



Sanitation

MATTERS

A Magazine for Southern Africa

ISSUE 3 - APRIL 2012



Health & Hygiene

Focus on handwashing

" The Water Research Commission, in 2009, commissioned research to develop a scientific method to assess the effectiveness of hand-washing and hand hygiene behaviours."

PAGE 3-7 ■

5 BEST PRACTICES OF HYGIENE

Unsafe hygiene behaviours accounting for morbidity and mortality rates

■ PAGE 8 - 9

WIN-SA BREAKS THE SILENCE

Menstrual Hygiene Management

■ PAGE 16

TOILET REHABILITATION

SPF has rehabilitated toilets at 3 schools in the Libode District.

■ PAGE 20-23

Sanitation Matters is a knowledge sharing publication of the Southern Africa Knowledge Node On Sustainable Sanitation (SAKNNS). The purpose of the publication is to share information and knowledge on sustainable sanitation within the Southern Africa region. Subscription is free. Material in this publication does not necessarily reflect the considered opinions of the members of the Water Research Commission, Stockholm Environment Institute and Water Information Network.

Editorial offices:

Water Information Network
Private Bag X03
Gezina
0031
Republic of South Africa

Tel (+27) 12 330- 9062
Fax (+27) 12 330- 2565

Editor:

Juliet Mwale
E-mail: julietm@win-sa.org.za

www.win-sa.org.za

Editorial team

Juliet Mwale
Silai

In this issue

A Tool For Measuring The Effectiveness Of Handwashing	3-7
Five Best Practices Of Hygiene Promotion Interventions In the WASH Sector	8-9
Washing Your Hands With Soap: Why Is It Important?	10-11
Appropriate Sanitation Infrastructure At Schools Improves Access To Education	12-13
Management Of Menstruation For Girls Of School Going Age: Lessons Learnt From Pilot Work In Kwekwe	14 -15
WIN-SA Breaks The Silence On Menstrual Hygiene Management	16
Joining Hands To Help Keep Girls In Schools	17
The Girl-Child And Menstrual Management :The Stories Of Young Zimbabwean Girls.	18-19
Toilet Rehabilitation At Nciphizeni JSS And Mtyu JSS Schools	20 - 23



A tool for measuring the effectiveness of **HANDWASHING**

Human hands are one of the chief vehicles of transmission of diarrhoeal disease, especially the hands of mothers and other caregivers. Good hand hygiene plays a significant role in preventing and minimising these diseases.

Melanie Wilkinson, Alheit du Toit and Dineo Mashimbye, Sustento Development Services

Human hands are one of the chief vehicles of transmission of diarrhoeal disease, especially the hands of mothers and other caregivers. Good hand hygiene plays a significant role in preventing and minimising these diseases.

The microbial population of the human hands are divided into two categories: transient flora and resident flora. Resident flora are found in the deeper layers of the skin. Transient flora colonize the surface layers of skin and if the skin is healthy, approximately 10% of the skin which is shed will contain viable bacteria. Practicing good hand hygiene can remove these transient flora from hands.

The Water Research Commission, in 2009, commissioned research to develop a scientific method to assess the effectiveness of handwashing and hand hygiene behaviours. This research resulted in the development of a hand hygiene assessment framework, consisting of three components (Figure 1-3), each of which addressed one of the hypotheses' of the assessment.

These were:

Hand hygiene hypothesis 1:

the manner in which an individual washed their hands (Hand Hygiene Technique) during a hand hygiene demonstration would be influenced by 6 indices made up of individual and environmental behaviours and characteristic. Each index in-turn would be determined by one or more indicators of hand hygiene behaviours.

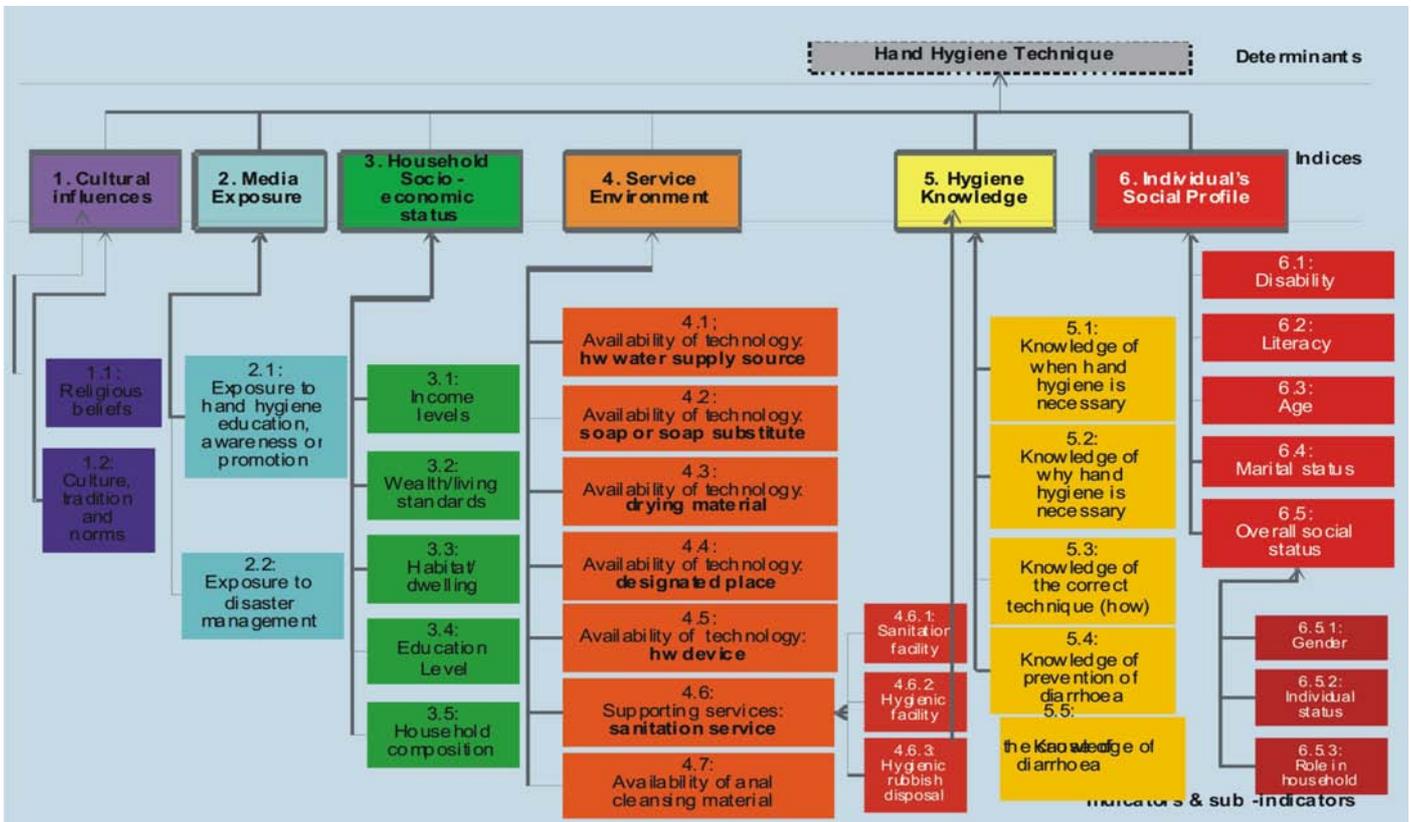


Figure 1: Component of the framework showing the hypothesized relationships between indices, indicators, sub-indicators and an individual hand hygiene technique.

Hand hygiene hypothesis 2:

the 'cleanliness' of an individual's hands (i.e. the bacterial counts on individuals hands) would be determined by the manner in which the individual washed their hands and the bacterial counts in the water which was used to practice hand hygiene during the hand hygiene demonstration.

