half of the respondents in the household survey were women and half were men, with some variations from district to district. 58% of the respondents were heads of households, 32% were spouses, while 10% were other household members of 16 years and above. 77% of the respondent heads of households were men and 23% women. Isoka and Mansa had the highest proportion of respondent female heads of households, with 48 and 40% respectively.

The respondents were fairly evenly distributed among different age groups. Around 60% of respondents had two or three children below the age of five in their households and only 1% had no children below the age of five.

Type of house can be used as one of the indicators of the socio-economic situation of a household. The survey showed that 46% of all respondents had houses made of burnt bricks with thatched roof and 18% had houses made of burnt bricks with iron roofs. The districts with most respondents with houses made of poles and mud with thatched roof were Kaoma with 51% and Chadiza with 30%. The figure below shows the variations among districts and municipalities.

Figure 6.1

60% of all respondents had farming, 23% gardening and 22% trade as sources of income, while 13% had income from casual labour, 10% from fishing and 5% as craftsmen. There were, however, significant differences among districts, with 44% of respondent households in Sinazongwe and 39% of households in Kabombo having fishing as a source of income, while no respondent households in six other districts had fishing as a source of income.

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\(^8\) According to data collectors and their supervisors, 48 household questionnaires had been administered in all 11 districts/municipalities. However, for Samfya district only 44 filled in questionnaires and for Kabombo only 46 questionnaires could be found for database entry.
Information related to incomes and expenditure should be used with some caution, as people may not remember, or may pay some expenditure in e.g. maize and not include this in the calculation or may live mainly of their subsistence farming or fishing. Despite these limitations, annual household expenditures can give some indications of a household’s socio-economic situation. It was found that 32% of all respondents had a total annual expenditure of ZMK 1 million or above, but with big variations from 84% of the respondents in Kabompo and 63% in Lufwanyama to 2% in both Sinazongwe and Mumbwa. Sinazongwe and Samfya had proportionately most respondents with a total annual expenditure of ZMK 100,000 and below, namely 34% and 30% respectively. The figure below shows the variations among districts and municipalities.

90% of households used much of their income on foodstuff, with 49% also using much of income on children’s schooling. Farming inputs was the third most important item of expenditure. There were significant variations among the districts as to whether they were able to make any savings, ranging from as low as 7% in Sinazongwe and 13% in Kaoma to 42% in Isoka and 36% in Samfya.

Figure 6.2

6.2 Latrines and Open Defecation

6.2.1 Latrine Coverage and Use

78% of all respondents in the household questionnaire survey had a latrine of some type, ranging from 96% in Choma, Kabompo and Samfya to 10% in Sinazongwe. The latter clearly had a much lower proportion of households with latrines than in the other districts and municipalities, as shown in the figure below.
Sanitation and Hygiene Component, National RWWS Programme, Zambia
Assessment of Existing Sanitation and Hygiene Situation and Interventions

Village key informants and village FGD participants gave the following main reasons why households had constructed latrines:

- To avoid going to the bush/ to avoid walking long distances for defecation
- To avoid embarrassment/ for privacy
- For convenience
- To provide visitors with a suitable place to go
- Because of awareness campaigns
- Because they were told to construct latrines and/ or would be punished by the chief or headman if they did not have latrines
- Because they were given subsidies
- To reduce diseases and reduce costs for treatment
- To avoid the shame of pigs following them to the bush to get/ eat the faeces
- To avoid sharing with other households

The reasons most often mentioned were clearly avoiding going to the bush and for privacy.

Generally, latrines were said to be used for their intended purposes (disposal of human excreta) although there were a few examples of households who had converted latrines into grain storage places. There were a few cases of households using latrines for bathing, but not many.

The most common type of latrine was clearly the traditional pit latrine with a not smooth floor surface, with 45% of all 522 households included in the questionnaire survey having this type of latrine, followed by 13% having a traditional latrine with a smooth floor surface, 11% having a pit latrine with a sanplat or another smooth concrete platform, and 8% of all households having a VIP latrine. The figure below shows the latrine coverage for all respondent households.

![Figure 6.4 Latrine Coverage](image)

There were, however, significant differences among the districts/ municipalities, with 21% of all respondent households in Chongwe having VIP latrines, followed by 15% in Kabompo, while the only type of latrines used by the respondent households in Sinazongwe was the traditional pit latrine with a not smooth surface.

The proportion of municipal respondent households with no latrines was clearly lower than the proportion of rural respondent households with no latrines, with 26% of all respondent rural households having no latrines, while the corresponding figure was 6% for municipal households. However, the rural districts of Samfya, Kabompo and Lufwanyana had around the same low proportion of households with...
no latrines as the two municipalities. Proportionately more municipal households had VIP latrines compared to the proportion of all respondent rural households, but there were still three rural districts that had a higher proportion of VIP latrines than was the case in the two municipalities. The proportion of rural respondent households with pit latrines with sanplats was higher than the proportion of municipal respondent households. The household survey thus showed that the difference in latrine coverage among the survey districts and municipalities was not related to whether the area was a municipality or a rural district.

Further details on the variations among the districts/municipalities are included in the table below.

Table 6.1: Latrine Coverage by District (% of Survey Households)

<table>
<thead>
<tr>
<th>District/ Municipality</th>
<th>VIP latrine</th>
<th>Pit latrine with sanplat</th>
<th>Trad. Pit latrine with smooth floor</th>
<th>EcoSan latrine</th>
<th>Pour-flush latrine</th>
<th>Trad. pit latrine with not smooth floor</th>
<th>Other</th>
<th>No Latrine</th>
<th>Hhs</th>
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<tbody>
<tr>
<td>Rural Districts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Sinazongwe</td>
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<td>0.0</td>
<td>0.0</td>
<td>10.4</td>
<td>0.0</td>
<td>0.0</td>
<td>89.6</td>
<td>100.0</td>
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<td>Chongwe</td>
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<td>29.2</td>
<td>0.0</td>
<td>0.0</td>
<td>29.2</td>
<td>0.0</td>
<td>16.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Samfya</td>
<td>13.6</td>
<td>11.4</td>
<td>4.5</td>
<td>0.0</td>
<td>0.0</td>
<td>65.9</td>
<td>0.0</td>
<td>4.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Mumbwa</td>
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<td>37.5</td>
<td>8.3</td>
<td>0.0</td>
<td>0.0</td>
<td>35.4</td>
<td>0.0</td>
<td>18.8</td>
<td>100.0</td>
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<tr>
<td>Chadiza</td>
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<td>29.2</td>
<td>4.2</td>
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<td>18.8</td>
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<td>45.8</td>
<td>0.0</td>
<td>35.4</td>
<td>100.0</td>
</tr>
<tr>
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<td>6.5</td>
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<td>0.0</td>
<td>63.0</td>
<td>2.2</td>
<td>4.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Isoka</td>
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<td>4.2</td>
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<td>0.0</td>
<td>60.4</td>
<td>6.3</td>
<td>12.5</td>
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<tr>
<td>Lufwanyama</td>
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<td>20.8</td>
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<td>2.1</td>
<td>64.6</td>
<td>0.0</td>
<td>6.3</td>
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<td>Rural Districts Total</td>
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<td>12.2</td>
<td>10.3</td>
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<tr>
<td>Choma</td>
<td>12.5</td>
<td>8.3</td>
<td>37.5</td>
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<td>37.5</td>
<td>0.0</td>
<td>4.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Mansa</td>
<td>10.4</td>
<td>6.3</td>
<td>10.4</td>
<td>0.0</td>
<td>0.0</td>
<td>64.6</td>
<td>0.0</td>
<td>8.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Municipalities Total</td>
<td>11.5</td>
<td>7.3</td>
<td>24.0</td>
<td>0.0</td>
<td>0.0</td>
<td>51.0</td>
<td>0.0</td>
<td>6.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>7.9</td>
<td>11.3</td>
<td>12.8</td>
<td>0.0</td>
<td>0.2</td>
<td>44.8</td>
<td>0.8</td>
<td>22.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

97% of households with latrines said they used them regularly. Nearly all women and men thus used their latrines during both the day and the night. However, only 4% of all respondents had a latrine by the field side. When working in the field, most therefore used the bush or field while some went home to use their latrine there.

42% of respondents with latrines said children always used the latrines. 42% sometimes and 16% that their children never used the latrines. 75% of respondents mentioned that children started using latrines between the ages of 3-5 years. During FGDs and interviews, informants in some villages indicated that children were up to the age of 8 years before they started using latrines. According to village informants in Choma, young children normally defecated on the ground, some mentioning that mothers would then later throw their faeces into their latrine and others that children’s faeces were washed away by the rain.

Several village key informants mentioned it as a problem for seriously ill people to use the latrines because they were too weak to squat. A few also mentioned the same problem for the elderly.

In most survey areas, it was most common for all household members to use one latrine, although some did have two either 1) one for all female members and one for all male members or 2) one for the children and one for the adults. One village key informant in Kabompo thus mentioned as the reason for household to have two latrines that "the father did not want to meet his daughter at the latrine and/
or the mother did not want to meet her sons at the latrines, as it may bring shame to them”. The cultural issue of not sharing latrines with in-laws was mentioned by several informants. However, according to a number of other village informants there were no cultural issues related to latrine use in their area or cultural issues/ barriers had reduced over time and were now insignificant.

### 6.2.2 Latrine Construction, Payment and Cleaning

72% of households in the questionnaire survey had latrines that were less than 3 years old and less than 7% had latrines that were more than 5 years old. The variations among the districts are shown in the figure below.

![Figure 6.5](image)

**Figure 6.5**

Age of Latrine

65% of all households with latrines had constructed their own latrines, ranging from 97% in Kaoma to 45% in Isoka, while 20% had used a local mason, ranging from 41% in Isoka to 0% in Sinazongwe and Kaoma. Further details are in the figure below.

![Figure 6.6](image)

**Figure 6.6**

Persons Constructing Latrines

Other specified as projects, NGOs, Government, neighbour, community member

According to several village informants, many households and local masons had no proper tools and often lacked the necessary skills to construct proper/durable latrines.

78% of respondents had paid less than ZMK 100,000 for their latrine, with all respondents in the five districts of Sinazongwe, Mumbwa, Chadiza, Kaoma and Kabompo having paid less than ZMK 100,000. 13% of all respondents had paid ZMK 100,000-250,000. Chongwe was the only district where a significant proportion of households had paid more than ZMK 500,000 for their latrine, namely 22%.

The most common local materials used for construction of latrines were mud bricks, grass and poles, while cement and similar materials had to be bought from a town, normally the district town.
The research team observed that 64% of the latrines in the households interviewed had no lid at all, while 43% had no feet templates and 42% had squat holes that were not key-hole formed. These and other observations are shown in the figure below.

Figure 6.7

Informants in many survey areas mentioned collapsing latrines during the rainy season as a problem, especially in the following districts: Kaoma, Kabompo, Sinazongwe and in some villages in Choma, Chadiza and Mansa.

The main and often only reason given for collapsing latrines was that the area was sandy. Several mentioned that latrines needed to be lined with cement, but not many households did this because of lack of money. In Mumbwa some traditional latrines were said to have collapsed because the wood had rotted. In Kaoma, where many reported problems with latrine construction because of sandy soil, latrines were normally lined with poles, tree bark or baskets. In Mansa, some households were said not to have constructed latrine superstructures because they feared that the latrines would collapse anyway.

Most households appeared to have paid for their own latrines. There were, however, many households who did not answer this question, which may be because they had not made any cash payments for their latrines.

52% of respondents in the household survey had experienced that their latrines got full, with 88% of them having built a new latrine. A few re-used materials from their old latrines, mainly if they had sanplats.

The latrines in nearly all households were cleaned by mothers and/or other family members, while only 2% were cleaned by fathers. Most households (75%) cleaned their latrines every day, while 13% did so twice a week. 92% of households used brooms to clean the latrines, while some (also) used water. Very few used any type of soap.

6.2.3 Satisfaction with Latrines

55% of the household questionnaire respondents with own latrines were satisfied, very satisfied or extremely satisfied with their latrines, while 22% were somewhat satisfied and 23% not all satisfied. The level of dissatisfaction was highest in Sinazongwe (80%), followed by Samfya (46%), Chongwe (33) and Mansa (32%). Further details are in the figure below.
There were slightly more women (26%) than men (21%) that were not at all satisfied.

52% of those who were not at all satisfied, somewhat satisfied or satisfied would like to improve the roof of the latrine, 42% the floor and 37% the slab, closely followed by other improvements. However, only 27% felt they were able to afford their suggested improvements. Despite this, 54% had plans to do some improvements to their latrines, with the highest proportion saying they could afford some improvements to the floor (33%), the walls (28%) and roof (26%), closely followed by other improvements.

The FGDs with village women and men and the interviews with village key informants also showed that many were not happy with the current latrines, often mentioning concerns about the short period that many latrines could be used because of their frequent collapse and some also mentioning concerns of the lack of safety and stability of the latrines.

The figure below shows the household survey respondents’ description of a “good” latrine.

6.2.4 Use of Human Excreta as Fertiliser

Only 13 respondent households (3% of households that answered this question) used human excreta as fertilizer, with four households in Samfya, two in each of Kabompo, Mansa and Chongwe. The main reasons for not using human excreta were that it was considered not safe to use as fertiliser (55%) and they did not like to use it (23%). More would, however, like to use human excreta as fertiliser if they knew it was done in a safe way, namely 18%.
It came out very strongly in some of the village FG Ds that the participants had no intentions of using human excreta in the future with participants in one FGD in Kabompo saying “We can’t use faeces as fertilizer. Do you want us to call cholera or diseases to our door steps? No way! It’s not safe”.

Others gave as reasons that use of human faeces as fertilizer would be unhygienic, it was a very wrong thing to do in the in village set-up, it smelled and may cause diseases. As women in one FGD in Chadiza put it “it is disgusting to use human excreta” as fertilizer.

In Mumbwa, many village informants called the use of human excreta as fertilizer for dirty, a taboo and a crazy thing to do. Some people were, however, planting banana trees on old latrine pits.

### 6.2.5 Households without Latrines

The far majority of survey households without latrines used the bush (68% of adults and 71% of children), followed by a neighbour’s latrine (21% of adults and 17% of children). In some villages, households without latrines used the latrines at the school or the church.

Although some households without latrines used their neighbour’s latrine, sharing of latrines among two or several households did not appear common in any of the survey areas. According to some village informants, sharing was not common because houses were far apart and/ or because the chief or headman had given a directive that each household should have its own latrine. Others indicated that there was much bush around, so it was easier to use this than to ask a neighbour to use her/his latrine. Village informants in Isoka also mentioned that normally sharing did not work well because it was difficult to tell who misused the latrine.

No adults in the survey households without latrines in Samfya, Kabompo and Lufwanyama (this was only 4-6% of the survey households in these areas) used, according to themselves, the bush. However, according to the village key informants in Kabompo there were some people without latrines who used the nearby bush or dug a small hole behind their house and buried their faeces. This was said to be done especially by children and/or at night time. Some people also used the bush at least temporarily when their latrines were full or had collapsed. The “dig and bury” was also used in other districts.

According to village key informants, there were also in Samfya some households without latrines using the bush or the river. They were reported to mainly be the single, aged, widows and the child-headed households. Similarly, in Mansa the households without latrines were said to be mainly orphans, old people and widows who would then use either the bush or the river.

In Sinazongwe, where only very few households had latrines, most used the bush for defecation, some men mentioning they went to the far-away bush 5-7 km from their homes. Women in one village explained they used the stream, from which they also drew water.

In Chadiza, one CBO representative explained that people practiced open defecation because they considered this a way of providing food for the pigs, they were used to going to the bush and/ or were waiting for subsidies before constructing latrines. Some village informants in Mumbwa also gave the lack of – or waiting for - subsidies as the reason why some households had not constructed latrines.

In Mumbwa, some women staying with in-laws were reported to go to the bush to avoid meeting the in-laws around the latrine.

53% of respondents with no latrines had plans to build a latrine. In Sinazongwe, where 90% of respondents had no latrines, only 38% had such plans. In Chadiza and Kaoma, where 42% and 35% respectively had no latrines, around half of them had plans to build one. The far majority of household survey respondents (78%) gave as reason for having no plans to construct latrines that they could not afford to build one. Other reasons given during village FG Ds and interviews were that people were tired of building latrines which always collapsed or they were too lazy. Other villagers had had their latrines had been washed away by floods.
6.3 Hand Washing

6.3.1 Hand Washing Facilities

66% of all respondents in the household questionnaire survey had hand washing facilities, varying from 90% in Kaoma to 33% in Mansa. More details are shown below:

![Figure 6.10](image)

However, only around half of households with hand washing facilities were observed to have water available at these.

Most households had either one hand washing facility (46%) or two facilities (31%). Most hand washing facilities were placed near the cooking area (32%), while 22% were near to the latrine and 21% near to a water storage container. There were, however, significant variations among the districts, with the proportion having hand washing facilities next to latrines ranging from 53% of households in Mansa to 5% in Kabompo.

![Figure 6.11](image)

Most households used basins (35%), plastic containers (29%) or buckets (26%) as hand washing facilities. During FGDs, a few mentioned that they used the “pouring method” with a cup for hand washing, but this did not seem common. One headman in Isoka explained that there was a need for more sensitization activities as some people were reluctant to use the “pouring method” for hand washing as they had always washed hands from the same basin and had had no diseases.

6.3.2 Hand Washing at Critical Times
Getting correct information about people's hand washing practices is often difficult, as people may know when they ought to wash hands, which may be reflected in their answers. In other words, people may for example say they always wash hands after using the latrine because they know they ought to, but in actual fact they may not do this. To get as correct information as possible about hand washing practices, two different methods were used, namely secret "voting" during the FGDs with village women and men and questions included in the household questionnaire survey.

First the results of the questionnaire survey: 90% of the respondents said they always washed hands before eating, while 63% said they always washed hands after defecation. Variations among districts are shown below:

![Figure 6.12 Hand Washing - Before Eating](image)

![Figure 6.13 Hand Washing - After Defecation](image)

The secret “voting” during the FGDs showed similar results, namely that often all or nearly all FGD participants always washed hands before eating, while far less did the same after defecation/ using the latrine. The following table shows the results of “voting” in the individual districts.
Table 6.2: Hand Washing Practices before Eating and After Using the Latrine

<table>
<thead>
<tr>
<th>District</th>
<th>Critical Time for Hand Washing</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Chongwe</td>
<td>Before eating</td>
<td>88%</td>
<td>100%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>56%</td>
<td>53%</td>
<td>44%</td>
</tr>
<tr>
<td>Sinazongwe</td>
<td>Before eating</td>
<td>50%</td>
<td>67%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>-</td>
<td>-</td>
<td>12%</td>
</tr>
<tr>
<td>Chadiza</td>
<td>Before eating</td>
<td>100%</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>85%</td>
<td>100%</td>
<td>15%</td>
</tr>
<tr>
<td>Kaoma</td>
<td>Before eating</td>
<td>98%</td>
<td>100%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>58%</td>
<td>60%</td>
<td>25%</td>
</tr>
<tr>
<td>Mumbwa</td>
<td>Before eating</td>
<td>100%</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>90%</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Kabompo</td>
<td>Before eating</td>
<td>100%</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>18%</td>
<td>80%</td>
<td>79%</td>
</tr>
<tr>
<td>Lufwanyama</td>
<td>Before eating</td>
<td>100%</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>31%</td>
<td>29%</td>
<td>69%</td>
</tr>
<tr>
<td>Isoka</td>
<td>Before eating</td>
<td>100%</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>39%</td>
<td>60%</td>
<td>61%</td>
</tr>
<tr>
<td>Samfya</td>
<td>Before eating</td>
<td>100%</td>
<td>85%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>85%</td>
<td>37%</td>
<td>15%</td>
</tr>
<tr>
<td>Choma</td>
<td>Before eating</td>
<td>100%</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>57%</td>
<td>40%</td>
<td>24%</td>
</tr>
<tr>
<td>Mansa</td>
<td>Before eating</td>
<td>100%</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>48%</td>
<td>67%</td>
<td>52%</td>
</tr>
<tr>
<td>Average for all districts</td>
<td>Before eating</td>
<td>94%</td>
<td>95%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>After using latrine</td>
<td>52%</td>
<td>56%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Note: The calculation of the average for all districts does not take into account that the number of participants in FGDs varied somewhat from district to district.

The results from the household questionnaire survey and the secret voting were fairly similar for hand washing before eating, with 94% of all men and 95% of all the women in FGD secret voting indicating they always wash hands, while 90% of all respondents in the household survey said they always washed hands at this time.

The corresponding figures for hand washing after defecation varied more, with 52% of all men and 56% of all the women in the FGD secret voting indicating they always wash hands, while 63% of all respondents in the household survey said they always washed hands at this time.

52% of women in the questionnaire survey said they always washed hands before preparing food and 36% sometimes. The percentages were relatively similar in relation to hand washing before feeding children, with 48% of women saying they always did so and 37% sometimes. 43% of women said they always washed hands after helping children after defecation, while 31% did so sometimes. There were some variations among the districts in this respect, with significant more women in Sinazongwe, Mumbwa and Choma never washing hands at these three critical times compared to women in the other districts.

The secret voting during the FGDs showed fairly similar results for women’s hand washing before preparing food and before feeding children, namely that 56% and 42% of them doing so (compared to 52% and 48% in the household survey). However, a significantly higher proportion of women in the
FGD voting (41%) never washing hands after helping children defecate compared to 26% of the women in the household survey.

The FGD secret voting showed significant variations among the districts in women's hand washing practices, with Sinazongwe District clearly having the worst situation with none of the women washing hands after helping children defecate, while the corresponding figure for Kabompo was 0% and for Chongwe 10%. Further details are included in the table below.

<table>
<thead>
<tr>
<th>District</th>
<th>Critical Time for Hand Washing</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before preparing food</td>
<td>53%</td>
<td>30%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>53%</td>
<td>37%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>67%</td>
<td>23%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Sinazongwe</td>
<td>Before preparing food</td>
<td>-</td>
<td>13%</td>
<td>87%</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>-</td>
<td>-</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>-</td>
<td>17%</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>Chadiza</td>
<td>Before preparing food</td>
<td>95%</td>
<td>5%</td>
<td>-</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>55%</td>
<td>25%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>68%</td>
<td>30%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Kaoma</td>
<td>Before preparing food</td>
<td>60%</td>
<td>27%</td>
<td>13%</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>10%</td>
<td>17%</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>33%</td>
<td>44%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Mumbwa</td>
<td>Before preparing food</td>
<td>63%</td>
<td>32%</td>
<td>5%</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>5%</td>
<td>22%</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>20%</td>
<td>73%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Kabompo</td>
<td>Before preparing food</td>
<td>89%</td>
<td>11%</td>
<td>-</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>63%</td>
<td>37%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>37%</td>
<td>63%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Lufwanyama</td>
<td>Before preparing food</td>
<td>57%</td>
<td>37%</td>
<td>6%</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>20%</td>
<td>46%</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>34%</td>
<td>51%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Isoka</td>
<td>Before preparing food</td>
<td>57%</td>
<td>26%</td>
<td>17%</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>57%</td>
<td>31%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>71%</td>
<td>29%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Samfya</td>
<td>Before preparing food</td>
<td>27%</td>
<td>25%</td>
<td>48%</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>30%</td>
<td>10%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>42%</td>
<td>15%</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Choma</td>
<td>Before preparing food</td>
<td>50%</td>
<td>43%</td>
<td>7%</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>33%</td>
<td>17%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>37%</td>
<td>33%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Mansa</td>
<td>Before preparing food</td>
<td>70%</td>
<td>22%</td>
<td>8%</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>45%</td>
<td>18%</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>55%</td>
<td>22%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Average for all districts</td>
<td>Before preparing food</td>
<td>56%</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>After helping children defecate</td>
<td>34%</td>
<td>23%</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Before feeding children</td>
<td>42%</td>
<td>36%</td>
<td>22%</td>
<td></td>
</tr>
</tbody>
</table>

Note: The calculation of the average for all districts does not take into account that the number of participants in FGDs varied somewhat from district to district.
It is clear from both the FGD secret voting and the household questionnaire survey that most people washed hands before eating and significantly less after defecation. It was even rarer for women to wash hands after helping children defecate (or rather cleaning them or helping them clean themselves after defecation), with the FGD secret voting showing 56% of women always washing hands after using the latrine, while only 34% of women always washed hands after helping children defecate. This indicates that children’s faeces were considered less “dangerous” than those of adults.