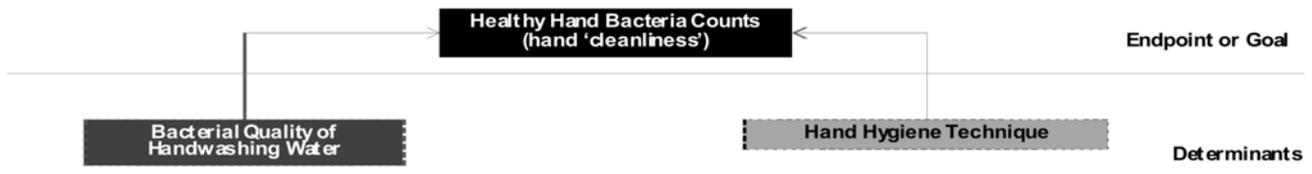


Figure 2: Component of the framework showing the hypothesized relationship between bacterial count in handwashing water, handwashing technique and the 'cleanliness' of an individual's hand.

Hand hygiene hypothesis 3:

from international literature, there would be a number of indicators which would determine hand hygiene and thus hand 'cleanliness' of individual's.



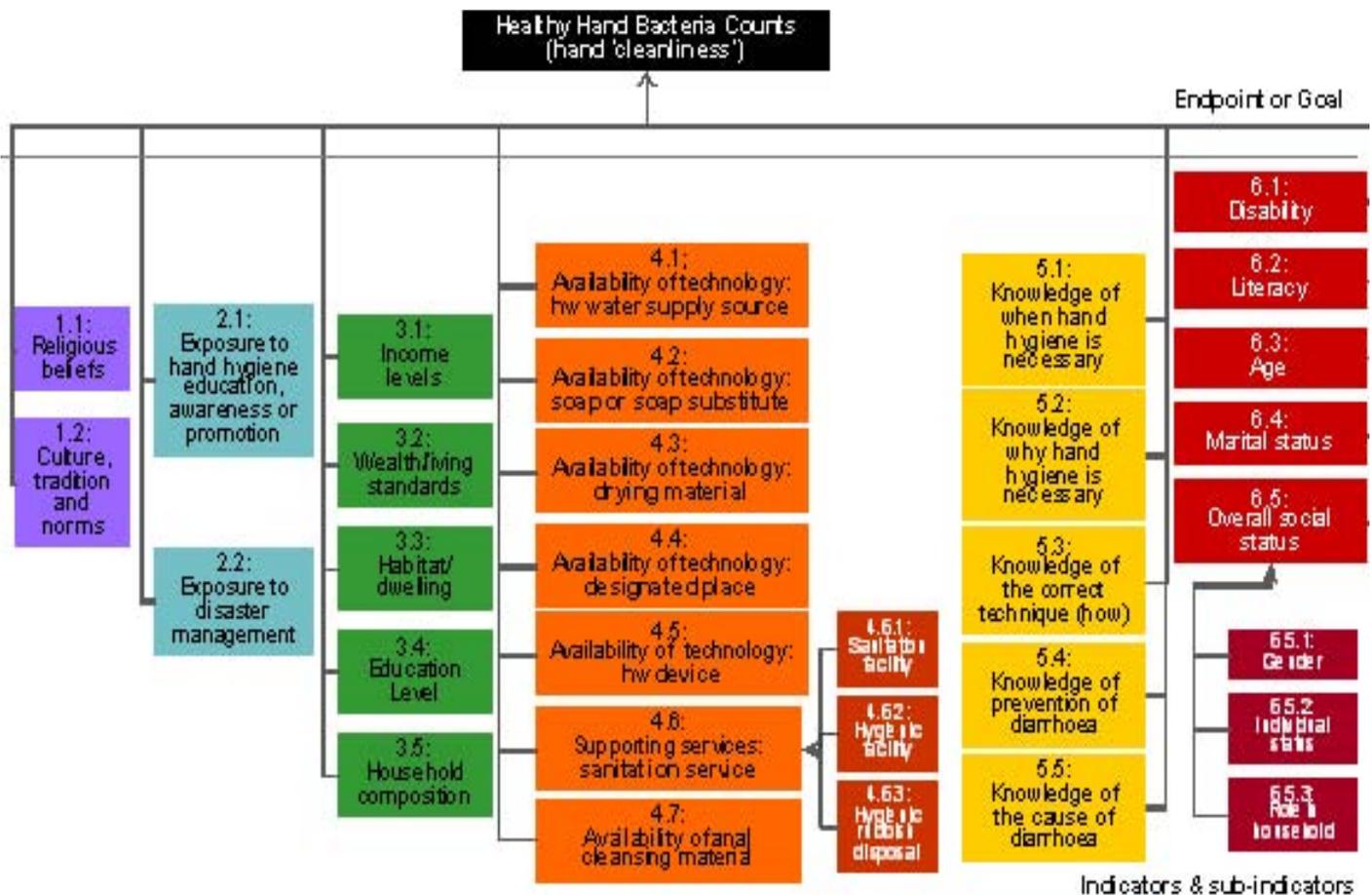


Figure 3: Component of the framework showing the hypothesized relationship between hand hygiene indicators and the 'cleanliness' of an individual's hands.

A triangulation approach was applied to collect data for the Framework, combining qualitative, quantitative and microbiological information. Two data collection tools, namely a hand hygiene observation and a hand hygiene interview were used for in-field data collection. Each question or observation in the data collection tools was a measure of an individual's hand hygiene behaviour. Each measure was assigned a score; measure scores were combined and averaged to give a score for each indicator in the Framework. Similarly indicator score were combined and averaged for their related index. Microbiological data was collected to determine the levels of bacteria on an individual's hands post-washing and to determine the levels of bacteria in the water used to wash hands. Various statistical methods were used to analyse the data for the variables within the Framework.

The Framework was tested using data from three study sites in the Tshwane metro, namely an urban, peri-urban and rural study setting. The sites were selected based on the perceived economic status and service levels to reflect a diversity of individuals. This would ensure that the Framework was not limited to capturing hand hygiene behaviours of a single sector and group in the country.

Key findings:

Hypothesis 1: *The manner in which an individual practices hand hygiene is determined by a number of indices and indicators.*

Analysis of the variables in the Framework clearly showed that the manner in which an individual practices hand hygiene (i.e. their handwashing technique) was not determined by all six hand hygiene indices but rather could be to only three of the indices, namely Household Socio-economic Influence, Service Environment and Hygiene Knowledge. However, it was the combination of two indices, Service Environment and Hygiene Knowledge which significantly influence the Hand Hygiene Technique. This suggested that the indicators which make up these indices were the most influential of the manner in which an individual practiced hygiene.

The score of hand hygiene technique was also significantly higher in the urban sample, as compared to the rural/peri-urban samples, suggesting that the individuals in the urban sample had more correct handwashing actions during the hand hygiene demonstration. This was supported by a much higher percentage

(95.6%) of the urban sample using soap to wash hands during the demonstration, as compared to 63.4% in the peri-urban/rural sample and the entire urban sample using a material towel or cloth to dry their hands, as compared to 36% of the peri-urban and 36.4% of the rural samples using similar materials.

Hypothesis 2: *Hand 'cleanliness' is determined by the bacterial count in the water used to wash hands and the manner in which hands were washed.*

Analysis of the variables in the Framework clearly showed that:

- how well an individual demonstrated hand hygiene could be related to the bacterial counts on an individual's hands, suggesting that the better the handwashing technique of an individual the cleaner their hands post-washing; and
- the bacterial levels in the water used to wash hands during the demonstration was not related to the cleanliness of an individual's hands, suggesting that the bacterial quality of water did

not determine the 'cleanliness' of hands in this sample.

Analysis of the levels of bacterial on individuals hands post-washing suggested that the most individual in the sample had 'clean' hands.

However at least 24% (25 rural, 8 peri-urban and 3 urban) of individuals had hand bacterial counts above the allowable levels and therefore, could be considered to have 'unclean hands' post-washing.

When the hand hygiene technique measures were analysed against hand bacterial counts, results showed that:

- **the use of soap did not necessarily result in 'cleaner' hands:** there was no significant difference in the average levels of bacteria counts on the hands

of individuals which used soap to wash hands when compared to the group of the individuals that did not use soap.

- **the rubbing together of the hands at least 3 times during washing did not necessarily result in 'cleaner hands':** there was no significant difference in the average levels of bacterial counts on the hands of individuals observed to 'rub hands together at least 3 times' and the individuals that did not rub hands together at least 3 times; and
- **the material used to dry hands did not necessarily influence hand cleanliness in the sample:** there was no significant difference in the average levels of bacterial counts on the hands of individuals based on the type of materials used to dry their hands, suggesting that whether hands were dried with a cloth, paper towels or air dried did not significant change the levels of hand 'cleanliness' of the sample.

Hand hygiene hypothesis 3: a number of indicators determine hand hygiene and thus hand 'cleanliness'

Table 1 clearly showed that the 'cleanliness' of an individual's hands was determined by a combination of indicators of household living standards, availability and type of technologies required for appropriate hand hygiene and an individual's hand hygiene knowledge. Indicators of the cultural behaviours, media exposure and the social profile of an individual do not determine hand 'cleanliness' in the sample (see Table 1).

Determinants	Indicator	Sig Relationship with Hand Bacteria Counts
Cultural Influence	Reported belonging to a religious group	No
	Reported having specific handwashing religious behaviour or practice	No
	Reported type of religious affiliation (Christian or Traditional)	Yes
	Reported having special times/traditions/occasions for handwashing	No
Media exposure	Reported having heard from someone or somewhere that handwashing is important	No
	Reported studying hygiene at school	No
	Reported learning at least one handwashing message from the source in the last month	No
	Reported being exposed to a disaster management intervention	no (small sample)
Household socio-economic	Reported household income level	Yes
	Calculated Wealth Index	Yes
	Observed durability of dwelling	Yes
	Reported educational level of the household	Yes
	Reported size of an individual's household	No
	Reported presence of at least 1 child under 17 years in an individual's household	No
Service Environment	Reported number of children under 5-years in an individual's household	No
	Reported type of handwashing water source	Yes
	Distance to handwashing water source	not measured
	Reported availability of soap in the household	No
	Observed availability of soap next to handwashing station most often used to wash hands	Yes
	Observed type of cleansing agent observed next to the handwashing station	No
	Observed availability of hand drying material at handwashing station	Yes
	Availability of hygienic drying material	insufficient data
	Reported position of handwashing station most often used to practice hand hygiene	Yes
	Observation of a handwashing station within 2 meters of the toilet	Yes
	Presence of a handwashing device at the handwashing station	No
	Observed type of handwashing device at the handwashing station	No
	Observed hygienic and safe handwashing device at the handwashing station	Yes
	Observed type of toilet	Yes
	Observed location of toilet	Yes
	Observed distance to sanitation facility	No
	Observed toilet tidiness	Yes
Observed faecal matter is observed on walls or floor of the toilet (i.e. dirty toilet)	No	
Reported cleaning of the toilet	No	
Reported safe storage of household rubbish	Yes	
Reported safe disposal of household rubbish	Yes	
Observed tidiness of the yard	No	
Observed presence of anal cleansing material next to or within arms-reach of the toilet	Yes	

Hygiene Knowledge	Reporting of more critical time for handwashing	No	
	Reporting at least 1 reason why it is important to wash hands at critical times	No	
	Reporting more of the activities require for appropriate hand hygiene technique	Yes	
	Reported knowledge of what diarrhoea is	Yes	
	Reported knowledge that diarrhoea can be prevented	No	
	Category of report of how to prevent diarrhoea	No	
	Level of reporting of how to prevent diarrhoea	No	
	Level of reporting of what causes diarrhoea	No	
	Social Profile	Having a disability	insufficient data
		Literacy	insufficient data
Age category		No	
Marital status		No	
Gender		No	
Education level		No	
Employment activities or duties		No	
Relationship to the head-of-household		No	
Others	Reported type of drinking water source	Yes	
	Reported distance to drinking water source	not measured	

How can the framework help future hand hygiene initiatives and interventions?

The assessment has demonstrated that the Framework and underlying process and tools provide details of which hand hygiene variable determine hand hygiene in the sample sites. The results of applying the Framework could provide hand hygiene data and information to inform and guide future hand hygiene interventions at the sites. The application of the Framework could also provide baseline data against which the effectiveness of future hand hygiene interventions can be assessed.

It was clear from the distinct hand hygiene characteristics of the three sample sites that a one-size fits all approach to hand hygiene awareness and promotion may not be effective. To change the hand hygiene practices of individuals in the rural and peri-urban sample it may be necessary that constraining factors, such as the lack of a designation handwashing station, may need to be addressed first, followed by a campaign to teach individuals the most effective manner of hand hygiene. Effective hand hygiene interventions in the urban sample would however be more effective if they focussed on re-enforcing knowledge of the correct manner of washing hands and emphasizing the links between disease and hand hygiene. Results of the research can be used to inform national policies and strategies. For example results suggest that national hand hygiene policies and

strategies should focus on providing guidance and direction on hand hygiene technologies and linking to strategies, policies and interventions which contribute to improving individual and household socio-economic status.

The research also showed that measuring the effectiveness of hand hygiene interventions in South Africa may be more difficult than initially anticipated and may rely on a number of variables, which were not yet clear at this point in time. What was clear from this research was that hand hygiene in South Africa showed significant difference with what had been found in international literature, with many gaps in the local and international understanding of hand hygiene. ■

“The research also showed that measuring the effectiveness of hand hygiene interventions in South Africa may be more difficult than initially anticipated and may rely on a number of variables, which were not yet clear at this point in time.”



5 BEST PRACTICES OF HYGIENE PROMOTION INTERVENTIONS IN THE WASH SECTOR

The objective of this article is to assist hygiene promotion (HP) practitioners and planners to make HP programmes better by providing indications of what works in HP interventions. It is also a humble first step to encourage researchers to look at how best practices can support cost effectiveness studies and contribute to sustainable positive behaviour adoption with regards to the MDGs and beyond.

Unsafe hygiene behaviours accounting for morbidity and mortality rates of women, children and men can and do change as a result of water and sanitation and hygiene (WASH) programmes. (Boot & Cairncross, Cairncross & Valdmanis) The key WASH-related hygiene behaviours known to have the greatest positive impact on individual health are:

- Hand washing with soap after defecation, cleaning bottoms of children who have defecated and before handling any food that is either eaten uncooked or touched by hand after cooking;
- Use of sanitary facilities for the disposal of human excreta;
- Use of improved water supply services and systems and methods for the effective treatment and the safe storage and drawing of drinking water in the home (Hernandez & Tobias, 2010).

We believe that WASH related hygiene behaviour changes are essential to ensure adequate use of water and sanitation interventions targeted by the MDGs. However, there is still limited evidence on which hygiene promotion interventions are effective in achieving such behaviours.

We have selected ten documents from six important players in the WASH-related hygiene sector with an extensive track record on HP. We have screened these documents to find out what these key players consider best practices in HP. It



a demonstration of proper hand washing by Bryan Habana with school children

is obvious that this selection is far from complete as our goal was mainly to get a first idea on best practices in HP that are widely applicable and not tied to specific circumstances. Those practices that were mentioned in all documents are presented in this article.

Commonly recognised best practices in hygiene promotion interventions.

We were able to identify five broad practices which, while insufficient by themselves, are indispensable for good HP interventions.