Lack of water was often given as the main reason for some people to not always wash hands at critical times. Another reason was that those using the bush for defecation did not carry water to the bush so they did not wash hands afterwards.

### 6.3.3 Use of Soap

64% of questionnaire respondents said they had soap in their households, ranging from 94% in Chongwe to 17% in Sinazongwe. However, soap of any kind was only seen in 37% of the households, ranging from 54% in Isoka to 17% in Mansa. 79% of those who said they had soap available had bar soap. People may have soap available within the household, but this did not necessarily mean that they used it for hand washing. 19% thus said they always used soap for hand washing, 60% sometimes and 22% never. The variations among districts are shown below.

![Use of Soap for Hand Washing](image)

The secret “voting” during the village FGDs showed an even lower proportion of participants always using soap for hand washing. Many gave as reasons for this that soap was a “precious” item that they could not afford to buy and often it was not easily available in the village.

The household questionnaire showed that 70% never used ash for hand washing, while 27% said they did this sometimes. The secret “voting” during the village FGDs showed fairly similar results.

### 6.4 Bath Shelters

88% of all questionnaire survey households had a bath shelter, varying from 98% in Kaoma to 38% in Sinazongwe. The variations are shown in the figure below.
Only 20% of the bath shelters had proper drainage or soak-away pits for waste water, ranging from 39% in Chongwe to none in Sinazongwe.

94% of all questionnaire survey households used their bath shelters regularly, ranging from 100% in Chongwe and Samfya to 61% in Sinazongwe. More than half of those who did not use it regularly gave as reason that there was not enough privacy, while nearly one third gave as reason that they did not like this type of bath shelter. The far majority (89%) did not use their bath shelters for other purposes than bathing. Nearly half of those who used it for other purposes used it as a latrine and nearly a third for storage.

The village FGDs and interviews with village key informants showed similar results, namely that the far majority of households had bath shelters and used them for privacy reasons. Furthermore, bath shelters were constructed of local materials like grass thatch, so there were normally no costs (i.e. money) involved in constructing them. Most of those that did not have bath shelters were said to take baths behind their houses at night, while a few bathed in the shrub/bush, in springs/lakes/rivers, in latrines or at the bath shelter at a water point. Nearly all people were said to take baths every day. However, in some villages in Sinazongwe there were no or very few bath shelters because of lack of water, so instead of baths people would wash themselves with a wet cloth, while in Mumbwa one V-WASHE member mentioned that some people only bathed once a week because of lack of water. For this reason, some women avoided attending anti-natal clinics because the nurses told them off for not bathing more regularly.

### 6.5 Storage and Treatment of Water

95% of the households in the questionnaire survey normally stored water at their house, ranging from 100% in Kabompo and Lufwanyama to 71% in Sinazongwe. At the time of the interview, water was observed to be stored in a container/bucket at 67% of the households, with 76% of the containers/buckets covered with a lid or similar. A few village key informants mentioned that water was not handled in a hygienic way because “it is reused so much”.

16% of households in the questionnaire survey always treated water before using it for drinking and cooking, ranging from 44% in Isoka to 3% in Sinazongwe and 0% in Kaoma. 28% of all households treated their water sometimes while 57% never did this. The variations are shown in the figure below.
6.6 Disposal of Household Waste

58% of households disposed of their solid waste in rubbish pits, varying from 92% in Lufwanyama to 17% in Sinazongwe. 16% disposed of it in a common dump site and another 16% in the bush. Variations among districts/municipalities are shown in the figure below.

48% of households composted their organic waste, ranging from 71% in Kaoma to 19% in Mansa.
85% of households in the questionnaire survey threw their waste water outside the house, which 71% thought was safe. However, according to several interviews with village key informant and several village FGDs, it was common for households to throw their waste water on gardens/in the field, while others threw it anywhere outside their houses. Some households were reported to throw their waste water into rubbish pits, especially very dirty water.

6.7 Cooking Area

57% of the households in the questionnaire survey were observed to have clean cooking areas, varying from 92% in Samfya to 13% in Sinazongwe. Most cooking areas were cleaned daily (75%) or twice a day (19%). They were mainly cleaned with brooms (88%), while some used water (22%), with hardly anyone using any kind of soap.

54% kept their cooking utensils on a dish rack outside the house, varying from 81% in Kaoma to 26% in Mansa. 26% of utensils were kept on dish racks inside the house. Further details are in the figure below.

The above information is generally consistent with the information from interviews with village key informants and from village FGDs.

6.8 Mosquito Nets

30% of adults in the questionnaire survey households always used mosquito nets, varying from 58% in Samfya to 2% in Sinazongwe, while 49% of adults sometimes used a net and 20% never. The proportions were similar for children. Variations for adults are shown in the figure below.
80% of those, who only used mosquito nets sometimes, did so during the rainy season.

According to most village key informant interviews and FGDs, people who had mosquito nets used them for the intended purpose. However, in Kabompo some people were said to use their mosquito nets for fishing, although this according to one headman was a punishable offence. It appeared that most households who had mosquito nets had been provided with these through various programmes, i.e. at no costs. Village key informants in Kabompo and Mansa thus mentioned that health authorities provided mothers with newly born babies with mosquito nets.

### 6.9 Ability and Willingness to Pay

The FGDs with village women and men showed that people gave very low priority to spending any money on constructing new or improving latrines. Women in one FGD in Sinazongwe thus said “how can we take money intended for food and build a latrine? It is more important to eat”. Most FGD participants were able and willing to provide local materials like sand, mud bricks and poles and also to provide labour for digging of pits. In addition some were willing to make very small cash contributions towards construction of latrines. However, most said that materials like cement, iron bars and/or sanplats would have to be provided by others.

Some FGD participants were willing to take out small loans for construction of latrines, if they were on favourable conditions, e.g. interest-free, flexible repayment conditions e.g. after one year/after one farming season and repayment in maize. Some men in Choma mentioned that loans for latrines should be in the form of materials, and not money, as money would be used to buy food or for other purposes. Others did not see loans for construction of latrines as an option as loans, if any, should be for farming inputs and/or they said would not be able to repay the loans.

Some FGD participants were willing to help old people, the very poor and other vulnerable groups in their villages construct latrines, while others saw it as the responsibility of the chiefs to organise assistance for these groups. In Kabompo, in addition to the chief also the headmen, the Government and the church were mentioned in this connection.

In several survey areas, the chief/ headmen had issued instructions that all households had to have a latrine. However, one headman in Isoka questioned “how many times can you punish or reprove people for not building new latrines? People here are poor so they spend most of their time engaged in casual labour and looking for food, so latrine construction is probably their last thing to do”.

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**Figure 6.19**

*Adults’ Use of Mosquito Nets*

- Bar chart showing the use of mosquito nets by adults in different areas.
- Categories: Sinazongwe, Chongwe, Sintho, Mumbwa, Chadiza, Kaoma, Isoka, Lufwa, Choma, Mansa.
- Data: Always, Sometimes, Never.
6.10 Sanitation and Hygiene Related Tasks of Women and Men

During the village FGDs, the current sanitation and hygiene related tasks of women/girls, men/boys and everyone in the household were identified. The following two tables are summaries of the main tasks as described by women and men, respectively.

**Table 6.4: Distribution of Tasks as Described by Women**

<table>
<thead>
<tr>
<th>Women an Girls</th>
<th>Men and Boys</th>
<th>Everyone</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sweep and keep the house and surroundings clean</td>
<td>• Construct latrines and clear latrine surroundings</td>
<td>• Wash clothes (mainly women, but also sometimes men)</td>
</tr>
<tr>
<td>• Clean the latrine</td>
<td>• Build bath shelters</td>
<td>• Women and men together make decisions on whether to construct rubbish pit, pit latrine and dish rack and their location (mentioned in Kabompo district only)</td>
</tr>
<tr>
<td>• Collect water and store it in a hygienic way</td>
<td>• Make dish racks</td>
<td>• Mother and father decide together on the level of hygiene and sanitation in households (mentioned in Kabompo district only)</td>
</tr>
<tr>
<td>• Bath children</td>
<td>• Dig rubbish pits</td>
<td></td>
</tr>
<tr>
<td>• Organise/heat water for bathing for husband</td>
<td>• Site locations of rubbish pits and latrines</td>
<td></td>
</tr>
<tr>
<td>• Wash dishes</td>
<td>• Ensure old latrines are buried appropriately</td>
<td></td>
</tr>
<tr>
<td>• Wash clothes</td>
<td>• Boys help collecting water (and a few times also men)</td>
<td></td>
</tr>
<tr>
<td>• Educate children on hygiene and sanitation</td>
<td>• Boys help sweeping surroundings</td>
<td></td>
</tr>
<tr>
<td>• Preserve/cover food</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen from the two tables, women and girls had the majority of the day-to-day tasks in relation to sanitation and hygiene, while men and boys were mainly responsible for the construction of latrines and bath shelters, the digging of rubbish pits and making of dish racks. Furthermore, boys sometimes helped collect water and keep surroundings clean.

It was only in FGDs in Kabompo district that tasks related to decision-making in relation to latrines and other sanitation/hygiene practices were discussed. Both men and women thus mentioned that they together made decisions on whether to construct rubbish pit, pit latrine and dish rack and their location and also together decided on the level of hygiene and sanitation in households.

**Table 6.5: Distribution of Tasks as Described by Men**

<table>
<thead>
<tr>
<th>Women and Girls</th>
<th>Men and Boys</th>
<th>Everyone</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clean the house</td>
<td>• Construct and maintain latrines</td>
<td>• Wash clothes (few districts only)</td>
</tr>
<tr>
<td>• Sweep the yard</td>
<td>• Siting of latrines</td>
<td>• Re-plaster latrine walls</td>
</tr>
<tr>
<td>• Clean the latrine</td>
<td>• Clear latrine surroundings</td>
<td>• Women and men together make decisions on location of rubbish pit, pit latrine and dish rack (mentioned in Kabompo district only)</td>
</tr>
<tr>
<td>• Paint or decorate latrines</td>
<td>• Dig rubbish pits</td>
<td>• Mother and father decide together on the level of hygiene and sanitation in households (mentioned in Kabompo district only)</td>
</tr>
<tr>
<td>• Bath children</td>
<td>• Build bath shelters</td>
<td></td>
</tr>
<tr>
<td>• Clean bath shelters</td>
<td>• Boys help keeping surroundings clean</td>
<td></td>
</tr>
<tr>
<td>• Collect thatch grass for bath shelters</td>
<td>• Boys help fetch water</td>
<td></td>
</tr>
<tr>
<td>• Wash dishes</td>
<td>• Give guidance on good hygiene (a few districts)</td>
<td></td>
</tr>
<tr>
<td>• Fetch water and store water in a hygienic way</td>
<td>• Boys do all types of tasks incl. those for females, until 13-14 years of age (mentioned in Kabompo district only)</td>
<td></td>
</tr>
<tr>
<td>• Organise water for bathing for father/husband</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Provide water for hand washing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Wash clothes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Preserve/cover food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Educate children on hygiene and sanitation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was only in FGDs in Kabompo district that tasks related to decision-making in relation to latrines and other sanitation/ hygiene practices were discussed. Both men and women thus mentioned that they together made decisions on whether to construct rubbish pit, pit latrine and dish rack and their location and also together decided on the level of hygiene and sanitation in households.
This is a contrast to the general statements from all four male FGDs in Sinazongwe. They mentioned that men made the decisions within the family, which men in one FGD described as follows “the father is the supervisor, while the children are the general workers. The mother is second in command and relays messages from the father to the children”. Men in another village mentioned that “men make decisions at home and the women are just helpers ...Children and women help implement those decisions made by the men”.

There were other variations among the districts/municipalities as to the tasks of women and men, but not many.

6.11 Village Organisation and Plans

Participants in the village FGDs clearly considered the chiefs and the headmen the most important persons for their villages. Particularly the headmen were mentioned as they worked on behalf of the chiefs and were closer to people than the chiefs.

It varied significantly from district to district, and also from village to village within the same district, whether the V-WASHE committee was considered as important and active in improving the situation in the village. In two villages in Chadiza, men thus indicated that the V-WASHE committees in their villages were not very active because their work was voluntary. In Isoka, women in one FDG said “the Sub-WASHE (or V-WASHE) is just talking without talking any action, but perhaps it does not get enough support from the Council”.

The same women mentioned that sometimes the Neighbourhood Health Committee (NHC) and the TBA held meetings with their village headman to discuss plans and review progress since the last meeting. However, the far majority of villages visited did not appear to have any village plans for improving their sanitation and hygiene situation.

Several FGD participants referred to the community health workers and/or the NHC as being active and important for their villages.

In Sinazongwe, the old people in the village were referred to as important in teaching young community members on cultural issues.

6.12 Sanitation and Hygiene Promotion and Communication

57% of all respondents in the household questionnaire survey had received some information on sanitation and hygiene during the last year, with slightly more men (59%) than women (54%) receiving such information.

It varied significantly from district to district whether respondents had received any, from 83% in Mumbwa, Chadiza and Kaoma to 13% in Sinazongwe. There were also significant variations between women and men. In Sinazongwe, 19% of the men had received information on sanitation and hygiene while this was only the case for 5% of the women. In Kaoma, the disparity between men and women was even greater, with 92% of men having received information while this was only the case for 73% of the women. In some of the other districts, it was the other way around, e.g. in Lufwanyama where 43% of the men and 59% of the women had received some information.
39% of respondents received information every month, 32% received this on special occasions, 18% every week and 11% every three months. There were differences as to how often women and men received information. It was thus more common for women to receive information every month than for men (43% of women compared to 34% men), while it was more common for men to receive information on special occasions (35% of men compared to 29% of women).

There was also a big difference between the rural districts and the two municipalities, with most municipal respondents receiving information on special occasions (64%), while most rural respondents received information either every month (42%) or every week (20%).

The topic on which most respondents had received information was hand washing. Out of the respondents receiving any information, 67% had received information on hand washing, while 54% had received information on disposal of solid waste and 49% and 48% respectively on different types of latrines and use of mosquito nets. Further information is included in the figure below.

There were some variations in the topics on which women and men had received information, with more women (73%) than men (61%) having received information on hand washing and also slightly more women than men having received information on use of mosquito nets and disposal of household waste. More men than women had then received information on safe food and other topics as specified underneath the figure above.
Similar topics of information were mentioned during village FGDs and interviews with village key informants, with the addition of the importance of having a latrine/not using the bush, HIV/AIDS awareness, prevention of diseases as cholera, diarrhoea, malaria and dysentery, building of dish racks, treatment of drinking water, keeping the environment clean, keeping water points clean and protecting them, cleaning water pots and washing clothes.

56% of respondents had received most information on sanitation, hygiene and water from health staff while 14% had the V-WASHE and 9% the Chief as the most important source of information. The figure below shows the sources from which respondents received most information.

![Figure 6.22](image)

Other mainly specified as different NGOs, the headman, door-to-door, school teachers

Overall, there were only slight differences as to most important source of information for women and men, with the biggest difference in relation to the V-WASHE committees, which 18% of women had as their most important source of information on sanitation and hygiene, while this was the case for 11% of the men.

There were, however, significant differences among the districts, with e.g. 50% of all respondents in Sinazongwe receiving most information from the Chief, while none in Chadiza and Kaoma had the Chief as their most important source of information. There were also significant differences between women and men in the individual districts, with e.g. 88% of men in Kaoma receiving most information from health staff, while this was the case for 69% of the women. Another example was Samfya where 25% of men received most information from health staff, while this was the case for 59% of women.

23% had the V-WASHE as the second most important source of information, while 21% had health staff and 13% the Chief as their second most important source.

In addition to the above, different NGOs were frequently mentioned during key informant interviews and village FGDs as important sources of information on sanitation and hygiene. In Kabompo the newly formed Water Point Committees (V-WASHEs) and the District Council RWSS Unit were considered important sources, while in Chongwe Youth Group(s) and in Chadiza a Women’s Club were mentioned.

The following are the most common face-to-face communication activities mentioned:
- Public gatherings/meetings
- Door-to-door activities and inspections
- Health and hygiene talks at the RHC/under 5 clinics
In addition, village key informants and FGD participants in Chadiza, Kaoma and Mumbwa also mentioned community drama as one of the communication channels used, although this was not reflected in the findings from the household questionnaire survey. Stories/parables and bible teachings/church sermons were other activities mentioned.

In two of the survey villages in Kabompo, people not following the chief’s/headman’s instructions to construct latrines, dish racks etc. were punished by having to work at the chief’s farm for a week or a month. In Kaoma, some villagers mentioned that if households were found with no latrines or unclean latrines, they were punished by having to give a chicken to the headman.

71% of respondents were generally satisfied with the information they had received on sanitation and hygiene, varying from 91% in Lufwanyama to 17% in Sinazongwe. There were also significant variations between the satisfaction of women and men within the individual districts, with e.g. 75% of men in Chongwe being satisfied compared to 46% of the women. It was the other way around in Mumbwa where 64% of the men were satisfied compared to 86% of the women.

Insufficient information was clearly the main reason why questionnaire respondents were dissatisfied, followed by the need for information on other topics. Village key informants mentioned the lack of resources, insufficient staffing at the RHC, lack of transport and in Sinazongwe also the poor and inaccessible roads as reasons for the insufficient and infrequent information on sanitation and hygiene.

In line with the above, 72% of all respondents would like to receive additional information on sanitation and hygiene. 36% of all households wanted future information on different types of latrines, followed by 27% on disposal of household waste, 26% on hand washing and 23% on use of mosquito nets. Further information is included in the figure below:

![Figure 6.23](image_url)

Slightly more women than men would like future information on hand washing and safe food, while more men than women would like information on disposal of household waste.

Health staff was clearly the preferred source of information, with 40% having them as their most preferred source of information and 29% as the second most preferred source. The V-WASHE came in second, with 21% having it as their most preferred source of information and 13% as their second-most preferred source of information. The Chief was considered another important future source of information, with 13% having the Chief as their most preferred source of information and 19% as their second-most preferred source. Further information is included in the figure below.
There were some variations in the preferences of women and men, but they were very small.

88% of all respondents preferred to receive information in local languages, compared to 12% in English.

Subsidies for latrines, mainly in the form of materials like cement or sanplats, had been provided in some of the survey villages as part of sanitation promotion activities. However, it was a general complaint that these subsidies had only been provided to very few households, which some described as being within a “closed circle”.

### 6.13 Key Organisations and Cooperation

Village key informants were asked whether any organisations had come to their villages in connection with sanitation and hygiene issues and what roles and activities they had. Similarly they were asked about the role of the chiefs.

Several key informants mentioned NGOs as key organisations, as their villages received - or had received - support for latrine construction (often in the form of subsidies) and hygiene promotion. A few other external organisations were also mentioned, including projects like the North-Western Rural Water Supply Project/ District RWSS Unit, the completed Central Province RWSS Project, and Irish Aid.

Chiefs were reported to be actively involved in sanitation and hygiene promotion in several of the survey villages in the different villages, mainly through their headmen. Several chiefs and their headmen thus promoted and/or instructed people to build latrines, rubbish pits, dish racks etc.

Different churches were also mentioned as important in villages in Lufwanyama.

An overview of sanitation and hygiene related interventions are included in chapter 11 of this report.
6.14 Key Issues and Suggestions

Many issues and suggestions were mentioned during interviews with village key informants and the FGDs with village women and men. The following are the main issues and suggestions mentioned:

- Subsidies in the form of materials like cement, roof sheets and iron bars to be provided for households to construct long-lasting latrines or NGOs/projects to construct good latrines; households could provide local materials but could not afford cement etc.; villagers in one district mentioned that already made sanplats should be given to people to avoid the misuse of materials.
- Problem in several areas with collapsing latrines because areas were sandy etc., so latrines should be lined; subsidies needed for this; villagers in one district also mentioning that the latrine safety should be checked because collapsing latrines are dangerous to people.
- In areas where sanplats had earlier been provided some villagers suggested that those left out earlier should be provided with sanplats.
- Need better design of latrines to avoid they collapse during the rainy season; some also mentioning that more builders need to be trained on latrine construction using standard designs and they should have their own tools.
- Improved water needed to improve sanitation and hygiene situation.
- Sensitization activities to be continued/intensified to change people’s attitudes, although some mentioned that people should not only be sensitized, subsidies should also be provided; others mentioned that sensitization activities should be before any sanplats were provided.
- Those doing sensitization works (volunteers, V-WASHEs etc.) should be provided with small incentives, bicycles or similar.
- Training at village level needed; some villagers mentioning that village headmen should be trained so they could spearhead the promotion of latrine construction.
- Village headmen/ village committee to force some households to construct latrines.
- Chiefs to include construction of hand washing facilities in their instructions and punish those without such facilities (mentioned in one district).
- Need for a RHC/ EHT at RHC/ adequate staffing of RHCs.

7 Sanitation and Hygiene in Schools

Information on the situation in schools was collected through a questionnaire survey administered to 44 schools, one in each of the wards visited, i.e. in total 4 schools in each of the nine districts and each of the two municipalities. Additional information was collected through two FGDs in the same schools, one with a group of girls and one with a group of boys, who were in grades 3-9.

7.1 School Background Information

Grades 1-9 were taught in 82% of the schools visited and grades 1-7 in 11% of the schools. The remaining 7% had pupils up to grade 12. The size of the schools ranged from a school in Kabompo with 227 pupils to a school in Mansa with 1,245 pupils.

48% of the schools had three shifts of classes during a day, 43% two shifts, 5% one shift and 2% four shifts. One school did not provide this information.

7.2 Latrines and Urinals

7.2.1 Ratio of Latrines to Pupils in Surveyed Schools

All 44 schools had latrines. However, during the FGDs with pupils there were complaints from nearly all schools, particularly from girls, that there were too few latrines for the number of pupils in their schools. For this reason, a significant number of pupils used the bush from time to time.
The following is comparison of the ratio of latrines to pupils in the 44 schools as compared to the official requirements in the Public Health (Drainage and Latrine) Regulations, as described in chapter 2 of this report.