1. Community-managed hygiene promotion is planned from the outset.

The more successful HP programmes plan the participation of communities from the outset. Doing so enables defining what has to be done, both for the facilitators and the targeted audiences. In HP interventions, local staff plays a key role as they personify the change catalysts - that is, if they are trusted and influential and if they have good facilitation skills.

In addition, good quality training and support from supervisors or other organisations is crucial. Facilitators need to know who in the community to involve, how to involve them, and in which practices.

2. Interventions must be planned and managed properly

Hygiene promotion interventions must have their own plans, budgets, monitoring and research and their own staff (or human resources allocated from the programme into which the HP is integrated). According to the WSSCC document, a good hygiene intervention should meet the following requirements:

- Commissioning baseline studies on current hygiene practices;
- Commissioning formative research to determine key behaviours to focus on;
- Developing behavioural change strategies including social marketing;
- Determination of roles and responsibilities for carrying out hygiene programmes;
- Ongoing monitoring of programme effectiveness;
- Training at all levels for programme implementation.

3. Defining and targeting the interventions

The review indicates the need to focus the intervention in order to make it successful. Appleton & Sijbesma, for example, show that it is important to find out first from the groups with which the programme plans to work what kind of changes they want, why they have made or would make such changes, and what would or did impede them to do so. Furthermore, hygiene interventions must also focus on a small number of practices or behaviours. More successful programmes send the right message to the right audience using the right channels. This calls for differentiated, gender and poverty sensitive strategies and methods, as in most intervention communities poor and better off women and men have different roles, responsibilities and interests. Poor and better-off women and men further differ in, for example, their rates of literacy and their access to means of communication and financial resources, all of which influences their possibilities to participate in HP programmes and practice new hygiene behaviours.



School children demonstrating proper hand washing

4. Longer term HP interventions are more effective

Rather than single interventions, repeated promotion with follow-up is needed. Shordt and Cairncross, 2006, show that hygiene interventions should last more than one year, and/or beyond the time of physical implementation of water points or latrines (when part of a broader water or sanitation programme). Too often, once construction is completed, the community and household are left alone. Longer hygiene interventions with follow-up will have strong impact in supporting hygienic behaviours.

5. Political will is crucial for success: show evidence of an enabling environment

A final lesson learned based on our review is that political will from the national or local government is crucial for success. Building relationships with high level stakeholders can support the implementation of hygiene programmes and help overcome unexpected difficulties. These relationships can also help to raise awareness and legitimise the intervention.

It is agreed that the authorities feel more comfortable supporting change when they feel it is part of a wider goal, such as meeting the MDGs. Linking programmes to regional authorities may also provide a necessary profile for natural leaders or champions.

Conclusion: towards measuring effectiveness

According to the publications reviewed, hygiene interventions that use the elements presented will have greater success in achieving sustained improved hygiene behaviours. While these five elements are used to different extents in intervention programmes, there seems to be no consensus on other elements. However, the practices identified above set the basis for assessing and comparing hygiene interventions, especially when linked with wider WASH projects or programmes.

We hope this article will encourage others to look into hygiene interventions and to identify key elements of effective hygiene interventions in all contexts. It is a first step in laying the groundwork for additional research on costs and effectiveness of hygiene interventions as well as more studies on the contribution of HP interventions to the realisation of hygiene-related MDGs. With this article we would like to open the debate on the effectiveness of hygiene interventions to gather further evidence. ■

For more information contact:
[awaiting information](#)



washing your hands with soap: **WHY IS IT IMPORTANT?**

There is a very good reason why we have GLOBAL HANDWASH DAY in October, AND WHY COUNTRIES AROUND THE WORLD HAVE RECOGNISED THE IMPORTANCE OF THIS SIMPLE ACTIVITY: The critical factor in disease transmission is a dirty skin transmitting germs onto food, dishes and other people.

John Kings

It is important to dispose of faecal waste into a closed pit, but that is only a small part of the answer to creating healthy families. The original White Paper on sanitation recognized this and created the Phase A and Phase B sanitation programme. The initial projects followed this and in general, NGOs became responsible for the health and hygiene training, while engineers carried out the construction phase. Communities entered into the phase A work enthusiastically, and created plays and songs to demonstrate the key issues. The health and hygiene component of all the projects took four weeks to implement properly. The first national sanitation workshop was organized by an NASco and a Limpopo NGO, and all the components of the programme were demonstrated to practitioners from all over South Africa. Unfortunately most projects no longer approach sanitation provision in this way,

and people now believe that sanitation refers only to a VIP toilet.

This is where the Global Hand wash idea came in about four years ago. On that day, for example, the LINGO consortium in Limpopo celebrate the occasion by organizing a function in a different community each year and around 200 people attend. They are given bars of soap and they are then shown how and when to wash their hands. Traditionally people wash their hands before a meal, but using the same bowl of dirty water. They are shown how to use running water. School children are especially targeted, to make hand washing a habit as they grow up.

LINGO members have also developed water holders that can hang from a tree near to the VIP toilet.

NGOs are not tied to contracts and consequently are able to change and develop their programmes. It became clear that HIV and gender awareness should be included and seen as integral components of family health and hygiene awareness.

Gender training was done with men as well as women, as were family planning issues. People were happy to debate these issues with an impartial motivator. What people were led to understand was the relationship between water, sanitation and family health: they are inextricably linked.

Government understands the importance of the access to basic services to improve the daily lives of all South Africans. It is important to understand the linkages between all these key services, and how they all rely on each other to improve daily life and health.



Understanding this, then water provision, sanitation and housing programmes should all have components of health and hygiene awareness in them – ideally they should all run in successive projects in each community. If people understand these health issues, then they will understand the need to keep their house clean, to teach their children to care for the taps, to keep their toilet clean and to wash their hands with soap before eating or cooking or washing dishes. This means, therefore, that all contracts should have a component of training and community involvement in them. Diarrhoea TB and HIV are major killers in South Africa and their effects can be mitigated by simple rules of family cleanliness.

What must be resolved is, how to fund this when the current subsidy for the VIP toilet is too high, and the traditional contractors for sanitation projects: BEEs and engineers, know little of community involvement in projects, and have no training skills.

What can be done is to reduce the subsidy, involve the householders in the construction of their own toilet: dig the hole, collect sand (As was done when DWAF ran the programme), and give the few skilled NGOs the job of health and hygiene training.

THIS IS TOO IMPORTANT TO CONTINUE TO NEGLECT IT.

“ Traditionally people wash their hands before a meal, but using the same bowl of dirty water. They are shown how to use running water. School children are especially targeted, to make hand washing a habit as they grow up. ”



Schoolchildren receive their free bars of soap.

Appropriate sanitation infrastructure at schools **IMPROVES ACCESS TO EDUCATION**

Good physical infrastructure at schools enhances access to education, while inadequate and poorly maintained infrastructure excludes learners.

CSIR ScienceScope

In the Butterworth education district in the Eastern Cape, some 400 schools are benefiting from clean sanitation facilities due to a pilot intervention by the CSIR.

Every day, directly because of lack of maintenance of the physical infrastructure – especially the water and sanitation facilities - countless learners at many rural schools are deprived of learning contact hours. “Girl learners are most affected by this as they often have to go home to find a clean toilet. And due to the long distances they have had to walk to school, they then don’t return to school for the rest of the day,” explains CSIR civil engineer and town planner, Dr Kevin Wall. “Girls who are menstruating would often rather not go to school than have to deal with the lack of privacy,” he adds.

The great majority of the 6500 schools in the Eastern Cape are located in rural areas, and nearly all of these schools have pit latrines. “Very few of these toilets have ever been properly maintained -- many of them are full, and are therefore no longer usable,” Wall comments.

An innovative programme whereby emergent micro-entrepreneurs are trained and mentored to provide routine cleaning and maintenance services of sanitation facilities at schools is being tested and evaluated at the Butterworth district schools. “The programme, using concepts formulated by the CSIR and developed by the CSIR in collaboration with the Water Research Commission (WRC), is based on partnerships.