In this first basic analysis of the sanitation situation in the surveyed schools, the following is not yet taken into account: the quality of construction (type of latrine, if adequate or not); if the latrine is functioning and fit for use or not; the fact that many of the schools have several shifts per day; or the estimated life-span of pits related to pit size and number of users.

In the surveyed schools there were a total of 327 cubicles for girls and boys compared to the recommended total number of 1,157 cubicles as per the national guidelines for school sanitation.

The figure below presents the number of schools with different success rates in fulfilling the national guidelines.

Figure 7.1: Compliance with School Latrine Requirements Related to Total Pupils

About one third of all schools in the survey had less than 20% compliance with the national requirements for school sanitation with respect to number of latrine cubicles for girls and boys.

Another third of the schools had a compliance rate of 20% to 40%, while for all schools in survey the average compliance was 28%. This means that in order to comply with the national requirements, there should be four times as many latrines in the schools surveyed.

However, as most survey schools had 2 or 3 shifts per day, the actual access for girls and boys to school sanitation facilities could also be assessed in relation to the average number of pupils per shift, as below.

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The quantitative analysis is based on data from 39 out of 44 schools included in the survey, as four schools did not provide specific data on the number of school girls and boys and one school did not provide information on the number of girls'boys' latrines.

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With a reduced number of pupils per average shift the actual access improves and a few schools even surpassed the guidelines when the calculation is based on the number of pupils per shift instead of the total number of pupils per day.

There is, on the other hand, a complication in calculating the access per shift, as the durability or life-span of each latrine in use in the school depends on the number of users (and size of pit). Hence if using 2 or 3 shifts without sufficient number of latrine cubicles (or adequately sized pits) the individual pits will fill up faster and the latrine will have to be replaced sooner.

Over time the faecal material in the pit latrines will de-water and decompose and after about 6 years only about 10% of the original volume is left in the pit. However, if the number of users is higher than designed for, the pits will fill up faster than the decomposition can counteract and the latrine will have to be abandoned prematurely.

In case of a pit filling up too fast, it is possible to give it a period of rest after then it can be used again. This will however decrease the access to latrines for the period of rest. Therefore, it is better to adjust the number of users to suit the decomposition rate, either by increasing the number of pits (cubicles) or increasing the size of pits when building new school latrines.

As the major cost in school latrine construction is related to the superstructure including the slab (floor) it has a better cost-benefit ratio when investing in school sanitation to increase the size of the pit or increase the total number of latrines compared to the number of users to allow for time needed for decomposition.

### 7.2.2 Urinals at Schools

Only four schools had urinals, but no measurements were given so their compliance to the requirements in the Public Health Regulations cannot be assessed. However, generally it can be said that urine mixed with faeces gives more smell than if urine and faeces were separated. Use of urinals can thus reduce the smell and the required cleaning of boys’ latrines. Of course, urinals which are not constructed well (drainage) or not cleaned regularly will smell. UNICEF has in some schools in Zambia introduced urinals for girls, where the same conditions apply about smell etc.

### 7.2.3 Types, Suitability and Maintenance of Latrines in Surveyed Schools

64% of the schools had VIP latrines for pupils, while 21% had traditional pit latrines with a not smooth floor surface and 11% with a smooth floor surface. The following figure shows the types of latrines in the schools visited according to districts.
Figure 7.3

Types of Latrines for Pupils

- Ventilated improved (VIP) latrine
- Pit latrine with sanitation platform
- Traditional pit latrine with a smooth floor surface
- Traditional pit latrine with a not smooth floor surface
- Other

Other specified as temporal latrine and both VIP and traditional pit latrine; some schools had more than one type of latrine for pupils

61% of the 36 schools with separate latrines for teachers had VIP latrines for them, while 11% had pit latrines with sanplats, 8% traditional pit latrines with a smooth floor surface and 8% traditional pit latrines with a not smooth floor surface. Further details are found in the figure below.

Figure 7.4

Types of Latrines for Teachers

- Ventilated improved (VIP) latrine
- Pit latrine with sanitation platform
- Trad. pit latrine with smooth floor
- Trad. pit latrine w not smooth floor
- Other

Other specified as temporal latrine (1 school) and no latrine for teachers (1 school); some schools had more than one type of latrine for teachers

As can be seen from the above two figures, the proportion of schools with VIP latrines for pupils and teachers were very similar. However, only schools in Choma had latrines with sanplats for pupils, whereas some schools in other districts had latrines with sanplats for teachers. This is in line with the information from pupils in some FGDs that their teachers had better latrines that they had.

In 75% of the schools all latrines for pupils functioned, while in another 23% only some functioned. One school did not provide this information. In 71% of the schools, all latrines for teachers functioned, in 5% some and in 14% none of the teachers’ latrines functioned. Five schools did not provide this information. The two figures below shows the situation in different districts.
As can be seen from the table below, a significant proportion of school managements did not consider their latrines suitable for the pupils, particularly not for boys and girls of 10 years and below, 23% and 18% of schools respectively.

### Table 7.1: Suitability of Pupils’ Latrines

<table>
<thead>
<tr>
<th>Category of pupils</th>
<th>Latrines suitable (% of schools)</th>
<th>Latrines not suitable (% of schools)</th>
<th>No answer (% of schools)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys below 10 years</td>
<td>75%</td>
<td>23%</td>
<td>2%</td>
</tr>
<tr>
<td>Boys 10 years and above</td>
<td>84%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Girls below 10 years</td>
<td>73%</td>
<td>18%</td>
<td>9%</td>
</tr>
<tr>
<td>Girls 10 years and above</td>
<td>80%</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

10 school managements/teachers gave as the main reason why some latrines were suitable for some pupils that children did not like the type of latrine (too dark etc.), while five mentioned that the latrine was not safe (drop hole too big etc.). Other reasons were that children did not know how to use this type of latrine and two that the latrine did not have enough privacy.

Some pupils participating in FGDs were satisfied with the design of their latrines, which appeared to mainly be schools with VIP latrines. However, many pupils were not happy with the design. Frequent complaints were unsafe latrines that often collapsed during the rainy season, poor ventilation, no doors, too big squat holes and young pupils who did not want to use the latrines for this reason. Other school latrines were said to have too small squat holes. A number of girls also complained about the lack of
privacy, either because the girls’ and boys’ latrines were too close together and/or because there was no latrine door or no proper door. Others complained of no roof.

9% of the schools (i.e. 4 out of 44 schools) had urinals for pupils.

66% of the schools had latrines that were three years or older, 11% had latrines that were 1-2 years, while 14% had latrines that were less than 1 year. There was no information from 9% of the schools.

Most latrines and urinals were constructed by various projects, some by parents and a few by schools and pupils. Only 4% were reported to be constructed by masons from the district.

Around half of the latrines and urinals were paid by projects, around one fifth by MoE and the remaining by parents or Parents-Teachers Associations (PTA).

According to school managements, the latrines in all schools except one were cleaned by pupils, while parents cleaned the latrines in the last school. In most schools, latrines were cleaned every day, either once a day (71%) or twice a day (4%). The remaining schools cleaned their latrines either twice a week (16%) or once a week (9%). Also pupils participating in FGDs mentioned that they cleaned the school latrines, both their own latrines and the teachers’ latrines, while teachers and/or prefects supervised the cleaning. In some schools, cleaning of latrines was used as a punishment for pupils who came too late, make noise or caused other trouble. Pupils in a few schools had detergent/soap for cleaning of latrines, but the far majority used brooms and water only.

Many pupils, both girls and boys, complained that the school latrines were not clean, had a very bad smell and some also that they were difficult to clean. Boys in one school in Kabompo thus complained that the smell in the latrines was like a rotten pumpkin. In some schools there were also complaints that some pupils did not know how to use the latrines properly, so there were faeces on the floor of the latrines and in some also on the walls because pupils did not have any toilet tissue paper. Pupils in one school in Sinazongwe also complained that outside people used the school latrines during week-ends and often defecated on the floor of the latrines. Also latrines in other schools were used by community members, e.g. in Samfya. Two out of the four schools visited in Lufwanyama had pour-flush toilets, but according to pupils there were very dirty because the schools had no water. Pupils therefore had to go to the stream to draw “enough water” to pour into the toilets.

The school questionnaire survey showed that the latrines and urinals in 55% of the schools were maintained by the school itself, mainly through school maintenance staff/school maintenance committees and teachers, while in 16% of schools maintenance was done by pupils and in 7% by parents. The remaining schools either did not do any maintenance work or did not provide information on this.

59% of schools had had one or several latrines that got full. 62% of them had constructed new latrines, while 8% had emptied the full latrines and 4% used other school latrines. From the answers received, it is not possible to see what other schools did except demolishing them/filling up the pits.

61% of the school latrines were observed to have no lids at all, while 52% were not clean, 48% had a strong, bad smell, while 48% had no feet templates. The variations by district are shown in the table on the following page.

Two out of the four urinals were observed to be clean/very clean, while one was not clean and two had a strong, bad smell.

The latrines in 71% of the schools were observed to be placed within 50 metres from the class rooms. More schools may have their latrines relatively close to class rooms, but unfortunately observations on this were not noted for 25% of the schools.
### Table 7.2: Observed Condition of School Latrines

<table>
<thead>
<tr>
<th>Districts/Municipalities</th>
<th>Not clean</th>
<th>Strong, bad smell</th>
<th>Not easy to clean around squat hole</th>
<th>Floor/slab material visible in squat hole and dirty</th>
<th>No feet template</th>
<th>Squat hole not keyhole-formed</th>
<th>Unsafe to use</th>
<th>Flies visible near squat hole</th>
<th>No lid at all</th>
<th>Lid not close-fitting or not in place on squat hole</th>
<th>Privacy not good</th>
<th>Other</th>
</tr>
</thead>
<tbody>
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<td>Rural Districts</td>
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<td>25.0</td>
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<td>-</td>
<td>-</td>
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<td>Rural Districts Total</td>
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<td>25.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>75.0</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Municipalities Total</td>
<td></td>
<td>25.0</td>
<td>37.5</td>
<td>-</td>
<td>12.5</td>
<td>25.0</td>
<td>-</td>
<td>12.5</td>
<td>-</td>
<td>62.5</td>
<td>12.5</td>
<td></td>
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<tr>
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<td></td>
<td>52.3</td>
<td>47.7</td>
<td>13.6</td>
<td>15.9</td>
<td>47.7</td>
<td>36.4</td>
<td>15.9</td>
<td>22.7</td>
<td>61.4</td>
<td>2.3</td>
<td>13.6</td>
</tr>
</tbody>
</table>
7.3 Hand Washing

57% of the survey schools had hand washing facilities. The figure below shows the variations among the districts and municipalities.

![Figure 7.7: School Hand Washing Facilities](image)

23% of the 44 schools had only one hand washing facility, 13% had 2-3 facilities, while 18% had 4-6 facilities and 2% (1 school in Samfya) had 12 hand washing facilities. One or two hand washing facilities for all pupils in even the smallest school makes it very unlikely that pupils regularly washed their hands.

52% of the hand washing facilities were placed near latrines, 2% within the latrine building, 4% close to the water point while the remaining were placed around classroom blocks, close to school offices and elsewhere within school grounds.

The schools had different types of hand washing facilities, half of which had taps. Others were buckets, basins, dishes and similar. 78% of schools with hand washing facilities considered these suitable for pupils of all ages. One school did not consider its hand washing facility appropriate, as it had one for 1,183 pupils, while another school management said that short children were unable to reach the taps.

18 out of 25 schools with hand washing facilities (i.e. 72% of schools with hand washing facilities) said they always had water at the hand washing facilities. However, the research team only observed water at the hand washing facilities of 8 schools (i.e. 32% of schools with hand washing facilities). The main reason for not always having water at the hand washing facilities was a general water shortage.

As mentioned in chapter 6, it is often difficult to get correct information about people’s hand washing practices, as people may know when they ought to wash hands, which may be reflected in their answers. Although children may be more honest in their answers than adults may be, the following information should still be used with some caution.

Some pupils said they normally washed hands after using the latrines. However, a considerable number of pupils did not wash hands after using the latrines, or only did so sometimes, because there was no or not enough water, because there was no or not enough hand washing facilities or they had broken and not been repaired or replaced. In one school in Mumbwa, the hand washing facilities had according to pupils been locked away, while in one school in Samfya the hand washing facility (a container) had been stolen and in a school in Isoka seven hand washing facilities had according to pupils just disappeared. Some said they went to the school’s borehole to wash hands, while others complained this was too far away and therefore did not wash hands. Some girls in Chongwe said they felt shy being seen washing their hands; instead they would like to have hand washing facilities close to the latrines.
Around one third of schools with hand washing facilities said they had soap at these, 90% (9 schools) saying this was bar soap and 10% (1 school) liquid soap. However, the research team only observed soap available at 3 schools at the time of its visit. The majority of schools gave as reason for not having soap available that there was not enough money to buy soap, while a number of schools mentioned that the soap disappeared. Some pupils said they sometimes used soap for hand washing at school, but most did not have soap available.

7.4 Water Source, Drinking Water and Water for Cleaning

82% of the schools surveyed had their water source within the school grounds. The figure below gives details on the districts and municipalities surveyed.

![Figure 7.8: Water Source within School Grounds](image)

Half the remaining schools had their water source within 500 metres from the school and half more than 500 metres from the school. 80% of the schools had boreholes, 5% used the river/stream, while 2% used tap water from service provider (1 school) and the remaining used water from hand-dug/shallow wells. Information was not obtained from one of the schools.

73% of school managements believed the water from the school’s water source was safe for pupils to drink, 25% did not think it was the case, while 2% did not know. The variations among the districts and municipalities are shown in the table below.

<table>
<thead>
<tr>
<th>District/ Municipality</th>
<th>Yes</th>
<th>No</th>
<th>Do not know</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinazongwe</td>
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<td>.0</td>
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</tr>
<tr>
<td>Chongwe</td>
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<td>.0</td>
<td>25.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Samfya</td>
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<td>50.0</td>
<td>.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Mumbwa</td>
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<td>25.0</td>
<td>.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Chadiza</td>
<td>100.0</td>
<td>.0</td>
<td>.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Kaoma</td>
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<td>25.0</td>
<td>.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Kabompo</td>
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<td>25.0</td>
<td>.0</td>
<td>100.0</td>
</tr>
<tr>
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<td>.0</td>
<td>.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Lufwanyama</td>
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<td>75.0</td>
<td>.0</td>
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</tr>
<tr>
<td>Choma</td>
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<td>.0</td>
<td>.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Mansa</td>
<td>25.0</td>
<td>75.0</td>
<td>.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72.7</strong></td>
<td><strong>25.0</strong></td>
<td><strong>2.3</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
55% of the schools always had sufficient water at the school’s water source for pupils to drink, while 27% had this sometimes and 18% never. The figure below shows the variations among districts and municipalities.

**Figure 7.9**

![Sufficient Drinking Water at School’s Water Source](image)

According to school managements, only pupils in 14% of the schools brought drinking water from home, while 4% did not know.

64% of the schools said they always had sufficient water available at the school for cleaning, while 25% had this sometimes and 11% never.

The research team’s observed that at the time of the visit very few schools stored water in containers/buckets. Half these containers and buckets were covered with lids.

### 7.5 Disposal of School Waste

43 out 44 schools (98%) disposed of their solid waste in rubbish pits, while the last school threw it into the bush.

30% of schools threw their waste water outside school grounds, 30% disposed of it in soakage pits at the schools, while 23% used it for watering flowers and plants and around 11% threw it into rubbish pits, latrines or elsewhere within the school grounds. 7% schools did not provide information on their disposal of waste water.

### 7.6 Sanitation and Hygiene Education

According to the school questionnaire survey, the far majority of schools (86%) had had sanitation and hygiene education activities in the school during the last year. The variations among districts and municipalities are shown below.
Sanitation and Hygiene Component, National RWWS Programme, Zambia
Assessment of Existing Sanitation and Hygiene Situation and Interventions

Figure 7.10

Sanitation and Hygiene Education Activities at School

The main sanitation and hygiene topics mentioned by schools managements were personal hygiene and hand washing, mentioned by 64% and 56%, respectively. Other topics are shown in the figure below.

Figure 7.11

Sanitation and Hygiene Topics

Other specified as diseases, importance of latrines/sanitation, nutrition, water and sanitation

In 52% of the schools, teachers had given instructions/lessons on sanitation and hygiene, while in 20% of schools there had been discussions with pupils and in 9% drama for the pupils. Other types of activities included singing with pupils and in one school a cleanliness competition. The above information should be used with some caution as each school only mentioned one activity, which is then assumed to be the activity they considered most important.

Activities were mainly organised by teachers (around 60%) and health staff. A couple of schools also mentioned NGO staff and D-WASHE members. 11% of schools did not provide information on this.

62% of the schools with sanitation and hygiene education had activities at least once per week, 9% once per months and others less frequently.

85% of the managements in schools with sanitation and hygiene activities considered them effective because children had changed their behaviours/had better hygiene practices. Other schools did not consider the activities effective due to poor the pupils' environment at home, lack of participation from villagers and because no soap was available for personal hygiene due to poverty.

Pupils in most schools also stated they received information on sanitation and hygiene issues, mainly through classes and some from inspections of latrines and during assemblies/parades. In several schools health, hygiene and sanitation was taught as part of other subjects as creative and technology
studies and home economics/home management. However, in some schools there were according to pupils not enough teachers for health and hygiene education during classes, so this was done during assemblies. In some schools, there were school health and nutrition programmes, which included sanitation, and in some schools anti-AIDS clubs. Pupils in one school in Mansa mentioned that PHAST trainers from Africare came to teach both girls and boys, while girls at one school in Lufwanyama mentioned that the EHT from the local RHC came to their school to give educational talks on sanitation and hygiene.

Pupils mentioned the same sanitation and hygiene topics as those shown in the figure above, but also a few additional topics, namely:

- HIV/AIDS and how it spreads
- The need to keep latrines clean
- Keeping school surroundings clean
- Health education at home to other siblings

7.7 Pupils’ Latrine Usage and Hand Washing Practices at Home

During the FDGs, pupils were also asked to describe their situation at home as far as latrine usage and hand washing practices was concerned.

Many of the pupils had latrines at the home. It was a common statement from these pupils that their latrines at home were better than those at the school. School and home latrines were often said to be the same type of latrine or the school latrines to be a better type (VIP latrines), but the home latrines were still considered better because they were much cleaner than the school latrines and some girls also mentioned their household latrines had better privacy. However, a few pupils did find the latrines at school better than those at home as the school latrines had better ventilation and/ or were VIP latrines. Other girls complained that their household latrines were too small in size and/ or not very strong (no slab/ no cement used). Pupils without household latrines used the bush or areas just behind their houses. Also some pupils from homes with latrines used the nearby bush, especially at night time; some mentioning they dug a small hole behind the house.

Many of the pupils, especially the girls, helped clean their latrines at home. Some pupils in Choma and Kabompo mentioned there had been a directive from the chief that all households had to construct latrines within a certain period; if this was not done, they would be punished.

As mentioned in section 7.3, it is often difficult to get correct information about people’s hand washing practices, so the following information should still be used with some caution. Many pupils mentioned that they washed their hands at home before eating and some also after using the latrine. However, some only washed hands occasionally because they had very little water available and some then reserved this for cooking and drinking. A few used soap for hand washing at home, but not many. As girls in one FGD in Choma said “it (soap) is a precious commodity”.

Some pupils talked about sanitation and hygiene issues at home, while others did not do this or only when asked to share their knowledge. As boys in one FGD in Sinazongwe said “pupils are (too) young to sit down with elders about talk about sanitation, so we talk to fellow young ones only”, while a group of girls in Kabompo said some of them did share this type of information with their mothers, sisters or brothers but not with any adult men due to traditions (traditional barriers).

Some pupils mentioned they received health and hygiene information at home and/ or by health staff, the church and/ or radio programmes as part of the “Keep Zambia Clean” campaign.
7.8 Problems and Suggestions

7.8.1 Problems and Suggestions Mentioned by Pupils
The following are the main sanitation and hygiene related problems and suggestions mentioned by school boys and girls:

- In most schools, too few latrines to the number of pupils; the number of school latrines should be increased, some also mentioning the number of latrines in the village should be increased.
- Need for better or improvements to school latrines, as some had no doors and/or no privacy, poor ventilation and/or were dangerous to use because they collapsed during the rainy season; pupils in several districts suggested that VIP latrines should be constructed.
- Many latrines not clean/ smelled; detergent, gloves etc. to be provided for cleaning of latrines and in some districts also brooms; in one district pupils also suggested punishment for those that did not use the latrines properly.
- The availability and/or the quality of water to be improved in the school and in the villages through construction of (more) boreholes and/or need for chlorine to treat water.
- Hand washing facilities should be provided next to latrines and there should always be soap.
- Girls’ latrines to be combined with bathrooms/showers needed at the school for girls.
- Toilet paper to be provided and for girls also sanitary pads.
- In some schools, no health and hygiene education and this should be provided; other pupils suggested more information on sanitation and hygiene issues either at school or village level.
- Need to lock latrine doors to avoid villagers misusing latrines.

7.8.2 Suggestions Mentioned by School Managements
The school managements had a number of suggestions of how to improve the sanitation and hygiene situation at their schools.

Many thus suggested the following:
- Construction of one or more boreholes
- Provision of hand washing facilities with some also mentioning provision of soap
- Construction of more latrines
- Continued sensitization activities, one school e.g. suggested that health workers should visit their school and talk to the pupils, while others mentioned provision of materials like posters and books.

8 Rural Health Centres and EHTs

Information from RHCs and EHTs was collected through a questionnaire survey administered to 33 EHTs. Due to shortage of EHTs, only one EHT was interviewed in Isoka, two in Lufwanyama and two in Samfya, while three or four were interviewed in the remaining districts/municipalities.

8.1 Staffing

70% of the EHTs interviewed were men and 30% women. Only 1 out of 33 EHTs (3%) considered their RHCs adequately staffed.

The majority of EHTs (52%) managed the deficit in staffing by working extra hours. Other ways to cope with this situation were to share the work among available staff, leave out the work for unfilled positions and getting TBAs and CHWs to assist. The main reason given for the lack of staff was that MoH had not posted the required staff to their RHC, mentioned by 46% of the EHTs, while a significant number also contributed this situation to the remoteness of the RHC and the lack of adequate incentives. Further details are included in the figure below.
8.2 Roles and Responsibilities

30% of EHTs said that attending to patients was their most demanding activity, while only 18% mentioned community mobilisation and sensitisation and 15% monitoring. Further details are in the figure below.

24% of EHTs did community mobilisation and sensitisation work daily, while 27% did it every week. Others did it less frequently, either monthly, quarterly or depending on activities/programmes.

Most EHTs had either the traditional ruler (27%) or a CBO leader (27%) as their key village contact for their community mobilisation activities. For others the NHCs or the CHWs were their key contacts. Further details are in the figure below.
33% of EHTs had health education on malaria, HIV/AIDS etc. as the most important message for their mobilisation and sensitisation activities, while 27% had water and sanitation and 21% hygiene education. Further details are in the figure below.

46% of the EHTs had public meetings as their most common media for delivering messages, 15% the village crier while 9% had drama and another 9% posters. 46% of the EHTs also considered the public meetings and 15% the village crier the most effective media, thus coinciding with the media they most commonly used. 15% considered drama the most effective media, although only 9% had this as their most commonly used media. Interestingly, none of the EHTs considered the posters the most effective media although 9% used them. Further details are in the figure below.
Around 55% of the EHTs did water quality monitoring. Almost all of them did this monthly (46%) or quarterly (41%).