“ *In the Butterworth education district in the Eastern Cape, some 400 schools are benefiting from clean sanitation facilities due to a pilot intervention by the CSIR.* ”

These involve skills development and incentives principles similar to those of franchising,” says Wall, who specialises in policy and strategy formulation to assist government in delivering and managing infrastructure services.

“We set out to facilitate the creation of emergent micro businesses to undertake cleaning and maintenance services of small-scale water and sanitation facilities - facilities such as those owned by schools, clinics, and municipalities. The franchising concept was not entirely foreign to the people with whom we engaged -- they have all patronised franchises such as food outlets and petrol stations.”

The franchisor in this instance - Amanz’abantu Services (Pty) Ltd - is an East London-based service provider with many years’ experience of working alongside rural and developing communities. “Under the guidance of the franchisor, trainee franchisees were equipped to start cleaning and maintenance of the sanitation facilities at the schools,” says Wall.



Butterworth schools sanitation and water infrastructure was in a bad state before the micro-entrepreneurs started work. Toilets filled to capacity and rainwater harvesting infrastructure broken -some toilets were even full of bush



One of the franchisees, Nocawe (in the front) with her team

The programme establishes and supports local franchisee micro businesses, thus creating entrepreneurial and employment opportunities - mostly for women, as it turns out. "The franchisees first received appropriate training from Amanz'abantu and assistance with setting up their businesses. The company thereafter continues to provide structured learning in the form of on-the-job mentoring, and also further training as required," notes Wall.

The cleaning and maintenance services provided by the franchisees at schools are being paid for by the schools from their budgets annually allocated for operation and maintenance of infrastructure.

Irish Aid, Ireland's government department

that assists developing countries, has committed to providing substantial research and development funding for the pilot for three years.

This is in line with an agreement reached between Irish Aid, the CSIR, the WRC, the Eastern Cape Department of Education and Amanz'abantu. "We provide policy, management, technical and other assistance necessary to facilitate the pilot programme. This includes drafting the terms of reference, formulating contractual documentation, monitoring progress, and disseminating results with a view to replicating such projects in other areas", says Wall.

"The franchising concept ensures quality

control and reliability while offering first-time entrepreneurs the chance to set up profitable businesses. A maintenance job could be a job for life, so these employment opportunities are sustainable."

Using franchisees to maintain small-scale infrastructure will overcome many current operation and maintenance challenges, also beyond schools. "Equipped with the skills to maintain infrastructure, the franchisees could expand into routine maintenance of infrastructure owned by others, such as health authorities and municipalities."

Wall concludes: "The project in the Butterworth district is proving so successful in cleaning up the sanitation, and thereby enhancing learners' access to education, that the provincial Department of Education is keen to roll out the sanitation maintenance programme to a further 1 000 or so schools within the province."

“ *The programme establishes and supports local franchisee micro businesses, thus creating entrepreneurial and employment opportunities - mostly for women, as it turns out.* **”**



Material moved from the pits is disposed of in an environmentally safe manner by being dug in to the root zone



It might be a low-level task, but for these workers it is the first time they have received training enabling them to hold down a job



Management Of Menstruation For Girls Of School Going Age:

Lessons Learnt From Pilot Work In Kwekwe

Noma Neseni, Executive Director, IWSD and ZHRC

The Institute of Water and Sanitation Development has been working on a pilot project on how to improve sanitation facilities to be more girls friendly. The current VIP latrine, considered to be of sound scientific quality in controlling smells and flies, falls short in meeting the needs of the girl child.

Some of the obvious areas that need improvement include:

- A lockable door for privacy and dignity. The current VIP latrines for both households and institutions do not have lockable door compromising safety and privacy. Consequently, when girls are visiting the toilets they generally go in groups of two or three so that some girls will provide the much needed protective cover in instances where

toilets do not have doors.

- An inside hand wash basin. Currently most toilets have a hand washing basin located outside the toilet and in schools it is at the centre of the school yard. If one has messed themselves up then they have to clean up with the entire school audience watching.
- Most of the toilets have squat holes and this is uncomfortable for girls with menstrual cramps or even any other person elderly, sick pregnant.

Working with the founder of the VIP latrine, Dr Peter Morgan, the Institute sought to pilot test a latrine that would provide privacy, safety, dignity and yet try to keep the costs down. The pilots were conducted in selected schools in kwekwe. Once implemented, the boys also demanded that a boy friendly latrine be constructed. This was interesting because it sort of

contradicted the gender stereo typing where males are given urinals and thought to be comfortable with that. In this project boys indicated their need for privacy. The toilet that was eventually constructed to address the technology side of menstrual management had the following features as shown above:

- A lockable door from inside to ensure safety, privacy. The door had a wench from inside.
- A hand washing bowl inside the toilet with a raised tank outside that feeds water to the inside hand wash facility
- A raised pedestal for comfort

However while working on this project it became clear that technology innovations alone were inadequate to deal with the management of menstruation among children in schools. While working on this project, IWSD noted that problems and

challenges related to girl children were broader than just the technological aspects. The subject of menstruation in Zimbabwe is shrouded in mystery and myths. For instance women with their monthly periods were traditionally not allowed to touch and prepare milk lest they affect the livestock, not allowed to pass through fields as they would affect the harvest, in some cases not allowed to cook for the family.

Some of the language use was "I'm going to the moon" We all know the mystery surrounding travel to the moon. Because of this mystery and myths surrounding the subject we found that:

- Boy children do not have an understanding of the subject matter, are embarrassed by it and this leads to some harassment of girls
- Male teachers were equally unclear about the subject matter and therefore unable to teach boys on sexual and reproductive health- inclusive of menstrual management.
- Female teachers who it is assumed will know this subject had knowledge gaps
- The traditional management system where information on sexual and reproductive health was handed down by aunties, grandparents is no longer strong. This is due to HIV/ Aids pandemic where in some cases; the household is being headed by a thirteen year old orphan. Faced that with the economic meltdown, most families have lost their relatives to the neighbouring countries were Zimbabweans are economic refugees.
- Another challenge is that most of the senior teachers tasked with discipline are also the same that are tasked with welfare and psychosocial support. This is an apparent role conflict and in this

“ All of these have weakened the social capital and girls often do not have relatives and parents who can teach them the basics of menstrual management handed down through generations and often managed by aunties and grannies. ”

area of support that we noticed greater needs for the girls. This therefore limited their ability to provide counselling and support to the girls.

All of these have weakened the social capital and girls often do not have relatives and parents who can teach them the basics of menstrual management handed down through generations and often managed by aunties and grannies. This role is therefore being left to the teacher who is sometimes ill equipped to deal with it.

It was noticed that aside from the technological, social capital support, another area of concern was in material support. The sanitary pads are quite expensive unaffordable for most children this is even more so for the orphans and vulnerable children. Children were using such materials as blankets, meal cobs, leaves, tissue paper, and used rags. All of these have a potential of causing infections and thrush and when reported to the senior teacher the immediate reaction is that they have been having sexual intercourse (interviews in Kwekwe schools).

An approach to the management of menstruation for girls needs to integrate all

aspects such as technology, social aspects, knowledge gaps, material support and education of the opposite sex. Attention to this ensures that we address the Millennium Goal of Education, Gender Equality, and access to sanitation, poverty eradication and health. Education is a human basic right and should not be stopped by lack of appropriate enabling facilities within the school environment.



Girl friendly latrine lockable from inside and with a hand wash facility inside for privacy and safety.

For more details contact:
 Noma Neseni,
 Institute of Water and Sanitation
 Development
 Email: noma@iwsd.co.zw

Win-Sa BREAKS THE SILENCE on menstrual hygiene management

WIN-SA convened what was deemed by the stakeholders to be the very first national dialogue on menstrual hygiene management. The dialogue was convened in collaboration with the Ministry of Women, Children and Persons with Disability, funded by the Stockholm Environment Institute (SEI).