### 8.3 Disease Patterns

More than half of the visits at the RHCs were for children below the age of 5 years. The diseases most commonly attended to in children under the age 5 years, in men as well as in women were malaria (30%, 27% and 36% respectively) and cough, followed by diarrhoea (21%, 9% and 15%). Further details can be found in the figure below.

When asked about common water and sanitation diseases, key informants in most villages mentioned the same diseases as the EHTs, namely malaria and diarrhoea. Some also mentioned cholera and dysentery and a few scabies. The diseases were reportedly most common during the rainy season.

### 8.4 Latrines

46% of EHTs reported that the traditional pit latrines with a not smooth floor surface was the most common type of latrine found in their catchments, while 39% reported the traditional pit latrine with a
smooth floor surface to be the most common type. Additional information is included in the graph below.

**Figure 8.7**

![Bar chart showing the most common type of latrine.](image)

58% of EHTs reported that most latrines were constructed by household members, while 30% reported most latrines to be constructed by local masons. Others who did latrine construction were RHC staff, D-WASHE members, the NHC and a project.

27% of the EHT catchments had, according to the EHTs, from 0-2 latrine builders, 27% had 3-9, 15% had 10 latrine builders and few had more than 10 latrine builders. 18% of the EHTs did not know. Most of the EHTs (68%) did not think the number of latrines builders in their catchments was sufficient.

39% of EHTs considered their main role in construction of latrines to be supervision, while 21% considered it to be monitoring and 18% designing. 6% (1 EHT) considered themselves to have no role in latrine construction. Further details are in the figure below.

**Figure 8.9**

![Bar chart showing the role in construction of latrines.](image)

Other specified as advice in usage and value of latrines, siting of latrines, no role

18% of the RHCs provided material assistance to latrine construction, in the form of cement, roofing sheets, sanplats and steel bar (should most likely be iron bars).
8.5 Stakeholders

Health associations (NHA, TBAs, HIV/AIDS etc.) and farmers groups and cooperatives were according to the EHTs the most common CBOs in their areas, followed by women’s associations and clubs. As can be seen from the figure below, only a small proportion of the EHTs (9%) mentioned the water and sanitation committee as a CBO in their area.

![Figure 8.10](image)

**Figure 8.10**

Other specified as various NGOs, ADCs and PHAST groups

42% of the EHTs were in most contact with the health associations, 15% with water and sanitation committees and 15% with women’s associations and clubs. The same types of CBOs were in the view of the EHTs most in engaged in sanitation and hygiene, with 46% of EHTs reporting the health associations to be most involved, 15% the water and sanitation committees and 9% the women’s associations and clubs. Further details are in the figure below.

![Figure 8.11](image)

**Figure 8.11**

Other specified as various NGOs, Home Based Care Groups and Hygiene Promoters

ADCs had been established in 82% of the RHC catchments where EHTs were interviewed, i.e. in 27 out of 33 catchments. 44% of the EHTs in areas with ADCs had been involved in this formation and 55% played a role in the ADC. Some of them specified their role in the ADC, which was mainly as advising on health matters, while two mentioned specifically sensitization or facilitation in relation to water, sanitation and hygiene. Five EHTs mentioned that health and hygiene issues had been discussed in the ADCs and two EHTs that water and sanitation had been discussed. 10 EHTs considered water and sanitation to be a priority for the ADC, while only two considered health and hygiene a priority for the ADC.
55% of the EHTs had direct contacts with the District Council. 44% of these EHTs were in contact with the Council on water and sanitation and 6% on health and hygiene. Further details are included in the figure below.

**Figure 8.12**

![Issues for EHTs Contact to District Council](image)

Other specified as monthly report, medicine, and tool kit

### 8.6 Problems and Suggestions

The following were the main problems mentioned by most EHTs:

- Lack of funding
- Lack of transport
- Shortage of staff
- Water problems
- Latrine issues, including only few build latrines, collapsing latrines, no cement
- Difficult to change people's behaviour/lack of understanding

Most suggestions from the EHTs were directly related to the problems identified, with a few additions. The following are thus the suggestions mentioned by most EHTs:

- Provision of funding from different sources including donors and NGOs
- Increasing number of staff (at RHCs)
- Providing motor cycles and other types of transport
- Increasing sensitization and training
- Provision of materials

### 9 Private Sector

#### 9.1 Availability and Prices of Construction Materials

At the time of survey there was a national shortage of Chilanga Cement affecting the market price of cement. At the same time, there was an international fuel crisis which affected transport prices in general. Hence cement prices in the districts were perceived high by stakeholders, ranging from 70,000 ZMK in Lusaka (and Solwezi), to 80-82,000 ZMK in Samfya / Kaoma and 88-90,000 at ward level in Kabompo / Samfya.

For comparison, in 2007 the price of 50 kg of Chilanga cement was reported to be around 42-45,000 in Lusaka.
It is noted that the prices were collected in the major market centres in the districts and that the price a household has to pay in a village will have an added value due to local transport. The added value can vary a lot depending on mode of transport, quality of road and distance from market centre to village. This survey has not gone into price levels at village level, as there were no official market prices that could be collected there.

The survey showed that the availability of materials decreased and prices increased with the distance from the bigger distribution centres at District level. Hence less availability and higher price at Ward level.

For Samfya and Kabompo the price for cement were reported to increase from District to Ward level with 13% and 26%, respectively.

Two types of price indexes for construction materials have been calculated from data collected from the nine rural districts and two municipalities. The prices for a number of different items used in construction were collected, but only the 3 main items were sufficiently standardised and with a complete data set from all areas to be compared across the total pool of data.

One price index is for 3 items (Cement, Pipe, Sheets) and one for Cement ONLY, the latter being the main product used in low-cost sanitation. “Ventilation Pipes” and “Roof Sheets” are mostly relevant for more expensive latrine models like VIP, often promoted for school sanitation.

It was found that CEMENT prices varied from 97% to 117% of the prices in Lusaka. The highest price was in Samfya (114%) and Kaoma (117%), while other areas range from 97% to 107%.
When combining 3 items there were found to be more variation in the index, from 100% up to 152%. The highest combined prices compared to Lusaka prices were in Samfya (152%) and Kaoma (145%), while other areas ranged from 100% to 117% compared to Lusaka prices. Especially the elevated price for “Ventilation Pipe” in Kaoma and Samfya (180-200% of the Lusaka price) makes a big difference in the combined price while “Iron Sheet” (137-143% of the Lusaka price) contributed to the increased difference in other districts.

The price for another basic construction material, the iron bar (6mm bar, 20 feet), was not collected in all sites, but the trend followed the price for cement. This means that if cement was e.g. 5% more expensive in a district compared to Lusaka, then the iron bars was also around 5% more expensive in the same district.

Sand and stones (aggregate) for concrete varied more, as usually it was collected or produced locally and the price depended more on the local transport price (distance, local rate) than where in Zambia it was procured. Hence the price for sand within the same district can vary depending on transport mode (local manual transport or by truck) and distance. The same applies for stone aggregate. There may also be a price difference depending if the stone aggregate is produced as an industrial process or by hand, although this was not investigated in this survey.

In some areas it was claimed there was no sand, only rocks, or the other way round. Or in e.g. Samfya it was in some places difficult to get both sans and stones. Then the price for the item(s) may be high due to transport challenges. Alternatively, the mixture of concrete may be changed to suit the available materials, which usually implies increased cement usage/ expenditure.

In each area there is a need for a local evaluation of availability and prices of essential materials like cement, iron, sand and stone, as to calculate a more exact price level for sanitation implementation using these materials.

In some rural areas where road access is very poor is may not be economical to transport bulk materials like sand and stones. Even the transport of cement may increase the price considerably.

### 9.2 Availability and Capacity of Local Builders

In the survey there were encountered builders in almost every ward visited. These builders where interviewed about work experience for household and school sanitation and about constraints/challenges in their work.
9.2.1 The Average Latrine Builder and Availability of Builders

The average builder does not exist, but the builders can be classified into groups based on their background as builders and experience/skills in latrine construction.

- A total of 39 builders, all male, were interviewed.
- The age ranging from 22 to 71 years, with average 38 years.
- Some had been builders a long time, others started recently, on average 12 years working as builders (i.e. not only for latrine building).
- Some builders (38%) had very little experience in latrine building, i.e. not ever participating in any official training and having constructed very few latrines. This means in the range of 5 to 15 latrines over the latest few years, or maybe 30 to 50 latrines constructed over the last couple of decades, making it only a few latrines per year on average. Several of those still claimed that they were comfortable with building both traditional and VIP latrines. It must however be questioned if they did know all the technical issues necessary and could construct to a required minimum quality. The 28% of all builders who did not have their own tools is included in this group.
- A larger group of “medium-skilled” builders (49%) had more experience, both in relation to actual official training and the number of latrines constructed over time. This group both built traditional latrines at household level and had experience with Sanplat and VIP construction.
- There was a small group of 5 “experienced” builders (13%) with much experience, either building more than 100 latrines over a long period or during recent years in connection with project activities. These builders had participated in formal training courses and been employed for construction of VIP latrines at schools and other institutions. On the sideline they assisted households with latrine construction, mostly building traditional latrines or installing Sanplats.

The interviewed builders were in most cases aware of other builders in the areas, ranging from 5 to 50 builders, with an average of 16 builders. However, there were no firm indications as to whether all other builders had experience with latrine construction and, if they had, little, medium or much experience with latrine construction.

The actual skills of builders in different areas are likely to depend on whether they have attended training on latrine construction, mainly arranged by different projects.

9.2.2 Experience in School Latrine Construction

About half of the builders had experience from building school or institutional latrines, mainly of the VIP type. Sometimes the traditional latrines were built at schools also. One builder had used the UNICEF-design for integrated school latrines with hand wash facilities in the cubicles and separate urinals.

A large part of the builders claimed to be comfortable building sanplats and VIP latrines without giving evidence of having received adequate training for these sanitation types. And the number of total latrines produced mentioned by those builders did also show very little actual building experience.

Photos from schools in the survey districts showed that despite the interviewed builders’ perceived skills, guidelines for construction of e.g. VIP latrines had not always been followed. The numerous examples of poor construction may relate to lack of proper tools, poor designs or poor supervision, but are of the type that can be and should be fixed so as to increase the user value of the capital investments.

The problems observed in VIP constructions were widespread and related mainly to poor quality and design of squat holes and foot rests (increasing fouling and making it difficult to clean easily), floors...
where waste water from cleaning could not drain away (into the pit) and imperfect installation of ventilation pipes (either not giving direct light to the pit to attract flies or not installed with proper fly screens).

Basically, it is a question of communicating the proper designs to the implementing organisations and make sure that they are arranging for proper capacity building of builders and supervisors, so as to ensure good quality of work in the field. If implementing organisations do not have the technical skills internally in the organisation, then some training using external training facilities is needed.

9.2.3 Knowledge on Hygiene Promotion

Only 2 builders had participated in hygiene promotion training, while some of the others were aware of the importance of hygiene. From the interviews, it is not possible to establish whether and how they may apply their knowledge on hygiene and hygiene promotion.

It is considered an advantage if builders have a good knowledge of hygiene issues and hygiene promotion, as it may result in the construction of better-quality latrines, when the builder sees the connection between inappropriate design or poor workmanship and the resulting increase in health risks.

9.2.4 Site Selection Skills

Around half the builders had given households recommendations on site selection for latrines. The advice was mostly concerned with the wind direction and smell, while fewer have a minimum distance from house to pit (5, 10 or 30 m away from the house) and distance to water source (30 m on downward slope).

Only a small number actually mention the need for the pit to be dug on an elevated site (to prevent rain water flowing into the pit, resulting in flooding and potential collapse). Of course more builders may know, but due to limitations in interview techniques it may not have come out during the interview.

9.2.5 Tools for Builders

Most builders interviewed had some basic hand tools. However, the toolbox may not have been complete or the tools worn out in some cases. A few builders mentioned the need for wheelbarrows and other forms of transportation because of the distance between work sites.

The specialised tools for making various types of sanplats were shared among builders on an area basis or had been used by a project to produce sanplats and then taken back to storage. In the latter case, the builders were then building household latrines using pre-fabricated sanplats, while not actually knowing how to make one. The 60x60 cm sanplats was in one place known to be produced centrally by a NGO and then transported to site for installation by local builders. Here the skills for making this particular sanplats were limited to a small production team, while the application in the field of the pre-cast slab was more widely known.

9.2.6 Training of Builders

Several builders have acquired the basic skills in connection with training in latrine construction. This could mean that they had no previous skills in building. If the training in latrine construction was adequate there should be no problem, but with inadequate training the result may be future poor construction quality in the field. One example is a builder referring to using 50 kg of cement for one sanplat (120 cm diameter), while another used 25 kg per slab (one bag of cement per 2 households). [It appears that different formulas are used between different projects, and even develop over time, e.g. at DAPP, going from 50 kg to 25 kg for a 120 cm sanplat]. Depending on the local conditions of sand/stone both mixtures may be appropriate, but here may also be a need to revise and adjust the procedures for slab making to suit local conditions.
Some builders were mentioning their sources of previous training as professional artisan schools, ZAMSIF, UNICEF, World Vision, V-WASHE, D-WASHE, Red Cross, ETH, OXFAM, DAPP and PLAN. A major part of the builders are requesting more training.

9.2.7 Inspection of Work by EHTs

The inspection of work by EHTs was mentioned by 46% of the builders, where some indicated a frequent and active inspection at different stages of the construction, especially with VIP latrines. Others mentioned less frequent inspection due to the EHTs being busy with other health related activities at the RHCs, not permitting time for latrine inspection work.

As the skills of EHTs in latrine building techniques were not investigated in this survey it is not possible to evaluate their skills in doing proper inspection of the work done by the latrine builders. It may be of interest to find out if EHTs need to have their skills upgraded as far as inspection of latrines is concerned, either by participation in training or by getting some manual/checklist for use in the field.

9.2.8 Access to Building Materials

In some areas either sand or stones or both were difficult to get locally.

Access to cement was much discussed during the interviews. The main issue was that it was difficult to get and expensive. It was however not clear which factors were most significant in contributing to this constraint.

The three reasons mentioned were:

- The owner of the latrine was supposed to get the materials, but lacked funds
- The owner had funds, but was constrained due to the transport distance to cement source
- The shop/market place did not always have cement in stock

Builders complained that the general poor financial situation of households and other clients combined with the elevated prices on e.g. cement made progress of work difficult. Hence the builders advocated for a subsidy for materials for latrine construction.

Only two builders indicated a price of cement at local level (ward), which ranged from ZMK 88,000 to 90,000 ZMK. These prices were given in Mumbeji (Kabompo) and Mano (Samfua) and indicated a 13-26% increase on the cement price compared to price in district town. This increase in price can be attributed to local transport from the district purchase location to the ward.

9.2.9 Estimates of Costs and Builders’ Remuneration for Latrine Construction

Various indications of prices for total construction costs and fees for labour were indicated for different models of latrines.

The total construction cost given for a traditional latrine ranged from ZMK 80,000 up to 240,000, with an average ZMK 130,000, while the labour charges ranged from ZMK 27,000 to 170,000, with an average of ZMK 69,000. Often builders mentioned the problem of late payment or payment in non-cash items, e.g. 100 kg of maize instead of money.

The total construction costs for a VIP latrine was given as being between ZMK 1 and 1.5 million, with labour charges around ZMK 350,000. If the VIP had bath shelters the price increased to ZMK 2 million.

No prices were given for latrine models using any kind of sanplats. This could be because these prices are not transparent to builders if working in projects with subsidies for the sanplats, other material and maybe labour (e.g. construction of latrines for vulnerable groups, funded by projects).
9.2.10 Discussion of Latrine Construction Prices for Alternative Models

Regarding the prices for VIP it appears that the low-cost models developed in Zimbabwe by Peter Morgan were not considered. From the original VIP latrines using 8 bags of cement some 25 years ago more models were developed over time having a lower input of expensive materials; i.e. the 5 bag model, the 3 bag model, the 2 bag model and the 1 bag model, all with VIP functions and a smooth, hygienic cement floor. The savings in cement is mainly from reducing the input to pit lining and superstructure, ending with unlined pit and superstructure constructed without cement except for the vent pipe which is made from local materials with a cement coating.

In Tanzania, only 25 kg (half a bag) of cement is used for a 140 cm diameter sanplat (for an unlined pit of 100 cm) which is upgradeable to VIP functions if a plastic pipe is installed and proper superstructure is constructed according to VIP specifications (i.e. shade inside). It has to be mentioned that sand and stones of good quality, as well as wire mesh, is available in Tanzania. In Zambia’s rural areas there may be a need for modifications in design and quantities of materials to suit local conditions.

9.2.11 Discussion of simple low-cost upgrading of Traditional Latrines

In the interviews with builders, there were no mention of the very simple upgrading of traditional latrines with use of a small square sanplats of 60x60 cm (produced and distributed by ZRCS in Choma), which can be used directly on top of a wooden floor with soil on top giving a smooth wash-able surface around the squat hole. Depending on local availability of good quality sand/ stones it is possible to build 8 to 10 “All-in-One” sanplats from 50 kg (1 bag) of cement, using either the plastic mould promoted by www.sanplat.com in Sweden (also available in Zambia at Kazuma Plastics) or by using a simple low-cost (locally produced) wooden mould.

If the size of the 60x60 cm sanplats is reduced to a minimum of about 40x60 cm it is possible to reduce the input of materials, price and weight. An estimated 12-15 mini-sanplats can be made from 50 kg (1 bag) of cement, for upgrading traditional latrines with a smooth washable squat hole with a tight fitting lid.

Using village level production with unsubsidised prices for materials and labour it is estimated that the small sanplats can be locally produced and sold for a price between 3 to 5 USD (13-21,000 ZMK) per unit, depending on design /size and tools used for production.

10 Institutional Arrangements

10.1 National Level Institutions

The Ministry of Local Government and Housing (MLGH) through its Department of Infrastructure and Support Services (DISS) has the overall responsibility for planning, implementation, coordination and monitoring of rural water supply, sanitation and hygiene promotion. It thus provides policy guidance, technical and financial control and facilitates mobilisation of foreign and local funds for rural water supply, sanitation and hygiene promotion. The RWSS Unit in DISS is currently staffed by three long-term employees, one on secondment from MEWD and is assisted by consultants on specific issues. A new structure with increased staffing for RWSS was approved in mid 2008, but is yet to be implemented.

The Ministry of Health (MoH) has the supervisory responsibility for sanitation and hygiene promotion. The Environmental Health Section of MoH under the Directorate of Public Health and Research is the section most relevant to sanitation and hygiene promotion. The section at national level consists of 2-3 persons only, but has a structure from national to village level (see below).

The Ministry of Education (MoE) is responsible for construction of water points and latrines in schools, colleges and universities. At primary and secondary school levels, water and sanitation are incorporated in the curriculum in the subject of environmental science and home economics.
Infrastructure and the Planning Sections of the Ministry appear to be the sections most relevant to the sanitation and hygiene component of the NRWSSP.

The Ministry of Community Development and Social Services (MCDSS) through its Department of Community Development is involved in water supply and sanitation activities, particularly through its staff at district and sub-district levels. The Cultural Department of MCDSS also has some involvement in e.g. encouraging people to share latrines with in-laws. MCDSS reported that it has a specific budget for water and sanitation related activities, but that the allocation varied.

10.2 Provincial Level Institutions

MLGH
Currently MLGH’s DISS, which has the responsibility for RWSS, does not have any staff at provincial level. However, the new DISS structure approved in 2008 includes representation at provincial level, with staff allocated to RWSS.

MLGH’s Department of Physical Planning and Housing (DPPH) as well as its Department of Local Government Administration (DLGA) have provincial level representation. As mentioned in the Water and Sanitation Sector Capacity Study report from October 2007, several district planning officers have indicated that they seek assistance from the provincial DPPH when preparing their district plans, which include RWSS. The Provincial DLGA/ Provincial Local Government Officers’ office is responsible for monitoring and auditing of the District and Municipal Councils, including in relation to RWSS. Currently, the PLGO’s office is the main MLGH provincial contact in relation to RWSS.

MoH
The Environmental Health Section of MoH is represented at provincial level as part of the Provincial Health Department. According to the 2007 Water and Sanitation Sector Capacity Study, there are three established environmental health positions in each province as follows: a Chief Environmental Health Officer (EHO), a Principal EHO and a Principal Environmental Health Technician (EHT). Reportedly, there are vacancies in many provinces.

MoE
The Provincial Education Office includes a senior buildings officer, whose role it is to co-ordinate school infrastructure works in the province. They supervise the construction of schools, their water points and presumably also latrines and offer technical support to the districts. They are also to ensure that surrounding communities have access to school water points.

MCDSS
At present the Department of Community Development of MCDSS has between one and three staff members in each province. According to the 2007 Water and Sanitation Sector Study in 2007, there are a number of vacancies at provincial level.

P-WASHE Committees
Northern Province has, as the only province, an active P-WASHE committee consisting of representatives from various provincial institutions.

10.3 District and Sub-district Level Institutions

District and Municipal Councils
As described in chapter 2 of this report, both the Local Government Act and the Public Health Act place the responsibility for implementing and monitoring sanitation and hygiene with the Local Authorities, i.e. district and municipal councils. This includes inter alia establishment and maintenance of environmental health services, taking measures for the preservation and improvement of public health and the establishment and maintenance of sanitary conveniences and ablution facilities.
The NRWSSP recommends that District Councils establish a special RWSS department within the Council. However, reportedly most District Councils do not yet have a RWSS department or unit, while some have a RWSS focal point person nominated among council staff. In some districts, the focal point person works full-time with RWSS, but this seems to be rare. Out of the nine rural districts and two municipalities visited, only Sinazongwe and Kabompo District Councils as well as Mansa Municipalities mentioned they had established RWSS Units within their councils.

**D-WASHE Committees**
According to the 2007 Water and Sanitation Sector Capacity Study, D-WASHE Committees have been established in most districts, consisting of District Council staff, district-based line ministry staff, NGOs etc. This was also the case for the nine rural districts and two municipalities visited in connection with the current study. As described in the WASHE manuals, the main roles of the D-WASHE Committees are to a) assess the existing water, sanitation and hygiene situation in the district, b) develop, implement and monitor D-WASHE plans, and c) train and facilitate meetings with sub-district staff and communities on WASHE basic needs. The D-WASHE Committee is to be chaired by the District Council Secretary.

Some D-WASHE Committees are reportedly very active and doing a lot of good work. However, several D-WASHE Committees seem not so active, or only a few of the members are active, one reason being that only limited funding is available for RWSS activities in their districts. During the interviews in nine rural districts and two municipalities, many D-WASHE committees complained they lacked financial resources and transport and some also the capacity to carry out planned activities. Further information on the findings in the survey districts and municipalities is included in section 5.1 above.

It is envisaged that, as part of the decentralisation process, line ministry staff in the D-WASHE committees will be moved to the District Councils.

**Line Ministry Staff at District and Sub-district Levels**

**MoH**
According to information collected in connection with the 2007 Water and Sanitation Sector Capacity Study, each District Health Office is to have the following 3 positions: a Principal EHO, a Senior EHO and a Senior EHT. A small Rural Health Centre 1 (RHC) is to have one EHT, while a medium-size RHC 2 is to be staffed with a Senior EHT and 2 EHTs (perhaps in 2 branches). A large RHC 3 is to have a Principal Health Inspector (or Principal EHO) and will have RHC1 and RHC2 under it. Normally, the EHT plays a key role in relation to sanitation and hygiene promotion.

In the nine rural districts and two municipalities visited, a significant number of RHCs were reported to be without EHTs and generally understaffed. In several districts/municipalities, there were only EHTs in around half of the RHCs. In one district, only 29% of the RHCs were reported to have EHTs. According to key informants, the situation is similar in other districts around the country. Several RHCs are therefore run by nurses or clinical officers.

At sub-district level, volunteer community health workers (CHWs) have been trained, with a target of having one CHW per 500 people. However, according to MoH, the drop-out rate among CHWs is relatively high because they do not receive any payments.

**MCDSS**
MCDSS operates in all 72 districts of Zambia with officers at district and sub-district levels. The 2007 Water and Sanitation Sector Study showed that there are a number of vacant community development positions at district and sub-district levels. This is in line with the complaints received from some of the survey districts/municipalities that the number of Community Development Centres in their districts was insufficient and existing centres were understaffed.

**MoE**
According to the 2007 Water and Sanitation Sector Study, MoE has a district buildings officer in each of the 72 districts. It is their role to monitor, on behalf of the province, the school infrastructure development that is taking place. This includes e.g. the construction of construction of water points and...
presumably also the construction of latrines. The individual schools are responsible for their own O&M of buildings and other installations, including water points and latrines.

**Area Development Committees**

As mentioned in the 2007 Water and Sanitation Sector Capacity Study from 2007, some districts have established ADCs in all their wards. However, neither the Decentralisation Secretariat nor the Department of Government Administration in MLGH had an overview of how many have been established so far. It is, however, the impression from reports and discussions with various institutions, including district staff, that the number of trained and active ADCs is still low. ADCs had been established in 82% of the RHC catchments where EHTs were interviewed, i.e. in 27 out of 33 catchments.

### 11 Sanitation and Hygiene Interventions

#### 11.1 Interventions Reviewed

A number of sanitation and hygiene interventions were reviewed, based on information collected during interviews in Lusaka and in the rural districts and the municipalities visited. The interventions are very different in geographical coverage, with some interventions covering several districts while others only cover a few wards. Furthermore, for several of the interventions sanitation and hygiene promotion only constitute a small part of a larger project. A few of the interventions reviewed have been completed, but the far majority are still on-going.

The following is a list of the 18 interventions reviewed:

1. AfDB-supported Central Province RWSS Project
2. Africare Support to Sanitation and Hygiene Promotion in Luapula (2 districts)
3. Caritas Mansa, Support to Sanitation and Hygiene Promotion in Luapula (1 district)
4. DAPP Projects 1) Child Aid incl. WATSAN (14 districts) and 2) HOPE related to HIV/AIDS, incl. WSS-related hygiene (7 districts)
5. Danida-supported Water Sector Programme Support – Lusaka, Southern and Western Provinces (12 districts)
6. KfW-supported North Western Province Rural Water Supply Project (3 districts)
7. Irish Aid support to Sanitation and Hygiene Promotion through P-WASHE in Northern Province
8. MLGH, “Make Zambia Clean and Healthy” Programme (whole of Zambia)
9. OXFAM GB, Support to Sanitation and Hygiene Promotion in Western Province (1 district)
10. Peace Corps, 34 Volunteers working with NHCs and RHCs in Luapula, Central, Eastern and North-Western Provinces (in total 13 districts, but only a few volunteers work with WATSAN)
11. PLAN Zambia, Support to Sanitation and Hygiene Promotion in Eastern Province (1 district) and Luapula Province (1 district)
12. SNV - Netherlands Development Organisation, Support to Sanitation and Hygiene Promotion in Western, North-Western and Northern Provinces
13. UNICEF 1) Piloting of CLTS Approach in Choma District, Southern Province and 2) School Sanitation and Hygiene in different provinces, including with Africare in Luapula
14. Village Water, Support to Sanitation and Hygiene Promotion, Western Province (4 districts)
15. WaterAid, Community-Based Total Sanitation in Monze District, Southern Province, and some districts in Luapula Province
16. World Vision, Support to Sanitation and Hygiene Promotion in Chongwe District, Lusaka Province
17. Zambia Red Cross Society, Support to Sanitation and Hygiene Promotion, Choma and Sinazongwe Districts in Southern Province
18. ZAMSIF Support to Sanitation in different Districts, including Choma District in Southern Province and Chongwe District in Lusaka Province

The amount of information it was possible to obtain for each intervention varied considerably. Furthermore, some of the organisations had long experience in their geographical areas while others were relatively new to the areas, hence their local experience varied.

The following includes an overview and assessment of key elements of the interventions and some lessons learnt.

The information obtained concerning the mentioned interventions is summarised in Annex 5 to this report.

11.2 Support related to Household Latrines

Subsidies

Several of the interventions provided subsidies for construction of household latrines, mainly in the form of materials for construction of sanplats or a pre-fabricated sanplat and sometimes for lining of pits. The household contribution was normally local materials and labour for digging of the pit. There were indications from D-WASHE committees and villagers in several districts that these subsidies were much appreciated as many households could not afford to buy cement, iron bars etc. However, some villagers also mentioned that these subsidies had only been provided to a few selected households in a “closed circle” and other households were now waiting for similar materials to be provided for them to construct improved latrines.

In a few districts, there had also been problems with materials that had been deviated for other purposes and some of the constructed household latrines not being maintained, disused or even used for other purposes, like storage of agricultural products; all this indicating a lack of demand or sense of ownership of the latrines.

Another problem experienced with some interventions was that other households were not able, or willing, to replicate the demonstration latrines as they found them too expensive. This was particularly the case for high-cost VIP latrines constructed in the past by e.g. ZAMSIF.

Reflecting on the past experience from construction of subsidised latrines, the trend among several of the implementing organisations is to now gradually reduce their subsidies or provide no subsidies for latrine construction.

Environmental and Technical Considerations

Some organisations were providing 60x60 cm sanplats for upgrading the hygiene of existing traditional pit latrines or providing households with 120 cm diameter sanplats, or materials to make one, in order to reduce the need for cutting construction wood and to make a more permanent structure.

Several organisations expressed concerns about continuous tree cutting for construction of traditional latrine floors as being detrimental to the environment. This challenge of reducing wood cutting, combined with the general poor financial situation of the target groups, made some organisations advocate for a continued small subsidy for slabs.

A few organisations had introduced, or was planning to introduce, ecological latrines, primarily testing out two systems described by the Sanitation Specialist, Peter Morgan, namely the Arborloo single pit
composting ("plant-a-tree" latrine) and the Fossa Alterna twin pit (double vault) composting system with intermittent use and manual emptying of the hygienically composted faecal material.

One challenge in this connection is the reluctance from beneficiaries to using composted faecal materials which affects the operation and maintenance of composting latrines. Some projects which had supported the construction of ecological latrines on a pilot basis had found there was a need for more promotion on the benefits of using composted excreta so as to overcome local taboos. Of the two models mentioned, the Arborloo type may have a better chance for success, as no handling of faecal matter is needed. It does, however, still have challenges with the design of temporary/movable superstructures and in making people accept to dig new pits at regular intervals.

In several places it was noted that local materials may be constrained, i.e. lack of either stones or sand of an appropriate quality within a reasonable transport distance. Also the condition of the soil making it suitable for pit digging was a constraint in various places. The three main problems being rocky underground, unstable loose sand formation or very high water table.

Social Considerations

Assistance to vulnerable households to construct latrines appeared to be dealt with in different manners, where some organisations provided this assistance as part of their intervention, while others promoted community assistance to vulnerable families.

None of the implementing organisations described any interventions with special latrine designs for elderly, disabled or sick persons who are not able to use the normal squatting position. This particular problem was mentioned by villagers in some districts.

11.3 Support related to Household Hygiene

Many organisations described activities promoting good hygiene practices, including hand washing at critical times, use of rubbish pits, dish racks, bath shelters etc. Some organisations were testing/promoting simple types of hand washing facilities, e.g. the tippy tap or other small containers with a devise for giving small amounts of water.

In many cases, the success with introduction of hand washing facilities and promotion of hand washing was moderate because of water scarcity in the households, traditions/culture from extended defecation in the bush without hand washing and insufficient understanding of the messages on the importance of hand washing or insufficient access to knowledge.

11.4 Community Sanitation and Hygiene Promotion and Training

Volunteers/ Hygiene Promoters

All organisations interviewed appeared to use a participatory approach to sanitation and hygiene promotion and also in connection with the provision of subsidies for latrine construction. This type of approach is in line with the WASHE concept and principles and also international experience. Several of the organisations interviewed arranged for training of V-WASHEs or other volunteers, often using a training of trainers (ToT) approach with training of EHTs and sometimes other groups of stakeholders as trainers. After training, the V-WASHE and/or other volunteers organised village meetings or went door-to-door to have discussions with other villagers.

Several of the organisations had trained quite a number of volunteers/ hygiene promoters in their project areas. It varied how large an area each volunteer was responsible for, some working in their own village only, while others covered several villages. Some hygiene promoters were given non-monetary incentives, e.g. bicycles, T-shirts and similar to assist them in their voluntary work.
According to D-WASHE members in some of the survey districts, it worked well with the hygiene promoters as they could see improvements in the villages where they were active.

**PHAST Approach**

One of the participatory approaches used was the PHAST (Participatory Hygiene and Sanitation Transformation) methodology or selected tools from the PHAST or SARAR (Self esteem, Associative strength, Resourcefulness, Action planning, Responsibility) methodologies. As both PHAST and SARAR tools are frequently referred to as PHAST in Zambia, this is the term used in the following.

Several of the organisations interviewed did capacity building for various groups of local stakeholders in use of PHAST tools. Often a training of trainers (ToT) approach was used, mainly targeting the EHTs and sometimes other groups of stakeholders. These then either facilitated the use of PHAST tools at community level or more commonly trained hygiene promoters or other volunteers to do so. In some districts, village PHAST groups had been trained.

Several D-WASHE members and also the P-WASHE in Northern Province indicated that the PHAST method was appropriate and effective. Also the Environmental Health Unit of MoH has had positive experiences of using the PHAST approach in selected areas of Zambia and is actively promoting its extension to other parts of the country.

**CLTS Approach**

Another participatory approach is the Community-Led Total Sanitation (CLTS) approach, which a number of the organisations interviewed had recently started using on a pilot basis. The CLTS approach includes steps where facilitators take communities through a process of meetings, mapping, village walks, and assist in establishing Village Sanitation Action Groups etc. The CLTS capacity building is targeting a number of local resource persons from the traditional leadership and existing institutions within the local administration, including chiefs, headmen, councillors, EHTs, community development assistants, community health workers, etc.

The organisations interviewed mostly described their experience with the CLTS approach as successful, i.e. many households having constructed some type of household latrine after they had been through the CLTS triggering process. Several district staff and villagers also found the approach effective and reported a significant increase in the proportion of households with latrines after they had attended CLTS meetings etc.

Some organisations expressed, however, concern about the quality of latrines constructed, as in accordance with the CLTS approach this was done without any technical guidance. Organisations also considered the lack of hygiene education in the CLTS process a limitation. At the time of the research, these issues were being discussed so they could be included in the further development of the CLTS approach for use in rural areas of Zambia.

One organisation expressed other challenges in using the CLTS approach in Zambia compared to e.g. Bangladesh, namely the distances in Zambia and the fact that in Zambia finished products as e.g. prefabricated slabs are not easily accessible for rural households through the private sector.

**Other Activities**

Other activities included drama performances which several organisations reported to be successful. Some interventions also included plans for radio programmes.

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10 The PHAST approach builds on and uses some of the tools in the SARAR methodology, but not all of them.
11.5 Support to School Latrines and Hygiene

Many organisations supported interventions in schools, both hygiene promotion and construction of school latrines.

School Latrines and Urinals

The latrine designs were often VIP latrines, but an alternative design called “integrated latrine” was also promoted/used in some schools.

The “integrated latrine” consists of a double-compartment pit latrine (pit w. lid, but no vent pipe) with a hand washing facility inside the latrine cubicle, using rain water when available. This latrine model was developed with inputs from children to overcome the constraints of the VIP design (too dark inside). Urinals for boys, and sometimes also for girls, were constructed in the same schools. It was reported that MoE has not adopted the “integrated latrine” model, but is still using and promoting VIP latrines in schools.

The integrated latrine appears a good alternative to the VIP latrine, although it does face a challenge in children having to put the lid back on the latrines every time they have used them. And the volume of pit may be too small compared to national requirements.

It appeared that the numbers of latrines constructed by different organisations in the surveyed districts did not always follow the national requirements related to latrine/pupil ratio. However, this may be a question of how best to distribute limited resources compared to the high demand for additional school latrines. In order to benefit as many schools as possible, some organisations seemed to have constructed a few latrines in several schools rather than many latrines at the same school(s), the last being in order to comply with the requirements in the Public Health Regulations.

Only one of the organisations interviewed mentioned the importance of the construction of urinals. Urinals can be designed for both boys and girls. Regarding general usage and cleaning of boys latrines it would be advantageous to use urinals (of good design). The more obvious advantage of the urinals is the reduced price per user compared to construction of a latrine cubicle, when only used for urination.

Urinals for girls are a relative recent introduction to the field of school sanitation, where pilot testing does indicate a potential success. It must however be discussed if this is culturally acceptable in Zambia. There is at least one Zambian organisation testing the urinal for girls at school (since 2007) in combination with the “integrated latrine”. Judged from photos, the design looks well developed and adequate for its purpose.

All in all, it is good to make urinals at schools, as it will alleviate the use of the latrine cubicles during peak periods. This will be the case for both boys and girls.

Hand Washing Facilities

Hand washing facilities for schools were often promoted/ provided by organisations interviewed. Many pupils participating in FGDs in the survey districts appreciated that hand washing facilities were provided, but several of them mentioned they often had no water. This situation was also observed by the research teams during their visits. The organisations providing the hand washing facilities had often not been able to deal with the main problem of easy access to water, which meant that the hand washing facilities did not assist, to the full extent, in promoting pupils’ hand washing at critical times.

Hygiene Promotion

Some organisations used schools as entry point for hygiene promotion in the wider community. One approach used was the peer-to-peer concept, with training of children, teachers and parents. One organisation trained 25 peer educators per school who in turn trained other teachers, pupils and parents in the same school or possibly in neighbouring schools. Peer-educators worked at community level, with adult-adult and children-children dissemination/discussion.
Several organisations interviewed reported that the peer-to-peer education approach was very effective. The approach/activities were not mentioned by pupils in any of the schools surveyed. It is assumed the reason for this is that the approach was not used in any of the schools selected by the districts/municipalities for the survey.

11.6 Organisation and Cooperation

According to most D-WASHEs and NGOs/project staff there was good cooperation and coordination between organisations and local authorities, with NGOs often being members of the D-WASHE committees. There were, however, also some complaints that coordination was not as effective as it should be, with one D-WASHE suggesting that it should be informed before it was agreed to start new activities in the district. Others also indicated that there was scope for improving the coordination of ongoing projects in their districts.

There were found to be alliances between some of the organisations interviewed, with particularly DAPP, SNV and Africare being engaged by other organisations to assist with the implementation of activities.

11.7 Lessons Learnt and Suggestions

The following are a summary of the lessons-learnt and suggestions mentioned by the organisations interviewed:

- Involvement of local traditional leaders (chiefs and headmen) is important for successful promotion of household sanitation and hygiene
- It takes time to change peoples’ attitudes and habits; furthermore households and schools can be slow in carrying out their part of the sanitation intervention, e.g. constructing the superstructure for a new latrine
- Mobilisation meetings can be constrained because sanitation topics can be highly sensitive
- It is essential that gender considerations are incorporated into sanitation and hygiene interventions
- The approach should be to climb the “Sanitation Ladder” in small steps, where it is still affordable for users and implementers, and to have a wider impact with limited resources
- Participatory hygiene promotion should be coupled with marketing approaches, making it possible for households to buy materials/technical support locally, i.e. local artisans to sell latrines and sanitation related services on a commercial basis
- Several implementing were supporting with capacity building and resources for those in close contact with the target group, especially for the EHTs, ADCs, SAGs and V-WASHE; both types of support were found to be important
- A NGO forum should be established at provincial level to spearhead and coordinate activities among NGOs
- It is important that institutional latrines (at schools and clinics) are of good quality and kept clean to show good examples to visitors/users
- Government should come up with a policy of zero subsidies for sanitation and impose a law for every village household to construct a latrine (one organisation suggested this)
12 Overall Conclusions

The following are the overall conclusions from the assessment of the current sanitation and hygiene situation and related interventions in rural communities of Zambia.

LEGAL, POLICY AND PLANNING ISSUES

1. There are no definitions of proper or adequate latrine accommodation for households and schools in acts, regulations or policies, but for households they are included in the NRWSSP.
2. The legal framework for disposal of solid waste and waste water is focused on urban areas and does not consider the situation in rural areas.
3. In policies, there is no guidance related to use of subsidies; as a consequence it varies considerably whether projects and programmes include subsidies for construction of household latrines.
4. There is no separate budget line for rural sanitation in FNDP, as sanitation is included under the overall budget line for rural water supply and sanitation. This could decrease the priority given to sanitation; the NRWSSP launched in 2007 does however have a specific budget for its Sanitation Component.
5. A number of relevant sanitation and hygiene strategies and manuals are available; they form together with the findings from this research a good background for developing the Sanitation and Hygiene Component of the NRWSSP in further details.

HOUSEHOLD LATRINES

6. The proportion of households with some type of latrine was relatively high, according to the household survey 78%; using the NRWSSP definitions 33% had adequate latrines; generally, latrines were used for their intended purposes.
7. According to the survey, latrine coverage and the type of latrine constructed were not related to whether the area was a municipality or a rural district.
8. Reasons for households to construct latrines were to avoid going to the bush/ walking long distances, for privacy, for convenience, because of awareness campaigns or having been told to construct latrines, because of subsidies and/or to reduce diseases.
9. Cultural barrier existed in several areas, mainly in relation to sharing latrines with in-laws; furthermore, some households had two latrines to avoid women and men sharing or adults and children sharing.
10. Collapsing latrines during the rainy season was mentioned as a problem in many villages, blaming this on sandy soil.
11. Use of human excreta as fertilizer was considered unsafe, unhygienic and generally disliked and hardly any households used human excreta as fertilizer.
12. Most households without latrines used the bush; although some households without latrines used their neighbour’s latrine, sharing of latrines did not appear common.

HOUSEHOLD HYGIENE PRACTICES

13. The far majority of women and men indicated they always washed hands before eating, while far less did the same after defecation; even less women washed hands after helping children defecate (or rather cleaning them or helping them clean themselves after defecation), indicating that children’s faeces were considered less “dangerous” than those of adults; lack of water was given as the main reason for not always washing hands at critical times; soap was rarely used for hand washing.
14. The far majority of households had bath shelters, but only 20% of them had proper drainage or soak-away pits for waste water; nearly all people indicated they took daily baths, despite several of them having severe water shortage.
15. Around three quarters of households observed to have water storage containers/ buckets had covered them with lids or similar; very few households treated their water before drinking and cooking.
16. Three out of five households disposed of their solid waste in rubbish pits, while most households threw their waste water outside the house.
17. The majority of households kept their kitchen utensils on dish racks either outside or inside the house.

**HOUSEHOLDS’ ABILITY AND WILLINGNESS TO PAY**

18. Both women and men gave very low priority to spending any money on constructing new or improving latrines, while most were able and willing to provide local materials like sand, mud bricks and poles and also labour for digging pits.

19. Some villagers, but not many, were willing to take out small loans for construction of latrines, if they were on favourable conditions.

**SANITATION AND HYGIENE RELATED TASKS OF WOMEN AND MEN**

20. Women and girls had the majority of day-to-day tasks in relation to sanitation and hygiene, while men were responsible for construction; it was not clear who normally made decisions related to construction and location of latrines etc.

**VILLAGE SANITATION AND HYGIENE PROMOTION**

21. Three out of five had received some information on sanitation and hygiene during the last year, but not very often; the most important source of information for the majority of people were health staff, followed by V-WASHEs and the chiefs; overall there were only slight differences as to the most important source of information for women and men.

22. Seven out of ten people were generally satisfied with the information they had received on sanitation and hygiene, with infrequent information being the main reason for dissatisfaction; the preferred sources of information were much the same as those from which they already received some information, i.e. health staff followed by V-WASHE, chiefs and headmen.

23. It was a general complaint that where subsidies had been provided as part of sanitation and hygiene promotion activities, this had only been to very few households in a closed circle.

**SCHOOL LATRINES AND HYGIENE**

24. Nearly all schools had too few latrine cubicles compared to the number of pupils; on average four times as many latrines would have to be constructed to comply with the national requirements; if considering the number of shifts, double as many latrines were to be built; in addition, not all latrines for pupils functioned in 25% of the schools.

25. Many pupils were unhappy with the design of their latrines, because they were unsafe, had poor ventilation, no doors, inappropriate squat holes etc.

26. There were many complaints from pupils that school latrines were not clean and had a bad smell, despite mostly daily cleaning by the pupils; it was a common statement that home latrines were better than school latrines because they were much cleaner.

27. Just over half of schools had hand washing facilities, but most only one or two and many of them were observed not to have water. This makes it very unlikely that pupils regularly washed their hands.

28. The far majority of schools had had sanitation and hygiene education during the last year, with pupils mainly receiving information during classes; in some schools there were a sufficient number of teachers for sanitation and hygiene education to take place during classes, so this was limited to information during assemblies.

**RHCs AND EHTs**

29. Only 1 out of 33 EHTs considered their RHCs adequately staffed, the main reason given was that MoH had not posted the required staff to their RHC, while others contributed this to the remoteness of the RHC and the lack of adequate incentives.

30. Only one in five EHTs mentioned community mobilisation and sensitisation as their most demanding activity; around half of the EHTs had water, sanitation and/or hygiene education as the main topic for their mobilisation and sensitisation activities.

31. Diseases most commonly attended to in the RHCs were malaria and cough, followed by diarrhoea.
PRIVATE SECTOR

32. Building materials at ward/village level were expensive and harder to get the longer the distance to district distribution centres. Builders complained that the general poor financial situation of households and other clients combined with the elevated prices on e.g. cement made progress of work difficult. Hence the builders advocated for a subsidy for materials for latrine construction.

33. Skills for latrine building found in the private sector were mainly at a low to medium level, with only a few experienced builders. This may explain the often encountered poor building quality met. Most builders appreciated further training if made available.

34. Alternative low-cost building technologies for both affordable VIP models for households or types of low-cost upgraded traditional latrines were generally unknown to the builders. This would result in a limited range of choice of latrine models for clients in households/schools, mostly being in the extreme ends of the sanitation ladder with traditional latrines (not upgraded) in one end and high costs VIP latrines in the other end, but hardly any choice in between.