MPOWER cup



Dr Lindiwe Ringane speaking at the dialogue



Example of products produced by Ngwedi

The dialogue was attended by over sixty (60) delegates who represented national and provincial departments, donor and development agencies, academic institutions, trade unions, civil society organisations and the private sector.

The dialogue objectives were designed:

- To 'break the silence on Menstrual Hygiene Management (MHM)' by (i) creating awareness on the topic and the impact it has on women and girls, (ii) exploring and sharing lessons of the management aspects, (iii) promoting integration of MHM in health and hygiene/life orientation strategies.
- To discuss ways of Supporting the Sanitary Dignity Campaign for Women and Girls, including (i) ways of increasing women's access throughout their life cycle to appropriate, decent, affordable and quality health care, information and related services, (ii) strengthening preventive programmes that promote women's sanitary health, (iii) undertaking gender sensitive initiatives that address women rights and empowerment issues, increase resources and monitor follow up on MHM.

The dialogue report and presentations are available on the website of the Southern Africa Knowledge Node on Sustainable Sanitation www.afrisan.org

“ *The dialogue was attended by over sixty (60) delegates who represented national and provincial departments, donor and development agencies, academic institutions, trade unions, civil society organisations and the private sector.* ”

Joining hands

to help keep girls in schools

It has been reported that about 1 in 10 school-age African girls do not attend school during menstruation. This suggests that girls are forced to be absent during their period, and thereby lose critical learning time.

Hleki Mabunda and Reitumetsi Johnson: Department of Basic Education

On average, about 4 days per month can be lost, which can add up to 528 days of schooling across the years that a girl should be in school. For poverty stricken families sanitary pads are simply too expensive, and can receive less priority when compared to other household needs such as food. As a result, women and girls will resort to using toilet paper, old rags during their menstruation period. This in itself presents gross risks for infections. Moreover, for girls of school going age, the inconvenience of having to manage periods without even the basic resources and facilities may lead them to rather stay away from school during their period. Such has the ability to undermine all efforts to keep the girl child in school for the entire stipulated learning time—thereby defeating efforts to contribute towards ensuring that all girl learners realize their full potential.

To begin responding to this challenge, the Department of Basic Education has partnered with Procter & Gamble on the 'Always keeping girls in school' initiative, earmarked to provide sanitary pads and sanitary hygiene education to girls in needy areas. Through this initiative, Procter & Gamble has committed to provide a year's supply of pads and sanitary education to at least 9 000 girls across all provinces in 2011.

In addition, the Department of Basic Education runs a monthly Sanitary Pads Donation Drive wherein employees are encouraged donate packs of pads for distribution to the needy girls. In addition to the support for 9000 girls, Procter &

Gamble has committed to match monthly donations by employees.

The response to the call for donations by departmental employees has been overwhelming, demonstrating internal broader acceptance of the need to help needy girl children to stay in school, indicating that it is possible for each one to help one, and that there is a role for each South African to support education one way or another.

Amongst the objectives of the 'Always keeping girls in school' initiative, are constructive discussions on menstrual hygiene and support, puberty education, proper use and disposal of pads as well as the provision of the actual pads. At most, the programme provides a platform to provide significant relief to girl learners in dealing with menstruation, thereby freeing some 'peace of mind' and actual time for girl learners to learn, every school day in every month.

The initiative is located within the Girls and Boys Education Movement Programme (GEM BEM), as a platform to provide peer to peer discussions of these issues. The Girls and Boys Education Movement (supported by UNICEF) is an international movement practiced in many other countries in the world. It was first launched in South Africa in 2002, and later formalized as a national programme in 2003. The movement operates through the girls' & boys' education movement clubs (GEM BEM clubs) in public schools. These are school based clubs made up of girls and boys who are committed to the promotion of human rights, dignity for all as well as

mutual respect between girls and boys. The clubs are intended to empower girls and boys with reliable information and knowledge, to guide them in discussing and addressing issues that are of concern to them in their schools and communities, and to act together to bring about positive changes in their lives and those of their peers. The GEM BEM aims to bring about positive change in the lives of the learners. Implementing the 'Always keeping girls in school' through the GEM BEM clubs provides an appropriate environment to educate both boys and girls about puberty and menstruation and engaging learners as agents of change, thereby dispelling the stigma and embarrassment associated with these issues among that age group.

Indeed the magnitude of the problem is much bigger than what the 'Always keeping girls in school' programme provides for in its current form. In his 2011 State of the Nation Address, the South African President, Jacob G Zuma, said: "Given our emphasis on women's health, we will broaden the scope of reproductive health rights and provide services related to amongst others, contraception, sexually transmitted infections, teenage pregnancy and sanitary towels for the indigent". It is expected that the implementation of the President's pronouncement by all stakeholders concerned will lead to a wider and more sustainable programme. The Department values the support provided by Procter & Gamble, UNICEF South Africa, and Departmental Employees to make this programme possible.

The logo for the 'Always' brand, featuring the word 'always' in a lowercase, blue, cursive-style font. A green leaf-like shape is integrated into the top of the letter 'y'.

The Girl - Child and Menstrual Hygiene Management

The stories of young Zimbabwean girls.

Annie Shangwa tackles menstrual hygiene management in Zimbabwe schools. Her work is influenced by the work of Dr Marni Sommer who produced a similar booklet targeted at Tanzanian schools.

By Annie Kanyemba

The primary aims of the booklet is to disseminate knowledge to the school girls and also to provide useful knowledge and advice which can help each girl practically. The booklet includes real stories told by the Zimbabwean girls. It was tested with the school girls to ensure relevancy and clarity of messages.

Several questions arose from the presentation of the booklet to the school girls. Some of these could be incorporated into the booklet and some of them raise questions which are not easily placed in the booklet.



Annie Kanyemba with some of the school girls

Many are questions related to customary beliefs. These include:

1. If people with who I stay know that I am on my monthly period, will they eat the food that I prepare?
2. Is it true that girls are not encouraged to eat too many eggs, too much salt and dried nuts with too much salt?
3. Is it encouraged for girls to wear cotton?
4. Is it true that if you greet a boy whilst on my MPs, he feels it?
5. Is it true that too much sweet food or liquid increases the period pain?
6. Is it true that if you take a bath twice a day the blood flow increases?

These questions reveal that many girls, even in quite sophisticated schools near to capital city, still hold very traditional views and anxieties about their periods and what effects these have on family and friends. The booklet is available in both English and Shona.

Typical stories

from the girls

When I was growing up, I used to hear a lot of stories about menstruation from friends and relatives and so I had drawn my own conclusion that periods were disgusting and I prayed that mine should come after finishing high school. The day I started menstruating was at the age of 14 and it was on a weekend. I was in the garden when all of a sudden I felt as if I had wet my pants and I quickly looked around to see if there was anyone watching me and then I clutched my panties and blood stains came to my hand.

My first reaction after seeing the blood was frustration. I cried silently and wished it wasn't happening to me, I told myself that it was way too early for me. Since I was not prepared for my first period, I had no one at the house except my mom, so I went to talk to her and asked her what that blood on my panties meant. I pretended not to know anything about menstruation as she was explaining it in detail to me. I disguised my knowledge of it because I thought she would think that I was too naughty to know something like that.

My mom gave me cotton and showed me how to put it on my pant and then later taught me how to use cloth in the event that there was no money in the house to buy cotton. Then Monday came and I went to school and sat in class wearing the cotton but somehow it went sideways and I stained my uniform. I did not realize until I went to the chalk board to do maths and my friend came to me and whispered that she wanted to take me to the bathroom urgently. When we got there she gave me her own pads and taught me how to wear them. It was so embarrassing even just listening to her advice. I felt so low self-esteemed but later recovered. We got back to the class and my teacher did not say anything, I guess she had seen what had happened but I was very fortunate that most of my class mates had not seen anything. Since then I made it a point to be very cautious whenever I am on my period to avoid staining my clothes or uniform.