INSTITUTIONAL ARRANGEMENTS

35. There appears to be some overlap in the roles and responsibilities of MLGH and MoH vis-à-vis sanitation and hygiene, while the responsibilities of MoE and MCDSS appear relatively clear and separate from those of other ministries.

36. The capacity of the District Council staff to take the lead in sanitation and hygiene promotion at district level appears low; furthermore, there appears to be some overlaps in the designated roles of the District Council and the District Health Office under MoH.

37. Several districts/municipalities only had EHTs in around half of their RHCs, which is severe constraint to sanitation and hygiene promotion activities.

SANITATION AND HYGIENE INTERVENTIONS

38. Some of the sanitation and hygiene interventions cover several districts while others only cover a few wards. Current interventions thus cover limited project areas, which mean that many villages in Zambia do not benefit from any intensive sanitation and hygiene interventions.

39. There was mixed experiences with subsidies provided for construction of household latrines. On the one hand subsidies were much appreciated as many households could otherwise not afford to buy materials like cement. On the other hand, problems had been encountered in some areas with the use of subsidies, for example that demonstration latrines did not provide the envisaged impact on coverage as private replication was low. Several organisations were therefore planning to gradually reduce subsidies to a lower level or to phase out.

40. The PHAST approach is being promoted and implemented in several areas with reportedly positive results. However, there appear to be a need for more resources for training of trainers, PHAST material for local use at village level, and monitoring.

41. The CLTS approach is being tested in several areas by different organisations, so far with positive results in terms of increased latrine coverage. The CLTS approach is now being developed further in order to include hygiene promotion and assistance to improve building technique to meet the minimum criteria for adequate household sanitation set in the NRWSSP.

42. The integrated latrine model with a double-compartment pit latrine and a hand washing facility inside the latrine cubicle is an alternative to the VIP latrine normally constructed in schools, although it does face a challenge in children having to put the lid back on the latrines every time they have used them. And the volume of the pit may be too small compared to national requirements.

43. The numbers of latrines constructed by different organisations in the surveyed districts did not always follow the national requirements related to latrine/pupil ratio. However, this may be a question of how best to distribute limited resources compared to the high demand for additional school latrines, but is an issue that may require further discussion.

44. Hand washing facilities at schools are constrained by widespread problems of limited access to water. This mean that installed facilities are rarely used in a proper way and pupils therefore do not get into the good habit of hand washing at critical times.

45. Although there was reported to be good cooperation and coordination between many D-WASHES and NGO/project staff, there appeared still to be scope for strengthening this to inter alia ensure better sharing of experiences at local and national level.
13 Key Issues and Considerations

The following key issues and considerations are based on the research findings and the suggestions received during meetings and FGDs at different levels. They are intended to feed into the discussions in connection with the development of the Sanitation and Hygiene Component of the NRWSSP.

LEGAL AND POLICY ISSUES

18. Acts, regulations and policies contain no definition of proper or adequate latrines for households and schools, whereas the NRWSSP does include definitions of adequate household latrines. Also there are no definitions in acts, regulations and policies of adequate disposal of solid waste and waste water in rural areas which do not have systems for collection of solid waste and sewerage systems for disposal of waste water. It appears as important to include these definitions in the legal framework (acts or regulations), both for households and schools.

19. The legal framework stipulates that both domestic and public buildings are to have proper and sufficient latrines, with clear requirements for the number of school latrines compared to the number of pupils. This is clearly not being enforced, with reportedly new schools sometimes being built without latrines or with very few latrines. Options for funding of school latrines should be identified.

20. Subsidies for household latrine construction have been provided under several ongoing interventions, but several organisations are phasing out subsidies, or planning to do so, because of the problems encountered. There are arguments both for and against having subsidies for latrines. On the one hand most rural households are very poor and have very little cash available for purchase of materials like cement, iron bars etc.; at the same time most rural households, both women and men, give very low priority to spending any money on constructing new or improving existing latrines. On the other hand, there are mixed experiences with the provision of subsidies, which some community members have indicated have been provided to a few households within a closed circle with others now waiting for similar materials/subsidies, some materials provided for free have been misused, subsidized demonstration latrines not replicated because too expensive etc. The advantages and disadvantages of providing subsidies and their possible form as well as the option of providing loans for construction of household latrines should be discussed. Some community members expressed interest in such loans, but the question is whether they will be able to repay them.

TECHNICAL ISSUES

21. Collapsing traditional latrines during the rainy season was often mentioned by NGOs, builders and villagers and attributed to problems of stability of pits dug in sandy soil. Low-cost solutions like basket lining have been developed while other improvements related to the design of the pit and the construction quality may alleviate this problem. This would require capacity building on a large scale with emphasis on training of latrine builders in affected areas, combined with provision of appropriate standard designs for various types of pits and types of pit lining.

22. One of the WASHE manuals recommends upgrading of traditional pit latrines with cheap sanplats due to the economic situation in rural Zambia. ZRCS has introduced this type of sanplats, namely 60x60 cm sanplats (called All-in-One) for placing on the wooden floors of traditional latrines, thereby making the latrines more hygienic. This option is relative inexpensive compared to the bigger sanplats of 120 cm diameter. The estimates of price vary from 2 USD (Tanzania) in local village level production price to 4 EURO (Malawi), which total cost for production and distribution to households when using contractors. Various models of the small sanplats and modes of implementation can be used in Zambia, where the lowest level with village production at builders house for local sale with 100% cost recovery is estimated to come to a price of 3-5 USD (13,000 to 21,000 ZMK) per slab, which should be affordable for most households.

23. Ideally the 120 cm diameter sanplats (originally designed for lined pits) should be increased in diameter to 140-150 cm to suit better for unlined pits. If good sand, stones and wire mesh / iron is
available it is possible using only 25 kg cement to make a 140 cm diameter sanplat fit for unlined pits. The 140 cm diameter sanplat can be made for subsequent upgrading to VIP feature. Builder’s special tool kit is about 25 USD and can be used for production of up to 3 slabs per day.

24. As done in the design of the integrated latrine model, it may be considered to add a hand washing facility inside the latrine cubicle to the VIP design for school latrines.

ISSUES RELATED TO SANITATION AND HYGIENE PROMOTION

25. Sanitation and hygiene promotion should be intensified, with much more frequent information being provided than was the case at the time of the research. The best modalities for doing so need to be carefully considered, taking into account that the far majority of community members preferred face-to-face communication; the fact that many RHCs do not have any EHTs is a clear constraint in this connection as one of their major tasks is hygiene promotion; as it is not assumed that this situation can be improved in the short-term, other options should also be considered, e.g. whether it is possible for other extension staff or other external organisations to train community health workers and/ or other volunteer hygiene promoters, using the experience from several NGO projects. It will, however, still be important to involve and build on the experiences of the EHTs, where they are available, and to also increase their numbers and skills so they can play the key role in hygiene and sanitation promotion that they are mandated to.

26. Involvement of traditional leaders in sanitation and hygiene promotion activities is clearly important. Currently, several chiefs and/ or headmen have issued instructions for all households to have latrines and some key informants have suggested they should also include hand washing facilities in these instructions. In some areas, people are punished if they do not comply with the instructions. While there are advantages in having instructions and punishment for offenders, it should be considered to extend the role of the chiefs and their representatives to focus more on promotional activities as has been done as part of the CLTS approach in Choma district.

27. The promotion of household latrines need to consider that the proportion of households with some type of latrine is relatively high, so efforts should be put into both promoting ODF villages and upgrading existing latrines/ constructing improved latrines; also cultural barrier which exist in some areas should be addressed, particularly the reluctance/ taboo of sharing latrines with in-laws.

28. The promotion of hand washing after using the latrine should be given high priority, with particular focus on washing hands after own defecation and after helping children defecate (or rather cleaning them or helping them clean themselves after defecation); this is to include promotion of simple hand washing facilities placed close to latrines both at household and school levels. It could be considered to have a national hand washing campaign which has been successful in other parts of the world; one option could be to link this to the Keep Zambia Clean Campaign. Considering that lack of water was often cited as the main reason for not washing hands at critical times, it should be considered how best to link the promotion of hand washing with improvements in water supply.

29. Affordable standard designs for bath shelters including drains or soak-away pits for waste water should be promoted. Drains should be made in a way that water can be reused for watering vegetable gardens or fields.

30. Sanitation and hygiene promotion activities are to consider the sanitation and hygiene related tasks normally allocated to women and men, but should at the same time promote that both women and men are involved in making decisions related to construction and location of latrines, digging of rubbish pits, making of dish racks etc.

31. Schools are often good entry points for improving sanitation and hygiene behaviour practices both among school children and in the surrounding community. The experience with the peer-to-peer education approach should be discussed in further detail. However, many pupils mentioned that their household latrines were better than their school latrines, so there is clearly a need to improve the number, standards and cleanliness of many school latrines before they can be considered as good examples to be followed by local communities. It is a well-known fact that it is often easier to achieve behaviour change among children, so improved sanitation facilities at schools and
activities to promote good hygiene practices among pupils will also be an investment in future generations.

INSTITUTIONAL ARRANGEMENTS

32. There appears to be a need to clarify the roles and responsibilities of MLGH and MoH vis-à-vis sanitation and hygiene, while the responsibilities of MoE and MCDSS appear relatively clear and separate from those of other ministries; there may also to be a need to clarify the role of the provincial level in sanitation and hygiene promotion, especially when DISS/MLGH places RWSS staff at this level. The responsibilities for training and supporting EHTs in relation to their sanitation and hygiene related tasks also need clarification.

33. The establishment of the RWSS departments/units within the Councils is a welcome development. However, most of the Councils in the survey districts/municipalities were found to be still struggling to find sufficient resources to support this structure. Funding should be provided to ensure that these structures are operational. Capacity strengthening for District Council staff is also required for them to be able to take the lead in sanitation and hygiene promotion.

34. The roles of the Council and the District Health Office should be clarified until such a time where health staff are transferred to the District Council as part of the decentralisation process.
List of Key Persons Met

MLGH
Mr. Peter Lubambo, Director of DISS, MLGH
Ms. Etambuyu Mashebe, Acting Head of RWSS Unit, DISS, MLGH
Mr. Davy Ng’oma, Monitoring & Evaluation Officer, RWSS Unit, DISS, MLGH
Mr. Lytone Kanowa, Senior Engineer – Water and Sanitation, DISS, MLGH

Other Ministries and Institutions
Mr. Fordson Nyirenda, MoH
Mr. Phillip Mulenga, MoH
Mr. S. Shisala, Water Affairs, MEWD
Mr. Humphrey Silupwa, MoE
Mr. Nkoma, MCDSS

Cooperating Partners and NGOs
Ms. Malama Munkonge, Programme Officer, UNICEF
Mr. Peter Harvey, Chief Water and Sanitation, UNICEF
Dr. Givesson Zulu, Programme Officer, UNICEF
Mr. Mahesh Mishra, Country Representative, WaterAid
Ms. Nancy Mukumbuta, WaterAid
Mr. Rees Mwasambili, AfDB
Mr. Peter Sievers, Counsellor, Royal Danish Embassy
Mr. Moffat Mwanza, Programme Officer, Royal Danish Embassy
Ms. Barbara K. Senkwe, Water and Sanitation Specialist, WSP/World Bank
Mr. Cecil Dulu Nundwe, Water and Sanitation Specialist, WSP
Ms. Musunda Kaluba, Peace Corps, Lusaka
Ms. Beene Hang’omba, Peace Corps, Lusaka
Mr. Maric Kangamba, PLAN International, Lusaka
Mr. Brian Saka, Zambia Red Cross Society, Lusaka
Ms. Elise Sørensen, DAPP, Lusaka
Mr. Elisha Ngónomo, Village Water; Lusaka
Mr. Lars Anderson, Save the Children Norway, Lusaka
Mr. Mabvuto Nkomah, Africare, Mansa
Mr. Chabu, Caritas, Mansa
Mr. Morris Chimbeta, Water Aid, Mansa
Mr. Plan International, Mansa
Mr. Lawrence, DAPP, Samfya
Ms. Sarah Mbangu, SNV, Isoka
Mr. Chansa Chansa, SNV, Solwezi
Mr. Benjamin Phiri, Plan International, Chadiza
Mr. Banda, World Vision, Chongwe
Mr. Mutinta Chiobiyo, OXFAM, Kaoma
Ms. Moonde Dorothy, ZRCS, Choma
Mr. Urban Sikachula, ZRCS, Sinazongwe
Mr. Muchabi Likando, World Vision, Sinazongwe

Consultants and Advisers
Mr. Mweelwa Muleya, Communication Consultant, COWI A/S
Mr. Jim Anscombe, Team Leader, North-Western RWS Project, GITEC
Ms. Waltraud Keipp, Senior WASHE Coordinator, North-Western RWS Project, GITEC
Mr. Michael Ngoma, WASHE Coordinator, North-Western RWS Project, Bicon
Informants met during the research in the nine rural districts of Chongwe, Sinazongwe, Chadiza, Mumbwa, Kaoma, Lufwanyama, Kabompo, Samfya and Isoka and the two municipalities of Choma and Mansa; these included informants from provincial and district levels, school management and pupils, EHTs, builders, village key informants and other community members
ANNEX 2

List of Key Documents Consulted

Cabinet Office, Gender in Development Division: National Gender Policy, 2000

Cabinet Office, Gender in Development Division: Strategic Plan of Action for the National Gender Policy (2004-2008)


CSO: Living Conditions Monitoring Survey Report, 2004


Government of Zambia: Water Pollution Control (Effluent and Waste Water) Regulations, 1993


Government of Zambia: Environmental Protection and Pollution Control Act, 1990

Government of Zambia: Registration and Development of Villages Act of 1971


GRZ/MEWD: National Water Policy, 1994

GRZ/UNICEF: WASHE Project, Our Household Card for Promotion of WASHE for Personal Health


MoH: Annual Health Statistical Bulletin, 2006

MoH: 2007-Environmental Health Annual Report

MoH: Planning Technical Updates for 2009-2011, Environmental Health

MoH and JICA: Guidelines for Integrated Community-based Child Health Package, 2007

MLGH: Final Manual for District Staff and Supervisors, RWSS Information Management and M&E System, August 2008 (includes inter alia RWSS Indicators, Definitions and Additional Data to Be Collected and Questionnaires)


MLGH: Decentralization Implementation Plan, 2006-2010
MLGH: Draft Review and Finalisation of the Gender Strategy in the Water and Sanitation Sector, 2005
MLGH: Draft Baseline Study on the Impact of HIV/AIDS in the Water and Sanitation Sector, 2005
MLGH: Guidelines for Implementing Community Water Supply and Sanitation Projects in Rural Areas, 2002
MoFNP: Fifth National Development Plan, December 2006
MoH: Strategic Plan 2005-2009
MoH: Annual Health Statistical Bulletin, 2005
National WASHE/Water Sector Reform Support Unit: Options for Excreta Disposal Facilities, Supplementary Module 5a, 2000
National WASHE/Water Sector Reform Support Unit: Participatory Health and Hygiene Education, Supplementary Module 6a, 2000
National WASHE/Water Sector Reform Support Unit: Participatory Health and Hygiene Education, Supplementary Module 6b, 2000
National WASHE/Water Sector Reform Support Unit: Other WASHE Manuals, 2000-2002
Northern Province P-WASHE: Various Sanitation and Hygiene Technology Descriptions
North-Western Province Water Supply and Sanitation Project: Sanitation Multiplication Proposal 2008
North-Western Province Water Supply and Sanitation Project: Water Point Committee Training and Operation Manual, November 2007
North-Western Province Water Supply and Sanitation Project: Baseline KAP Survey 2005, August 2005

UNICEF, Zambia: WASHE Briefing Note 2: Community Led Total Sanitation, undated (from 2008)

Annex 3

Elements from NRWSSP of Particular Relevance for Further Development of the Sanitation and Hygiene Component

In November 2007, MLGH launched the National Rural Water Supply and Sanitation Programme (NRWSSP) for 2006-2015. This was developed to address key issues which have hindered provision of improved access to water and sanitation in rural areas. It is intended to both speed up the achievement of the Millennium Development Goals (MDGs) and meet the Government’s vision for universal coverage.

One of the three specific objectives of the NRWSSP is:

_To increase and improve the number of proper sanitation facilities in rural areas through promotion of household latrine construction, health and hygiene education, and strategic demonstration facilities_

Key strategy elements are:
- Implementation of WSS through decentralisation to local authorities
- Demand-driven investments at district level based on single district investment plans developed with effective participation of communities led by the Local Authorities (LAs)
- Promoting integrated development and management of water supply, sanitation and hygiene education based on the WASHE (Water, Sanitation and Hygiene Education) strategy
- Community contributions that promote sustainability of services but also take into account social equity
- Promoting sector-wide financing of water supply, sanitation and hygiene education

The NRWSSP has seven components, one of which is the Sanitation (and Hygiene) Component. The remaining six components all appear to have some links to the Sanitation and Hygiene Component. The seven components are shown in the table below with some links indicated for each component:

<table>
<thead>
<tr>
<th>Component Number</th>
<th>Component Name</th>
<th>Links to Sanitation and Hygiene Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water Supply</td>
<td>Hygiene practices related to the handling and storing of water, cleanliness and drainage around/from water points etc.</td>
</tr>
<tr>
<td>2</td>
<td>Sanitation</td>
<td>The outcomes/results of this component are:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A National Sanitation Programme (to be developed under this assignment)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increased number of people in rural areas using adequate sanitation facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sanitation and hygiene promotion programmes in all districts achieving behavioural change in sanitation practices and improved utilization of sanitation facilities</td>
</tr>
<tr>
<td>3</td>
<td>Policy Development</td>
<td>The component description mentions sanitation as one of the particular focus areas for policy development. This is in line with observations above on the Water Policy, the Water and Sanitation Act and the suggestions in the National Sanitation Strategy from 1997.</td>
</tr>
<tr>
<td>4</td>
<td>Capacity Building</td>
<td>Capacity development is foreseen to be required for both sanitation and hygiene promotion at different levels, particularly for district and sub-district levels</td>
</tr>
</tbody>
</table>
### Component Number | Component Name | Links to Sanitation and Hygiene Component
--- | --- | ---
5 | Information Management System | The main IMS indicators include indicators on access to adequate latrines, disposal of household rubbish in an adequate manner, hand washing facilities close to latrines, and adequate bath shelters. Other indicators and data on e.g. community structures and capacity are also of relevance to the Sanitation and Hygiene Component.
6 | Operation & Maintenance of Water Facilities | The same links as for component 1
7 | Research & Development | The description of this component mentions that with respect to sanitation there are many experiences on technical solutions country-wide but no comprehensive analysis of suitable standards has been carried out. In the view of the consultants, it may also be relevant with more research on hygiene practices, with subsequent adjustment to the focus of hygiene promotion, if required.

The outcomes/results for the Sanitation Component, as now described in the NRWSSP, include increased number of sanitation facilities and sanitation and hygiene promotion to achieve behaviour change (the full wording of the outcomes/results are included in table 1 above). However, the overall description of the elements of the Sanitation Component (section 3.3.9 of the NRWSSP document) appear as focusing more on disposal of human excreta (latrines) than other forms of sanitation and hygiene practices like disposal of domestic waste, hand washing and other personal hygiene practices.

The NRWSSP has the following cross cutting issues, which should all be considered/ incorporated in the Sanitation and Hygiene Component.

- Gender
- HIV and AIDS
- Environment
- Good Governance

The total budget for the NRWSSP is ZK 923 billion, with ZK 124 billion (13%) for the Sanitation Component. This gives an average annual budget of ZK 12.4 billion for sanitation (and hygiene).

The NRWSSP gives the following definitions related to latrines.

An adequate latrine is to satisfy the following requirements:

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

The following are considered adequate latrines:

a. Ventilated Improved Pit (VIP) latrines
b. Pit latrines with sanitation platforms or other concrete platforms
c. Traditional pit latrines with a smooth floor surface
d. EcoSan latrines
e. Pour-flush latrines
f. Septic tank latrines
As part of the IMS Component, requirements/standards have been developed for the mentioned types of latrines for them to be considered adequate. The indicators related to sanitation and hygiene practices are included in table 1 above.

Other IMS data of particular relevance for the Sanitation and Hygiene Component are:

- Number of active local brick-layers able to construct latrines, well aprons etc
- The number or proportion of women among active local brick-layers who are able to construct latrines, well aprons etc.
- The V-WASHEs’ perception of the quality of the latrines constructed by brick-layers and/or others
Annex 4

Various Strategies, Guidelines and Manuals of Relevance to Rural Sanitation and Hygiene Component


In 1997, a National Sanitation Working Group, assisted by the Water, Engineering and Development Centre (WEDC), Loughborough University, England, developed a National Sanitation Strategy for Peri-Urban and Rural Areas in Zambia.

The strategy document proposes a number of principles that may be adopted to supplement those established in the National Water Policy in order that the risks to health would be reduced and programmes be encouraged to give more prominence to considerations of environmental sanitation. The proposed principles are:

1. Sanitation is critical to good health and therefore it should be recognised as an equal partner to water supply.
2. Behavioural change should be given greater prominence than provision of facilities.
3. Integrated institutional approaches operate at all levels in promoting behavioural change, led by one lead institution.
4. The government’s role is primarily in facilitation, motivation and research, and to promote sanitation through technical and financial support in terms of information and co-ordination. This support will be concentrated on those areas most in need.
5. Implementation will be demand responsive and community/user based.
6. Level of need and demand will influence level and type of interventions.
7. Management and decision-making will be devolved to the lowest possible level. It will, wherever practicable, use existing structures, rather than create new ones.
8. Strategies will employ gender balanced approaches to meet objectives, recognising women as key players and agents of change, and not solely as primary beneficiaries.
9. Commercial sector (including formal and informal sector) inputs will be encouraged in promotion and implementation.
10. Monitoring and evaluation will be built into all sector activities.
11. Interventions will be sustainable for communities/users and will not pose negative impact on the environment.

The objective of the strategy is “to create an enabling environment with support mechanisms to facilitate individuals, households and communities to effectively improve their environmental sanitation conditions and hygiene practices by erecting barriers to prevent the transmission of disease agents”, or put more simply “Environmental Sanitation for All”.

It appears that, for various reasons, the 1997 National Sanitation Strategy for Rural and Peri-urban Areas was never fully implemented. However, several of the WASHE manuals and modules developed by the Community Management and Monitoring Unit (CMMU) used elements from the strategy.

The strategy document includes several chapters that will be very relevant for the development of the Sanitation and Hygiene Component of the NRWSSP, including chapters on:
National and intersectoral promotion of environmental sanitation (advocacy and social mobilisation)
Behavioral change and community participation
Technology options
Monitoring and evaluation

2. WASHE Manuals and Modules

WASHE stands for WAter Sanitation Health Education. As mentioned in WASHE Manual 1 “Understanding the WASHE Concept/Strategy”, the concept was developed in Western Province in 1986 and spread to other parts of the country in the 1990’s. As mentioned in WASHE Manual 2 “WASHE in the Water Sector Reforms”, the National WASHE concept was formally launched in 1996. As at December 1999, a total of 63 D-WASHE committees had been established.

The long term objective of WASHE is the development and management of sustainable community water supply and sanitation through participatory hygiene education. The immediate objectives include:

- Development of integrated capacities of all actors through resource mobilisation
- Devolution of management responsibilities to the lowest levels
- Improvement of decision making, community involvement/participation and general capacity building
- Establishment of WASHE Committees at different levels whose members have a common goal as against individual representatives of organisations or group where they come from
- Promotion of Hygiene Education

In the WASHE concept there is much focus on integration of activities related to water, sanitation and health and hygiene education, community management and participatory approaches. Capacity building at all levels and intersectoral cooperation and coordination are also emphasized.

Five core WASHE training manuals and a number of supplementary modules were developed by the CMMU. Most of the latest editions of these are from 1998-2000. The target groups for the supplementary models are organisations and individuals directly involved in the planning and implementation of rural water supply, sanitation and health education, including district councils, D-WASHE committees, specific line ministries, NGOs, donors, volunteer agencies and development organisations.

Of particular relevance for this assignment are the supplementary modules:

- 5a Options for Excreta Disposal Facilities
- 6a Participatory Health and Hygiene Education (Theory)
- 6b Participatory Health and Hygiene Education (Practical)
- 7p Group Dynamics and Energiser Tool Kit
- 8 WASHE and Gender

The consultants have reviewed the three first-mentioned modules, whereas it has not been possible to find copies of the two last-mentioned modules.

The module on Options for Excreta Disposal Facilities has a general section on excreta and their disposal, including inter alia the “F diagram” showing the faecal-oral route of disease transmission from faeces and classification of excreta-related diseases. Another section describes the common excreta disposal practices identified in Zambia, including different types of latrines as well as crude (or open) defecation. It mentions that informal surveys have revealed that if the latrine is located behind the house, it is far more likely that more of the family members will be prepared to use it, both male and female. Furthermore this has an impact on whether or not visitors are willing to use the facility. The module also has a section on making the right choice, which includes a description of the essential components and requirements of an excreta disposal facility. A good supplement to this module is the Manual for the Construction of Pit Latrine Using Sanplat produced in 1998 by the National WASHE Training Team, Reform Support Unit, MEWD.
The module 6a on Participatory Health and Hygiene Education (Theory) includes sections on common diseases related to poor water and sanitation, a list of focus areas and preventive measures for water and sanitation related diseases and a summary of the classification of the same. Module 6b on Participatory Health and Hygiene Education includes very practical guidance on how to conduct participatory health and hygiene education activities.

The module suggests the following participatory activities:
- Water ladder
- Water use and practices - visualised discussion and community mapping
- Water collection – 3 pile sorting
- Water storage – 3 pile sorting
- Sanitation ladder
- Hand washing times – stand alone posters/pictures (with pocket voting)
- Hand washing methods – stand alone posters/pictures (with pocket voting)
- Refuse disposal – story with a gap

Picture sets are used in connection with all the activities, which are described in detail in the module. It is mentioned that the activities can and ideally should be integrated into the work of local Environmental Health Technicians (EHTs), Community Health Workers or project staff dealing with water and sanitation related health and hygiene issues.

Picture sets were reportedly developed at the same time as the module description/manual and widely distributed, especially to EHTs. Small-size versions of the pictures were included in one of the other WASHE manual, which is still to be located.

In the view of the consultants, the three modules/manuals reviewed include good information and tools for promoting improved sanitation and hygiene practices. However, according to several stakeholders, these (and other) WASHE manuals are not available in most of the districts, which is also the consultants’ experience from other work in the sector.

Furthermore, the WASHE materials do not seem to include relatively brief descriptions of technical elements, their costs as well as advantages and disadvantages of different types of appropriate latrines – descriptions that could be used for community presentations, discussions and choice. The Guidelines for Implementing Community Water Supply and Sanitation Projects in Rural Areas from 2002 do, however, include a brief description of different latrine technologies.

As earlier mentioned, there is a detailed manual for the construction of pit latrines using sanplats, which is reportedly being used for training by the Chainama College of Health Sciences. However, this is focused on one latrine option and mainly targeted at masons and others who are being trained in latrine construction. The manual thus mentions that the D-WASHE has trained about 20 to 30 masons in each district and provided them with tools and a set of moulds needed to construct pit latrines.

3. Guidelines for Community Water Supply and Sanitation Projects

Guidelines for Implementing Community Water Supply and Sanitation Projects in Rural Areas were published in 2002. They describe a number of principles to be considered, including the integration of water supply, sanitation and hygiene promotion with reference to the WASHE basic needs. As mentioned earlier, they also include a brief description of different latrine technologies. Other sections/chapters of particular relevance for the Sanitation and Hygiene Component are:

- Sanitation and Hygiene Promotion Technique, including the Participatory Hygiene and Sanitation Transformation (PHAST) approach which uses a number of participatory tools
- Key aspects to consider at each stage of a sanitation project (this is a table following the section on sanitation and hygiene promotion techniques)
- Preparation and Selection of Projects, including a section on promotion to create demand
- Project Implementation and Management, including a section on sanitation projects describing key aspects to consider at each stage in the implementation. The section also includes key aspects in relation to hygiene promotion.
• Management Structures, including a table with examples of community based structures and roles

4. Strategy for support to local authorities in sanitation and hygiene promotion, MLGH, DST 2008

Important issues regarding strategy formulation, by the District Support Team (March 2008)

Current approaches to hygiene and sanitation........

.........emphasise hygiene promotion rather than hygiene education. The aim is to encourage conditions and practices that help to prevent water and sanitation related diseases and motivate people to take actions against ‘risk’ practices and behaviours - as perceived by themselves rather than outside experts.

Current “best practices” for hygiene promotion and lessons learnt from previous experience suggest the following:

• Foster increased use of participatory methods and tools: The creation, use and extension of participatory methods and tools have provided good results. These help overcome resistance to deeply-seated attitudes and practices and facilitate links to felt priorities. Although face to face communication is more effective than campaigns, mass, folk and community media should also be used as they build an effective climate for change. In Zambia the Government has agreed to adopt the approaches and tools known as Participatory Hygiene and Sanitation Transformation (PHAST) developed by Unicef and introduced in Zambia by the donor and NGO community;

• Facilitate communities to set their own objectives: Hygiene promotion is more effective where communities are allowed to set their own specific objectives. It is seen that a focus on a few core behaviours (most critical), related core messages and demonstration of alternatives such as hand-washing, safe disposal of human excreta and use of safe water are enough to start up hygiene and sanitation programs for maximum impact.

• Evidence suggests that creation of demand for latrines through hygiene promotion is only successful to a limited degree and that the most effective way of sanitation promotion is through the market. Participatory hygiene promotion has thus to be coupled with marketing approaches. Extension workers promote sanitation as integrated parts of hygiene promotion activities while small-scale private enterprises and local artisans - who have turned into business people - sell latrines and sanitation related services on a commercial basis.

• Gender strategies should be updated to ensure shared and equitable roles for men and women: Overall, women and girls are given the major burden of hygiene and sanitation – both in terms of promotional tasks and responsibility for hygiene in the home and community. Strategies need to be more equitable and aim to ensure that men and boys take more responsibility and share in related work and tasks.

In addition:

• Hygiene Promotion should be culturally sensitive and take in consideration the community’s cultural beliefs. E.g. folk media such as dancing groups, local theatre etc. have the in-built advantage of being culturally acceptable,

• Hygiene Promotion should take into consideration the different age groups in a community;

• Affordability of the facilities using appropriate technology well supported by community members and less time consuming;

• Individual households should be targeted rather than communities.
5. WPC Training and Operation Manual, North Western Rural Water Supply Project

The last modules of the manual deal with sanitation and hygiene promotion training.

The objectives are:

- To enable WPC understand the importance of hygienic practice in relation to AIDS
- To enable WPC understand the importance of sanitation
- To enable the WPC understand the available technology choices in sanitation
  - Sanitation technology options
  - Using the sanitation ladder
- To enable COC to understand the importance of Children’s Hygiene.
- Explain on ecological sanitation using single and double vault composting toilets.
### Annex 5

#### Information on Sanitation and Hygiene Interventions Reviewed

**Abbreviations used:**
- CLTS = Community Led Total Sanitation
- CHWs = Community Health Workers
- EHT = Environmental Health Technician
- HH = Households
- HW = Hand washing
- MoH = Ministry of Health
- ODF = Open Defecation Free
- NHC = Neighbourhood Health Committee
- RHC = Rural Health Centre
- VAG = Village Action Groups (DAPP)
- Watsan = Water and Sanitation

<table>
<thead>
<tr>
<th>Name of Project &amp; Organisation</th>
<th>AfDB-supported Central Province RWSS Project</th>
</tr>
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<tbody>
<tr>
<td>Geographical Areas and Duration</td>
<td>Districts in Central Province, completed</td>
</tr>
<tr>
<td>Support related to HH Latrines</td>
<td>Improved traditional pit latrine promoted, as VIP is more expensive. Subsidies in the form of cement/ iron and demonstration superstructures. Materials for 2,000 slabs (reinforced by iron) financed by the project. Tools provided for 120 cm diameter slab production.</td>
</tr>
<tr>
<td>Support related to HH Hygiene</td>
<td>Promoting HW facilities</td>
</tr>
<tr>
<td>Support to School Latrines and Hygiene</td>
<td>n/a</td>
</tr>
<tr>
<td>Community Promotion, Training</td>
<td>EHTs trained to help communities cast slabs/ build latrines; moulds distributed via RHCs/ CHWs. CHWs also trained in casting sanplats and basic hygiene.</td>
</tr>
<tr>
<td>Organisation and Cooperation</td>
<td>Implementation through D-WASHE</td>
</tr>
<tr>
<td>Lessons Learnt Issues Suggestions</td>
<td>Promotion should not be done in the main farming season. Communities / schools slow in carrying out their parts, i.e. constructing superstructure. Latrines should not be too close to houses, as disliked that other people can see it being used; sharing w. in-laws also a problem. During previous field visit in May 2008 some slabs constructed in February 2007 were still not used for a new latrine, and user either used old latrine or bush. Reasons given were “rains” or lack of funds for proper superstructure (like the by AfDB promoted fully subsidised demo-superstructure).</td>
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<tr>
<td>Name of Project &amp; Organisation</td>
<td><strong>Africare: Support to Sanitation and Hygiene Promotion in Luapula</strong></td>
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<tr>
<td>Geographical Areas and Duration</td>
<td>Operating in 2 districts, Milenge and Mansa in Luapula Province, until 2010.</td>
</tr>
<tr>
<td>Support related to HH Latrines</td>
<td>Africare produces sanplats for communities, where beneficiaries assist with stones, bricks, sand, etc.</td>
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<tr>
<td>Support related to HH Hygiene</td>
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<tr>
<td>Support to School Latrines and Hygiene</td>
<td>Promotion of hygiene education in 9 schools in Mansa and 4 schools in Milenge. Emphasis is on improving hand washing and food handling for the pupils, using Peer Education Committees in schools with pupils, teachers and parents. There are 25 per school and they are in turn expected to teach their fellow teachers, pupils and parents. Africare also provides buckets for hand washing in these schools and school latrines using sanplat.</td>
</tr>
<tr>
<td>Community Promotion, Training</td>
<td>Africare does training for sustainable funding for O&amp;M of e.g. water points. This training which emphasises management of finances and income generating activities.</td>
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<tr>
<td>Organisation and Cooperation</td>
<td>UNICEF, MoH, MoE, Council</td>
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<tr>
<td>Lessons Learnt Issues Suggestions</td>
<td>Africare has indicated that one of its major challenges, is low participation of men in its activities, sometimes the sanitation topics are highly sensitive causing some people to shun meetings</td>
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<tr>
<td>Name of Project &amp; Organisation</td>
<td>Caritas Mansa, Support to Sanitation and Hygiene Promotion in Luapula</td>
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<tr>
<td>Geographical Areas and Duration</td>
<td>Caritas Mansa is operating in all Districts of the province in various development projects targeting vulnerable women and children. It is only in Mwense District that it is undertaking WSS interventions with the support of UNICEF</td>
</tr>
<tr>
<td>Support related to HH Latrines</td>
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<tr>
<td>Support related to HH Hygiene</td>
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<tr>
<td>Support to School Latrines and Hygiene</td>
<td>In addition, activities include the construction of school latrines</td>
</tr>
<tr>
<td>Community Promotion, Training</td>
<td>The interventions include the training of masons (Out of these only 2 are women), formation of V-WASHE Committees including the training of Hygiene Promoters.</td>
</tr>
<tr>
<td>Organisation and Cooperation</td>
<td>UNICEF</td>
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<tr>
<td>Lessons Learnt Issues Suggestions</td>
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</tbody>
</table>
### Sanitation and Hygiene Component, National RWWS Programme, Zambia

**Assessment of Existing Sanitation and Hygiene Situation and Interventions**

| Name of Project & Organisation | DAPP  
|-------------------------------|-------------------------------------------------|
|                               | 1) Child Aid, incl. WATSAN  
|                               | 2) HOPE related to HIV/ AIDS, incl. WSS-related hygiene |

#### Geographical Areas and Duration

| DAPP  
| 1) 14 districts, incl. 6 in Southern Province; others spread out, e.g. Mano, Kasongole and Kampamba wards in Samfya District.  
| 2) 7 districts, spread out |

#### Support related to HH Latrines

| Training of builders for circular reinforced sanplat, 120 cm diameter, on 90 cm diameter pit, usually 3 m deep, partly lined. Normally the sanplat is moved to new pits when first is full; some HHs plant trees on old pit.  
| DAPP provides cement for vulnerable HHs and advocates for small subsidy for slabs.  
| DAPP will promote EcoSan pilot for 100 units in each of 2 districts (Mazabuka and Gwempe), using the Arborloo design (plant-a-tree latrine; Peter Morgan) |

#### Support related to HH Hygiene

| In Monze DAPP testing tipsy-tap HW system, combined w. ash + soap – yet to be determined if success. In Samfya successful with HW promotion.  
| Bathing shelters promoted w. something to stand on and drainage.  
| Dish racks promoted, sometimes a two layer model w. table for basin |

#### Support to School Latrines and Hygiene

| Peer-to-peer educators trained from grade 5 up in watsan, organising cleaning of latrines. Hygiene educ. for pre-school children  
| School HW tanks constructed; use of ash/ soap recommended |

#### Community Promotion, Training

| 1) VAGs trained for 8 months, w. sanitation and hygiene for one month; implementation starts after 8 months.  
| WSS committees trained on hygiene and are given tools, e.g. for sanitation implementation. DAPP played important roles for promotion in Choma. During Apr’07 to Mar’08 16 WSS committees formed and 150 persons trained on health & hygiene, and peer training in sanitation and hygiene in 10 schools. Builders trained in construction of latrines with 120 cm diameter sanplats.  
| DAPP introducing CLTS in Samfya together with 60x60 sanplat for HH. In Samfya the focus of DAPP on hygiene promotion is on identifying hygiene promoters (these are selected by the community members) that after the relevant training are sent to promote hygiene in the surrounding communities. So far, 8 Hygiene Promoters in 4 Wards have been trained (that is 2 per Ward). And these have been in the forefront of carrying out interventions in 200 Villages. The advantage of pairing the Promoters is that there has been gender balance as one is male and the other female. These Hygiene Promoters are working closely with V-WASHE Committees in the respective villages. |

#### Organisation and Cooperation

| 1) > 2000 Village Action Groups (VAGs) established, covering about 500,000 people; WSS committees w. 2 persons/village  
| Partners: D-WASHE, NGOs, Dutch Gov., EU, WaterAid  
| DAPP member of the D-WASHE and carried out monitoring activities at community level and reported on this during D-WASHE meetings.  
| 1 local area leader per 4 schools checks on pupils’ use of HW facilities, gives hygiene messages (incentive K25,000 per day) |

#### Lessons Learnt Issues

<p>| Other NGOs, incl. CARE in peri-urban areas, have experienced difficulties in getting people to dig out from twin pit EcoSan (Fossa Alterna), so DAPP will promote low- |</p>
<table>
<thead>
<tr>
<th>Suggestions</th>
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<tbody>
<tr>
<td><strong>cost Arborloo design.</strong></td>
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<tr>
<td>Challenge to make nice superstructure for the temporary use of pit in Arborloo</td>
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<tr>
<td>Some areas, especially w. high density, cluster villages, have very high coverage with traditional latrines</td>
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<tr>
<td>If using Lubanga poles a traditional latrine w. logs for floor will last several years, but w. other poles may only last one year</td>
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<tr>
<td>DAPP is concerned about cutting of trees for floors in traditional latrines</td>
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<td>In Samfya the inadequate water available in some of the schools makes it difficult to implement the programme effectively. As a result, some hand washing facilities are found to have no water.</td>
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<tr>
<td>In Samfya the intervention in 4 Wards in the District means that at least 12 Wards do not have an intervention. This means that demand is very high and DAPP is not able to meet that demand.</td>
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<tr>
<td>DAPP is now using 25 kg cement (⅓ bag) for 120 cm diameter sanplats, while before used 50 kg (1 bag) for same model.</td>
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<tr>
<td>For the part lining in loose top soil is used some 4 Litres (1 gallon) of cement with bricks to make a ring-foundation of 3 courses, partly elevated from ground level to protect against rain water.</td>
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<tr>
<td>DAPP also use basket lining in loose unstable soil.</td>
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<tr>
<td>School hand wash tank design by DAPP: 25 kg cement + 2 taps @ 12,000 ZMK.</td>
<td></td>
</tr>
<tr>
<td>Name of Project &amp; Organisation</td>
<td>Danida-supported Water Sector Programme Support, Lusaka, Southern and Western Provinces</td>
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<tr>
<td>-------------------------------</td>
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</tr>
<tr>
<td>Geographical Areas and Duration</td>
<td>Capacity development support to Local Authorities in 12 districts in Southern (3), Lusaka (2) and Western (7) Provinces. 2006-2011</td>
</tr>
<tr>
<td>Support related to HH Latrines</td>
<td>No direct subsidies to construction of HH latrines, but promotion of use of latrines and training of local masons in the construction of latrines. Some training in latrine building targeting builders from districts has recently taken place with training being provided by Chainama College.</td>
</tr>
<tr>
<td>Support related to HH Hygiene</td>
<td>Outline of proposed Training Strategy for Capacity Development Programme for EHTs and others to upgrade skills in participatory sanitation and hygiene promotion. Chainama College is preparing the curriculum for training of EHTs. This training is scheduled to start in 2009.</td>
</tr>
<tr>
<td>Support to School Latrines and Hygiene</td>
<td>School sanitation and hygiene education activities are scheduled to start in 2009. School sanitation and hygiene education is likely to include both the provision of hygiene facilities (latrines, water supply and hand washing facilities) and development of necessary knowledge, attitudes, values and life skills.</td>
</tr>
<tr>
<td>Community Promotion, Training</td>
<td>A Hygiene Promoters’ Facilitation Manual (May 2008) for EHTs, Extension Staffs, V-WASHE Committees and CHWs has been developed. The manual provides various tools for PHAST training for hygiene and sanitation promotion.</td>
</tr>
<tr>
<td>Organisation and Cooperation</td>
<td>MLGH, District Councils/ D-WASHEs, Chainama College of Health Sciences</td>
</tr>
</tbody>
</table>
| Lessons Learnt Issues Suggestions | Despite the conceptual development over the last 10 to 15 years, most EHTs have not been trained in participatory approaches and PHAST tools, and are not familiar with the concept of hygiene promotion. In general, EHTs are still practicing health and hygiene education as a less interactive and rather top down transfer of knowledge, teaching the community members how water related diseases are being transmitted and instructing them in appropriate hygiene behaviour.

Another constraint concerns the number of EHTs. In principle each Health Centre should at least have one EHT. However, most districts, in particular the more remote ones, do not fulfill this requirement. Several Health Centres share one EHT and make use of volunteers instead. In other instances, EHTs act as stand-ins for the nurses and therefore do not have much time for outreach activities. There is thus also a need to train other extension staff in participatory hygiene promotion to get a critical number of hygiene facilitators in each district. |
<table>
<thead>
<tr>
<th>Name of Project &amp; Organisation</th>
<th>KfW-supported North-Western Province Rural Water Supply Project GITEC</th>
</tr>
</thead>
</table>
| Geographical Areas and Duration | Kasempa, Mufumbwe and Kabompo districts in North Western Province  
Pilot on ECOSAN since March 2007 |
| Support related to HH Latrines | Pilot on ECOSAN viability, with 10 HHs in each of three districts, i.e. in total 30 HHs  
Half of HHs in rural areas (single pit) and half in rural towns (twin pit)  
For rural areas, ECOSAN single vault rectangular design reinforced slab 0.9x1.2m with ring beam (0.7x1.0m/1.0x1.3m); project subsidy in form of materials (98,000 ZMK in Nov'07 price); HH contribution as labour, local materials for superstructure.  
Selection of 30 HHs based on willingness to use waste as compost |
| Support related to HH Hygiene | Peer to Peer HH Hygiene promotion is part of the school hygiene promotion. |
| Support to School Latrines and Hygiene | Hygiene promotion includes schools |
| Community Promotion, Training | 30 HHs participating in ECOSAN pilot project received information and training on hygiene  
IEC tools used/planned, in relation to water supply and hygiene: radio programmes, drama plays |
| Organisation and Cooperation | Local Sanitation Promoter is identified and trained.  
Plan for Sanitation Promoter for ECOSAN to receive ZMK 60,000 for each latrine  
constructed, not put in use as Nov´08 info |
24 out of 30 HHs completed superstructure after 10 months; 14 out of 24 latrines were functioning; other 10 had collapsed and/ or been abandoned; 10 out of 24 HHs used latrines properly.  
- Current local use of excreta compost is restricted to planting banana and orange trees in grounds formerly used as latrines. General use of compost from latrines needs more promotion. Adequate sensitization and training of HHs in management and use of compost latrines necessary.  
- The compost latrine is a feasible improvement to the ordinary pit latrines as it is affordable.  
- A subsidy is required as the average rural HH income lies below the poverty line and HHs cannot afford to pay full costs.  
For multiplication Project Team suggests:  
- Private contractors to produce ring beams and sanplats at central locality  
- Sanitation Promoters from community, possibly at ward level; should be well trained and receive incentive of ZMK 60,000 per completed unit  
The total subsidy need is estimated to 158,000 ZMK (per March 2008 prices). |
<table>
<thead>
<tr>
<th>Name of Project &amp; Organisation</th>
<th>Irish Aid Support through P-WASHE in Northern Province</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical Areas and Duration</td>
<td>Irish Aid has offices in Kasama but not in Isoka, but is supporting the district as the only organisation to play a role in issues of sanitation and hygiene. Irish Aid was reported to work in eight catchment areas in Isoka</td>
</tr>
<tr>
<td>Support related to HH Latrines</td>
<td></td>
</tr>
<tr>
<td>Support related to HH Hygiene</td>
<td></td>
</tr>
<tr>
<td>Support to School Latrines and Hygiene</td>
<td>School sanitation and hygiene in Northern Province boosted by the development of the “School Sanitation Strategy Paper of 2002”. This strategy was developed by the P-WASHE with support of Irish Aid.</td>
</tr>
<tr>
<td>Community Promotion, Training</td>
<td>Support to capacity development for sanitation and hygiene at Provincial and District level</td>
</tr>
<tr>
<td>Organisation and Cooperation</td>
<td>P-WASHE (Northern Province), SNV</td>
</tr>
<tr>
<td>Lessons Learnt Issues Suggests</td>
<td>The following mentioned by the P-WASHE: Logistics problems e.g. transport for monitoring</td>
</tr>
<tr>
<td></td>
<td>Limited resources hinders the abilities of the committee</td>
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<td></td>
<td>Capacity building needed for the V-WASHEs</td>
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<td></td>
<td>Lack of resources to execute planned activities</td>
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</tbody>
</table>
### “Make Zambia Clean and Healthy” Programme