“*...I had drawn my own conclusion that periods were disgusting and I prayed that mine should come after finishing high school.*”



The girls listening to Malaika Mushandu answering their questions.



Annie Kanyemba and Malaika Mushandu listening to feedback and questions from the girls at the Domboramwari Secondary School in Epworth. The testing of this booklet was conducted with the help of Malaika Mushandu, who is currently Miss Zimbabwe.



One of the girls reading the MHM booklet



The girls listening to Malaika Mushandu answering their questions.

TOILET REHABILITATION

at Nciphizeni JSS and Mtyu JSS schools

By Small Projects Foundation

SPF has rehabilitated toilets at 3 schools in the Libode District. For the purpose of this case study, SPF will concentrate on 2 schools; Nciphizeni JSS and Mtyu JSS.

Protecting futures programme is a project funded by Procter and Gamble implemented by the Small Projects Foundation.



One of the objectives of the Protecting Futures Programme is to ensure that girl children are awarded an opportunity that will secure a safe future for them. In order to achieve this objective, SPF undertook a survey of the condition of the toilets of all 15 selected schools in the Libode District. The outcome of the survey enabled SPF to prioritise 3 schools for toilet rehabilitation.

Conditions of toilets at both schools (before rehabilitation)

Toilets at both Nciphizeni JSS and Mtyu JSS were not conducive to an ideal learning environment for learners. Not only were the toilets unsafe, they were also a health hazard which could contribute to the outbreak of infectious illnesses. The state of the toilets before rehabilitation could have been a contributing factor in the absenteeism and sporadic school attendance by the learners.



Boys and Girls Toilets – Nciphizeni JSS



Boys and Girls Toilets – Mtyu JSS

Conditions of toilets at Nciphizeni JSS (before rehabilitation)

Nciphizeni JSS has a total number of 700 learners, 400 of which are girl learners. The girl learners were subjected to use the toilets at the school for all their ablution needs. Before the toilets were rehabilitated they looked like this:



Toilet with no pedestal. Learners had to squat.

Both toilets for boys and girls had no doors which resulted in a lack of privacy. There were no wash hand basins. The girls had nowhere to wash hands after using the toilet. There was no provision made for the disposal of pads. The girls dumped them in the toilet pit system or just threw them in the nearest bushes.

Learner → because of the programme we got new toilets. We now have privacy. Our parents have been educated on how to communicate with us and on how to support us. We are now to share the challenges we face as youth with our parents.

Parent → The girls have never missed school since inception of this programme. Before this programme they missed school and were dirty with blood stains.

Structural Improvement

The general condition of toilets for both boys and girls was in a bad state. It was decided to rehabilitate the existing basic structures as they were of sound construction.

The following improvements were made:

- Re-plastering of both structures (inside and out)
- New steel doors were fitted which afforded the girl children with the necessary privacy
- Installation of water provision and hand wash basin for hygiene purposes
- General repairs to floors and replacement of pedestals.



Building being re-plastered



Pipes for water supply of the hand-wash basins. Girls toilet block re-plastered and painted



Inside toilet block with hand wash basin and new doors for toilets

Pad Disposal Method

SPF has provided Ncipizeni with an incinerator for pad disposal to ensure an economical and hygienic pad disposal method. Due to the remote location of the school, there are no rubbish/refuse removal services in these rural locations. It was therefore decided to design a durable and cost effective pad distribution unit.

Community Mobilisation

Through community mobilisation workshops the community has taken ownership of the toilet rehabilitation initiative in co-operation with the SGB. A community member has been identified and appointed to do cleaning of the toilets 3 times a week. She has been provided with cleaning materials and has been trained on the proper maintenance and cleaning of the rehabilitated structures.

Teacher → the school teachers, especially the life orientation teachers are delighted about this programme. They say that there has been a vast improvement in the confidence of the girl children and also in their school performance.

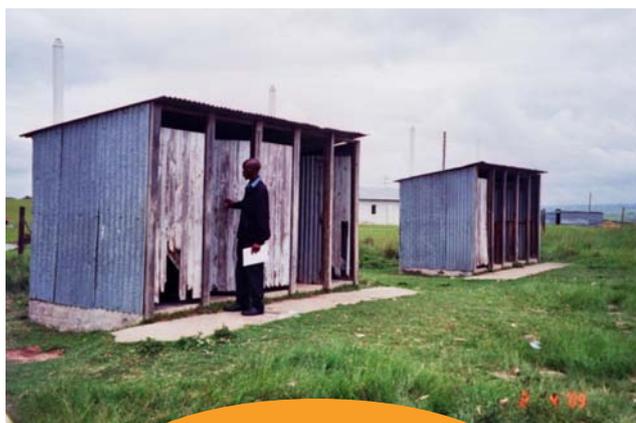


Incinerator for pad disposal

Mtyu JSS

Conditions of toilets at Mtyu JSS (before rehabilitation)

Mtyu JSS has a total number of 400 learners, 262 of which are girl learners. The girl learners were subjected to use the toilets at the school for all their ablution needs. Before a new structure was built, the toilets looked like this:



Toilets with broken down doors and unsteady structures



Toilet with broken pedestal

The toilets for boys and girls were constructed of corrugated iron. It was badly rusted and there was no screen wall in front of the toilets. The learners had no privacy and even the community could see into the toilets.

Structural Improvement

It was decided to build a concrete block structure on the existing foundations and to use the same pits. The new structure consists of:

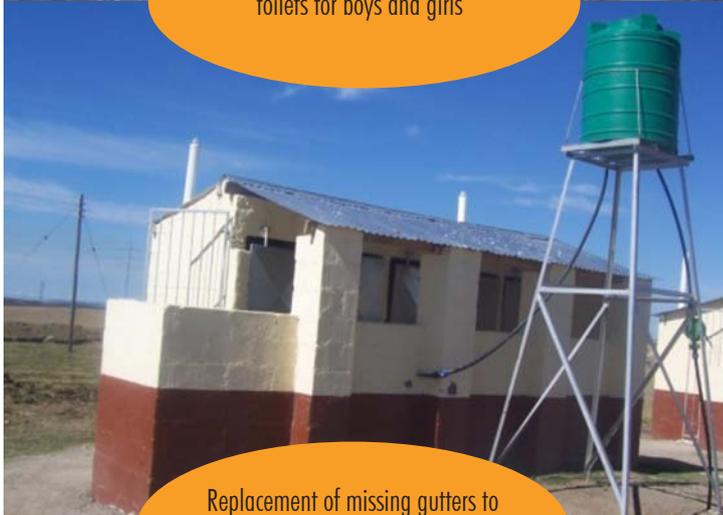
- Concrete blocks
- New roof
- Steel toilet doors
- Hand-wash basins for hygiene purposes
- Installation of water tanks at toilets
- Replacement and re-alignment of gutters for rainwater



In the process of building new toilets for boys and girls



Inside toilet block with hand-washbasin and steel doors



Replacement of missing gutters to ensure maximum collection of water in tanks



Complete re-construction of the toilets

Teacher → The children no longer miss school because they use Always pads for protection. The programme must continue because it promotes the status of the school and of our learners. The programme has not only capacitated the learners with puberty education but has also built toilets for our schools.

Learner → Before the programme I used to miss school because other children were making fun of me. At the time I did not have pads to use for my periods – I was using a cloth and at times newspaper for protection. This programme has made a huge difference in my life. It has provided me with pads and has provided our school with toilets. I am no longer using a cloth when I am on periods. We are no longer using those dirty toilets with broken seats and no doors which afforded us no privacy when using toilets.