**Ministry of Local Government and Housing**

<table>
<thead>
<tr>
<th>Name of Project &amp; Organisation</th>
<th>Geographical Areas and Duration</th>
<th>Support related to HH Latrines</th>
<th>Support related to HH Hygiene</th>
<th>Support to School Latrines and Hygiene</th>
<th>Community Promotion, Training</th>
<th>Organisation and Cooperation</th>
<th>Lessons Learnt Issues Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Make Zambia Clean and Healthy” Programme</td>
<td>All country, launched June 2007</td>
<td>Promotes adequate HH latrines, especially for upgrading unplanned settlements in urban areas of Lusaka, Ndola, Kabwe, Kitwe and Livingstone. Description does not mention problems / interventions in rural areas</td>
<td>HW is promoted, as well as personal hygiene, solid waste handling</td>
<td>The campaign does not focus on schools in particular, but emphasises the need for improved water supply and sanitation in some schools. For the importance for cleanliness in schools is stated: “Clean schools with proper ablution blocks for boys and girls, not only allow the next generation to learn good practices, they also keep them healthy. A clean and tidy school environment encourages children to develop tidy practices which when applies to their studies will result in them performing better and achieving higher grades”</td>
<td>Promotion of personal hygiene, garbage collection, provision of clean and safe water and sanitation, general cleanliness of premises, residences, transport and communities, etc.</td>
<td>Multi-sector, multi-disciplinary with actors from all government line ministries, all other public administration, traditional authorities, private sector, cooperating partners, church organisations, NGOs, CBOs and individuals</td>
<td>Activities are moving forward, e.g. with support from private funding. Among activities are introduction of small trucks for solid waste collection in districts and use of drama groups.</td>
</tr>
<tr>
<td>Name of Project &amp; Organisation</td>
<td>OXFAM GB Support to Sanitation and Hygiene Promotion, Western Province</td>
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<tr>
<td>Geographical Areas and Duration</td>
<td>Kaoma District, 3 wards; Nyambi, Namafulo, Luambuwa</td>
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<td></td>
<td>2007-2010</td>
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<tr>
<td>Support related to HH Latrines</td>
<td>Total target population 23,100 persons, mainly female headed households and the most vulnerable. At the time of the research OXFAM had constructed 436 latrines in the 3 wards. Most materials were purchased within the district; materials not found there were sourced from Lusaka.</td>
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<tr>
<td>Support related to HH Hygiene</td>
<td>Hygiene and sanitation promotion was the engine of Oxfam’s project, with everyone in a community as the target group.</td>
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<tr>
<td>Support to School Latrines and Hygiene</td>
<td>Construction of VIP latrines in ten schools in Kaoma district. Oxfam provided all the materials and asked the PTAs to make the bricks and dig the pits</td>
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<tr>
<td>Community Promotion, Training</td>
<td>Oxfam - in cooperation with EHTs - was planning to train 900 hygiene promoters, out of which 526 promoters had been trained at the time of the research. The training included monitoring of behaviour change. The hygiene promoters go door-to-door to sensitize people on different hygiene issues. These outreach activities were done three times per week per village for 1 hour each time. The hygiene promoters were reporting to the EHTs, using special reporting forms. Sometimes, the hygiene promoters called public meetings where the EHT participated. The hygiene promoters also worked with the NHCs whose members covered large areas. Builders identified by the community were trained in latrine construction and also provided with tools.</td>
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</table>
| Lessons Learnt Issues Suggestions | Oxfam work with basket/tree bark lining for pit latrines in sandy soils
People tended not to use the same latrine as in-laws
People without access to latrines used the bush which they are used to from long time back. According to Oxfam, many considered use of latrines as not important. Oxfam targeted the sick, i.e. those with chronic illnesses, because they tended to use latrines more than others.
People who constructed latrines because they were told to did often not use the latrines regularly and often did not construct a new one once the old one was full or collapsed. Children tended to get afraid of using latrines if a latrine had collapsed and then their parent also discouraged them from using the latrines.
Sometimes, not all household members used the latrine, e.g. 3 out of 9 persons might use it. |
| Name of Project & Organisation | Peace Corps  
34 young volunteers placed in rural villages, working with NHCs and RHCs |
|--------------------------------|------------------------------------------------------------------------------------------------|
| Geographical Areas and Duration | Works in Luapula (3 districts), Northern Prov. (4 districts), Central Prov. (2 districts), Eastern Prov. (3 districts) and North Western Prov. (1 district); in total 13 districts  
A community has a volunteer for up to 6 years  
Only 4 volunteers work w. WATSAN; there used to be more focus on watsan, but now more funds available for malaria and HIV/AID |
| Support related to HH Latrines | No funds available for supporting / subsidising HH latrines |
| Support related to HH Hygiene | |
| Support to School Latrines and Hygiene | n/a |
| Community Promotion, Training | Volunteers assist w. “Village Inspection” assessments where focus is on many issues, incl. some on environmental health/ watsan. Village Inspection data are kept by RHC/EHT  
Volunteers write proposals for funding together w. RHC.  
P.C. only funds training, no funds for subsidies etc.  
Volunteers write quarterly/ annual reports |
| Organisation and Cooperation | Volunteers live in villages, where they do capacity building for NHCs and collect data for funding of training etc.  
Cooperation w. RHC/ EHT and MoH |
| Lessons Learnt Issues Suggestions | Toilets at many Clinics are dirty, i.e. institutions do not keep a good standard, which is not encouraging in the sense of showing a “good example” to visitors  
People do not have a high priority for HH latrines. Also some VIP latrines constructed by some ZAMSIF projects have collapsed/ were abandoned. |
<table>
<thead>
<tr>
<th>Name of Project &amp; Organisation</th>
<th>PLAN, Zambia, Support to Sanitation and Hygiene Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical Areas and Duration</td>
<td>Working in Chadiza District in Eastern Province in 3 villages in each of 5 wards: Mangwe, Kandabwako, Buvwi, Chilanga and Naluvwi. Plan had started implementation mainly in Mangwe. According to the Plan International, it was the only NGO working with sanitation and hygiene in Chadiza. Operating in Mansa District, in 8 wards from 2006, focusing on boreholes, formation and training of V-WASHE Committees.</td>
</tr>
<tr>
<td>Support related to HH Latrines</td>
<td>PLAN is not providing subsidies for household latrines in Chadiza. In Mansa, Luapula, PLAN gave out cement (and roof sheets) for the construction of sanplats in selected HH. When some cement was misused PLAN changed approach to CLTS and has already trained some people. Sensitisation messages are also spread using the structure of the CHWs.</td>
</tr>
<tr>
<td>Support related to HH Hygiene</td>
<td>Due to failure in latrine usage, Plan International had embarked on a CLTS programme. Plan International had changed its approach to using CLTS led by UNICEF in Chief Macha’s area of Southern Province. Three members of each village in five wards of Chadiza had been identified to lead the CLTS activities. Plan has trained about 25 masons for construction of household latrines and had also provided them with tools.</td>
</tr>
<tr>
<td>Support to School Latrines and Hygiene</td>
<td>In 2008, Plan International has been focusing on school health programmes in particular. School sanitation is 100% subsidised, sometimes with small community input in the form of local materials when feasible.</td>
</tr>
<tr>
<td>Community Promotion, Training</td>
<td>Future focus will be on CLTS (no OD), using PLAN International’s regional experience with CLTS from Tanzania, Kenya and Ethiopia.</td>
</tr>
<tr>
<td>Organisation and Cooperation</td>
<td>Working with MoE on school sanitation</td>
</tr>
<tr>
<td>Lessons Learnt Issues Suggestions</td>
<td>While elders/adults may use traditional latrines most children practice OD, where mothers may bury or put their excreta in pit. The worm infestation among children is high. It is a widespread belief that children’s excreta are not harmful. In Eastern province the traditional excreta disposal is OD and letting the pigs eat the excreta; hence people do not have even traditional latrines, as a source of food for domestic animals would then be lost. This excreta/pig cycle may be a transmission route for tape-worms, but there are no studies to confirm this. The Government should come up with a policy of zero subsidy for sanitation and impose a law for every household in the villages to construct a latrine. Government spending so much money on sanitation through the D-WASHE, but people’s attitude still not changing.</td>
</tr>
<tr>
<td>Name of Project &amp; Organisation</td>
<td>SNV - Netherlands Development Organisation</td>
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</tbody>
</table>
| Geographical Areas and Duration | Western, North-Western, Copperbelt and Northern Provinces  
In Northern Province in Mpika, Mungwi, Isoka and Kasama District  
More focus on WSS from 2008 with baseline survey |
| Support related to HH Latrines |  |
| Support related to HH Hygiene |  |
| Support to School Latrines and Hygiene | School sanitation is on the drawing boards and they hope to do this in collaboration with other key stakeholders such as Irish Aid. |
| Community Promotion, Training | SNV is supporting a WASHE Team to build the capacity of V-WASHE Committees in North-Western and Copperbelt Provinces.  
Training of Area Development Committees (ADCs) to undertake monitoring of WSS services in their areas. |
| Organisation and Cooperation | Irish Aid, UNICEF, V-WASHE, Department of Water Affairs |
| Lessons Learnt Issues Suggestions | One of the strategies being used is the training of Area Development Committees (ADCs) in order to strengthen their capacity to undertake monitoring of WSS services in their areas.  
A Water and Sanitation strategy is in draft form in which SNV is spelling out its aspirations |
<table>
<thead>
<tr>
<th>Name of Project &amp; Organisation</th>
<th>UNICEF Pilot of CLTS Approach</th>
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<tbody>
<tr>
<td>Geographical Areas and Duration</td>
<td>CLTS approach tested in 12 villages in Choma district from November 2007; In August 2008 more than 100 villages in Choma were triggered. Also planned to test approach in Luapula (high coverage) and Eastern Province (low coverage) for other cultural representation</td>
</tr>
<tr>
<td>Support related to HH Latrines</td>
<td>During 2 months in pilot CLTS the latrine coverage increased from 23% to 88%, estimated that 68% of toilets constructed meet GRZ standards. 75% of villages were ODF after 2 months Some latrines were considerable distances from houses – may reduce use at night times etc. Promotion of Open Defecation Free (ODF) villages. No subsidies for latrines</td>
</tr>
<tr>
<td>Support related to HH Hygiene</td>
<td>Promotion of hand-washing and other hygiene practices not included in the CLTS process so as not to confuse things during pilot experience Monitoring after 2 months showed only 22% of toilets had HW facilities Future ideas for promoting HW: use traditional festivals, radio for messages, messages on walls in waiting areas of RHCs, possibly using CHWs etc.</td>
</tr>
<tr>
<td>Support to School Latrines and Hygiene</td>
<td>See next page</td>
</tr>
<tr>
<td>Community Promotion, Training</td>
<td>CLTS facilitators taking communities through a process of meetings, mapping, village walks, establishment of Village Sanitation Action Groups etc. In pilot UNICEF/ national-level facilitators used, but in future will use district staff together w. councillors and traditional leaders. In August 2008 over 60 CLTS facilitators had been trained in Choma district; including District Council staff, Chiefs, Village Headmen, Ward Councillors, EHTs and NGO staff. Focus is on behaviour change to ODF status and not on technical standards for latrines. Next steps on sanitation ladder considered when ODF achieved</td>
</tr>
<tr>
<td>Organisation and Cooperation</td>
<td>UNICEF trained a number of local stakeholders as mentioned above Role of traditional leaders was crucial in ensuring sustained action from communities and chiefs involved keen to scale up the approach Village Sanitation Action Groups established during CLTS process</td>
</tr>
<tr>
<td>Lessons Learnt Issues Suggestions</td>
<td>Impact highest where initial sanitation coverage lowest; High coverage not necessarily resulting in ODF status; Low coverage not necessarily meaning not ODF, since HHs may share latrines Traditional leaders crucial for implementing and sustaining Previous sanitation projects do not necessarily prevent CTLS success but can complement approach On-going monitoring by traditional leaders, sub-district and district staff important Promotion of HW and hygiene education to be added to CLTS Give more technical advice to village sanitation action groups to assist HHs move up the sanitation ladder</td>
</tr>
<tr>
<td>Name of Project &amp; Organisation</td>
<td>UNICEF School Sanitation and Hygiene</td>
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</table>
| Geographical Areas and Duration | Districts in different provinces  
New project in Luapula w. Africare |
| Support related to HH Latrines | Integrated school latrines promoted. The model was developed w. inputs from children to overcome constraints of VIP design (too dark inside)  
It is a double-vault latrine (pit w. lid, but no vent) + urinal for boys and sometimes urinals for girls. |
| Support related to HH Hygiene | Latrine cubicles have HW facility inside using rain water when available |
| Support to School Latrines and Hygiene | Schools used as entry point for hygiene promotion, using the peer-to-peer concept; training of children, teachers and parents in one school; they visit two neighbouring schools. Peer-educators work at community level, adult-adult and children-children  
School Health Nutrition Programme (MoE) another entry point, but not so active |
| Community Promotion, Training | Walls of latrines and urinals are plastered, painted and used for hygiene messages w. text and drawings, so-called “talking walls” |
| Organisation and Cooperation | MoE |
| Lessons Learnt Issues Suggestions | MoE has not adopted the UNICEF School latrine design, i.e. the “integrated latrine”, but continue using VIP design for schools. |

Note: UNICEF is also providing support to other sanitation and hygiene related activities, e.g. with training of EHTs and others in the use of PHAST tools.
<table>
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<tr>
<th>Name of Project &amp; Organisation</th>
<th>Village Water, Support to Sanitation and Hygiene Promotion</th>
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</thead>
</table>
| Geographical Areas and Duration | Western Province, 4 districts: Lukulu, Kaoma, Mombo, Kaulu  
V.W. plans to work in additional areas in Western province or in Eastern Province |
| Support related to HH Latrines | Support to HH latrines is in areas where water points installed; subsidies for demo latrines for vulnerable HHs, selected by community, e.g. 50-100 slabs to community with 400 HH.  
Subsidies as slabs, i.e. V.W. buys materials for 120 cm diameter Sanplat  
Training on Sanplat construction w. distribution of moulds (1 per 4-5 villages)  
Moulds from Kazuma Plastic |
| Support related to HH Hygiene | Hygiene practices/facilities promoted, including dish racks, rubbish pits  
In 2008 no sponsor for hand washing support |
| Support to School Latrines and Hygiene | Working w. 2 schools only, but planning for more  
V.W. recently got brick making machine for construction of circular pits for school latrines |
| Community Promotion, Training | Sanitation promoted and subsidised before water points  
CLTS are used in certain districts, while in other districts subsidies are used for construction of sanplats.  
When CLTS is introduced it is before water supply interventions, for each HH to have a latrine, and other hygiene facilities like dish rack, rubbish pit |
| Organisation and Cooperation | Works through one other local NGO, CEP, for sanitation  
Works w. district councils, e.g. gives them reports  
Establishes and/or trains V-WASHE  
V.W. appreciates the NGO Forum |
| Lessons Learnt Issues Suggestions | Sustaining sanitation is a big challenge/impossible; communities positive towards HH sanitation when getting water, but few will replace when latrines collapse  
Lining of pits in sandy areas is necessary; some of lined pits from 2004 are still in use, although most collapsed during 2007 big rain  
District capacity a big challenge, but also difficult for them as no/little district budget for salaries and transport |
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<tr>
<th>Name of Project &amp; Organisation</th>
<th>Water Aid, Community-Based Total Sanitation</th>
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<tbody>
<tr>
<td>Geographical Areas and Duration</td>
<td>Monze district, Southern Province, focus on wards with lowest latrine coverage Some wards in Mwense, Milenge and Samfya districts, since 2006/7 Communities targeted are small. Annually supporting about 4,000 HH latrines</td>
</tr>
<tr>
<td>Support related to HH Latrines</td>
<td>Focus on CLTS principles, combined with provision of Sanplats to selected HH for upgrading surface area (floor) in existing latrines, i.e. promoting 60x60 cm slabs to improve (unhygienic) traditional latrines Promotion of basic sanplat, circular (120 cm), mould cost around 100 USD (from Kazuma Plastics), pits normally 90-100 cm wide, 2-3 meters deep unlined. Sometimes stabilising edge of pit. Subsidies for slabs provided, considered necessary Community provides local materials and labour (estimated to K 250-400,000), while project provides materials like cement, iron and sometimes stones or transport of the same (in total estimated to ZMK 80-100,000/slab) Water Aid is gradually trying to reduce subsidy for HH sanitation but finds the low quality of non-subsidised latrines a challenge hence advocates for slab subsidy</td>
</tr>
<tr>
<td>Support related to HH Hygiene</td>
<td>Strong focus on HW facilities and practices Also other hygiene practices promoted incl. safe water use, water points well-managed, food and water covered, garbage and domestic animal excreta disposal, clean surroundings</td>
</tr>
<tr>
<td>Support to School Latrines and Hygiene</td>
<td>School peer educators used. In Luapula school latrines for 28 schools.</td>
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<tr>
<td>Community Promotion, Training</td>
<td>Aim is ODF villages, focusing on whole community and not on individual HHs Initially focused on interested HHs, moved to focus on total (village) sanitation Much focus on community mobilization, sensitization, training of masons etc. For example successful use of drama groups. Weekly village hygiene meetings held</td>
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<tr>
<td>Organisation and Cooperation</td>
<td>In Monze, DAPP, District Council very active (e.g. in Chipembele increase coverage from 4% to 40-50%). Working with D-WASHE for promotion In Luapula working with DAPP (Samfya) and Caritas (Mwense) WaterAid participated in the NGO Forum</td>
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<tr>
<td>Lessons Learnt</td>
<td>Water Aid suggests the need for an NGO forum at provincial level to spearhead and coordinate activities. Concerns on use of logs for floor because of loss of natural resources and also concerns on the hygiene situation of traditional latrines with smooth surface Successful in integrating HE, sanitation and water supply (reversing order of intervention). Good sanitation a pre-condition for water supply Drama groups successful Community members helped vulnerable HHs construct latrines Dome shape sanplan (not reinforced) earlier tested, but did not work well and people are used to reinforced sanplats. Stones difficult to obtain in Samfua Water Aid makes 4 pieces 60x60 cm sanplats from 50 kg cement +local sand/stone</td>
</tr>
</tbody>
</table>
### Name of Project & Organisation
**World Vision, Support to Sanitation and Hygiene Promotion**

### Geographical Areas and Duration
Chieftainess Nkomesha’s area (80%), Wunda Wunda ward (20%), Chongwe urban (15%), and some parts of Manika ward.

### Support related to HH Latrines
At time of research, World Vision was in the process of completing the construction of 330 VIP latrines in the district.
Households were provided with subsidies in the form of building materials such as cement, iron sheets and iron bars to construct VIP latrines, the cost of labour was to be met by individual households.

### Support related to HH Hygiene

### Support to School Latrines and Hygiene
At the school level, World Vision supported the programme of rehabilitation of classroom blocks and the building of VIP latrines through MoE.

### Community Promotion, Training
Promotion for School sanitation through MoE

### Organisation and Cooperation
D-WASHE, MOE

### Lessons Learnt

### Issues
Some areas such as Chalimbana and Kambeleka were very sandy and this affected the lining and building of latrines.

### Suggestions
No programmes to train local masons.
The cost to construct a VIP latrine was in the range of ZMK 800,000 – 1,000,000. Most households could not afford this, as they lacked good income.

Although World Vision had not supported the construction of bath shelters, the majority of households had constructed bath shelters which were used for bathing, while others took baths using latrines or river

Sanitation and hygiene should be promoted with a similar drive was done for HIV/AIDS
## Name of Project & Organisation
Zambia Red Cross Society, Support to Sanitation and Hygiene Promotion

### Geographical Areas and Duration
In 2007 ZRCS started the implementation of a three-year sanitation and hygiene promotion project in some wards of Choma and Sinazongwe districts.
The wards in Choma include Mapanza, Simubi, Chilalantambo and Kabimbo.
Total target group 2 x 4 wards (90,000 people)

### Support related to HH Latrines
For development project target is 9,000 latrines w. 60 x 60 cm slabs
Production of slabs now at ZRCS Choma office, but village production planned

### Support related to HH Hygiene
HW much promoted
Dish racks, rubbish pits also promoted

### Support to School Latrines and Hygiene
Trained builders on construction of school/institutional latrines, including construction of 450 institutional latrines (VIP with All-in-One embedded in slab)
School latrines are on average 1 unit per 20 pupils, with more units for girls than boys

### Community Promotion, Training
First priority is mobilisation of leaders and training on PHAST;
20 hygiene promoters trained per ward (around 1 promoter per 3 villages); hygiene promoters trained for 7 days on hygiene promotion/PHAST; they train/supervise village PHAST groups; no cash incentives, but bicycle, t-shirt/cap provided
Attempts to get more women as volunteers than men, several also NHC members
ZRCS technicians teach families to construct log floors to fit latrine slab

### Organisation and Cooperation
Works w. D-WASHE, using same policy/ guidelines/ manuals
Monitoring done with D-WASHE
ZRCS member of NGO forum

### Lessons Learnt Issues Suggestions
ZRCS disaster oriented, but also has development projects for watsan/ hygiene
Software has much impact w. respect to cost/benefit, although ZRCS recognise that behavioural change takes time.
ZRCS believes it is necessary to give small latrine subsidies to poor communities
ZRCS can make 10 slabs (All-in-One 60x60 cm-type) with 50 kg Chilanga Portland Cement, or 8 slabs with other type of cement.
Has 100 All-in-One fibreglass moulds (55x55 cm) from Kuzuma Plastic
Investigating CLTS for pilot project, but concerned about the lack of a little help for poor communities to get hardware
<table>
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<tr>
<th>Name of Project &amp; Organisation</th>
<th><strong>ZAMSIF Support to Sanitation</strong></th>
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<tbody>
<tr>
<td><strong>Geographical Areas and Duration</strong></td>
<td>ZAMSIF provided support to a number of district, including some of the districts visited during the 2008 research, namely: Nachibanga and Nalituba wards, Choma District, Southern Province Chongwe District, Lusaka Province ZAMSIF has ceased activities</td>
</tr>
<tr>
<td><strong>Support related to HH Latrines</strong></td>
<td>Intervention from ZAMSIF in the past was for HH VIP latrines with bath shelters for selected HH, which had been given to areas with a serious need for latrines (Nachibanga and Nalituba wards). Construction fully subsidised.</td>
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<tr>
<td><strong>Support related to HH Hygiene</strong></td>
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<tr>
<td><strong>Support to School Latrines and Hygiene</strong></td>
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<tr>
<td><strong>Community Promotion, Training</strong></td>
<td>These VIP latrines were built as demonstration for others so they saw the importance of building good latrines.</td>
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<tr>
<td><strong>Organisation and Cooperation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Lessons Learnt Issues Suggestions</strong></td>
<td>If it is a poor community and the proposed solution for HH sanitation is excessive in price the replication by other HHs without subsidy not possible</td>
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