Community Mobilisation

Through community mobilisation workshops the community has taken ownership of the toilet rehabilitation initiative in co-operation with the SGB. A community member has been identified and appointed to do cleaning of the toilets 3 times a week. She has been provided with cleaning materials and has been trained on the proper maintenance and cleaning of the rehabilitated structures.

Parent → I have found it easier to communicate with my daughter ever since this programme was introduced to her school. The provision of pads to learners has been a financial relief to me. We are grateful to Save the Children and to Small Projects Foundation.

Celebrating 100% sanitation

100% sanitation concept was introduced by Village Water Zambia (VWZ) in its project areas in 2009. This approach came as a solution to the challenges that VWZ faced with the already existing approaches to sanitation.

By Village Water Zambia (VWZ)

The approaches that VWZ championed from 2004-2007 promoted subsidies and handouts to enable communities construct latrines. This approach was supported based on the belief that communities were poor and the sandy terrain for the area was unmanageable for these poor communities. This approach overlooked all aspects of innovation, initiative and self-confidence among these rural people. Though this approach was attractive and appealing, it did not yield the desired results. Once a latrine collapsed or was filled the communities looked to VWZ for further support and in the meantime the communities continued with open defecation.

In 2009 VWZ, initiated a concept which focused on facilitating communities to construct latrines using own or locally available resources and to ensure households had all the necessary sanitary facilities required for a healthy environment. VWZ called this concept '100% sanitation'. 100% Sanitation is the improved delivery of sustained community owned sanitation in remote areas leading to long lasting benefits including community empowerment, local capacity building and opportunities for initiative. This approach targets only villages supported by VWZ and creates model villages. The 100% sanitation approach uses established



Model village meeting all sanitary requirements

model villages, where Village Water Zambia has already worked, as Centres of excellence for training and adoption of the practice by other communities. This is an integrative approach that combines water, sanitation, hygiene education and capacity development through practice. Members of communities are taken to these nearby 'model villages' in order to learn, be inspired, realize the benefits of sanitation, and to develop a partnership for their development journey, to whom they can turn with questions and for

inspiration. This a low cost approach which use peer education and creates a good learning environment for easy adoption by communities. The picture above is part of VWZ training material depicting the required status of what communities should aspire to achieve.

What are these facilities?

Over the past four years VWZ has conducted hygiene promotion campaigns and trainings in selected rural areas of



Standard latrine constructed in rural areas using local resources

Western Province of Zambia. The main objective has been to use these trainings as a triggering process for communities' to respond to the sanitation call. The sanitation messages include food preparation and processing, the use and maintenance of household latrines, the promotion of personal and environmental hygiene, and the fulfilment of the basic sanitation needs. This approach encourages communities to construct sanitary facilities using own resources and locally available materials. The main sanitary structures promoted under the 100% sanitation concept are latrines, racks, bath shelters, mortar and pestle stands and rubbish pits. The other focus has been the general cleanliness of the villages and the people. The picture above shows a basic latrine which VWZ is encouraging communities to construct. The main components of the latrines are hand washing facility and the pit. It is designed in such a way that it assures privacy.



Mortar, pestle stand and dish rack in a
Zambian village

VWZ's emphasis on health and hygiene education focuses on structures and actions

that help communities to improve on handling of household utensils and food. The major focus is the construction of plate and food racks and mortar and pestle stands. These structures are constructed using locally available resources. The objective is to reduce the possibility of these utensils from being licked by animals especially dogs. In addition food stored on racks is less likely to be exposed to dust. In order to ensure that people are clean throughout the day, VWZ promotes construction of bath shelters for each benefiting household. This makes it possible for people to bath at any time of the day unlike bathing when it is dark. Communities are also encouraged to manage the surroundings of the water point.



Protection around the water pump to prevent animals from accessing it

In celebrating these achievements VWZ introduced the 100% sanitation game an initiative designed to reward those communities who have shown the greatest

improvement in their sanitation as well as to reinforce our message about the importance of sanitation. This was a game designed for the clean and only the villages with 100% sanitation participated. The football tournament gave VWZ and its partners to have a wider audience to share sanitation, health and hygiene information other than those that have benefited from VWZ initiatives. Zambia's love football, and as such word has spread about the tournament and all the 78 villages that have received support from VWZ Kaoma district in the past are fighting to participate in the 2011 games.

The celebrations were attended by the area chief, the district council, VWZ, the press and the communities. The traditional leader encouraged his subjects to take sanitation seriously and extend the 100% sanitation concept to all villages in his chiefdom.



Village Water Zambia staff showing
AMCOW award in 2010



Chief Mutondo of Kaoma District encouraging
people to improve sanitation

As a result of implementing the above approach VWZ in 2010 received recognition from African Minister's Council on Water (AMCOW AfricaSan Awards) for recognizing sanitation and hygiene achievements in Africa.

First Announcement and call for papers DEVELOPMENTS IN FAECAL SLUDGE MANAGEMENT - 2

International Conference Centre, Durban, South Africa,
29 - 31 October 2012

The Third African Sanitation and Hygiene Conference held in Kigali, Rwanda from 19-21 July 2011 indicated that the scale of the challenge facing sanitation and hygiene remains formidable. 584 million people in Africa do not have access to safe sanitation services and 231 million people still practice open defecation. The poorest twenty percent are twenty times more likely to defecate in the open than the richest twenty percent. The conference learned of the scale of impact from poor sanitation on education, economic growth, productivity, tourism, the environment and the management of infrastructure. Improving Faecal Sludge Management was identified as a significant new area of learning. FSM need to be incorporated within city-wide systems and effective business models developed and implemented.

After a successful first conference of FSM held in Durban in March 2011 (see the publication - What happens when the pit is full? at www.african.org), it was agreed that there was a need for follow up events to capture and share further developments in the management and beneficiation of faecal sludges (including urine).

The second International Faecal Sludge Management Conference is being planned from the 29 to 31 October 2012 in Durban, South Africa. The call is now open for papers or workshops dealing with innovations and experiences with all aspects relating to the accumulation, treatment, removal,

beneficial usage, transport, pit emptying, new sanitation technologies, management arrangements, economics and disposal of faecal sludge derived from on-site sanitation systems.

Expressions of interests and abstracts not exceeding 500 words should be submitted to fsm2@pid.co.za before 31 May 2012. The estimated costs of registration will be US\$ 350. We are working towards raising support for attendance of presenters from developing countries.

For further
information contact
Jay Bhagwan at
jayb@wrc.org.za
OR
0027123300340.



4th International Dry Toilet Conference

Tampere, Finland, 22-25 August 2012

Theme:

Drivers for ecological dry toilets in urban and rural areas

Organised by:

Global Dry Toilet Association of Finland , University of Tampere, Tampere University of Applied Sciences, Tampere University of Technology

Programme:

- Mon-Wed 20-22 Aug – Pre-conference workshop on safe and sustainable sanitation, organized by Prof. Tuula uhkanen, free-of-charge
- Wed 22 Aug – Registration, social events
- Wed-Thu 22-23 Aug – Exhibition
- Thu 23 Aug – Opening, key-notes, parallel sessions
- Fri 24 Aug – Parallel sessions, closing, dinner
- Sat 25 Aug – Excursion

Contact:

E-mail: secretary2012@drytoilet.org

Tel: +358 45 875 3597 / +358 45 875 3597 (Mrs Erja Takala)

Skype: Dry_toilet_secretary

Web: www.drytoilet.org

Facebook: Global Dry toilet Association of Finland
Conference web site: www.drytoilet.org/dt2012



International
Water Association



About SAKNSS

The Southern Africa knowledge node on sustainable sanitation aims to fast track and accelerate the delivery of sanitation through sustainable solutions. The node aims to facilitate and coordinate capacity and skills development, knowledge sharing and collaboration.



**Southern Africa knowledge
node on sustainable sanitation**



The website aims to facilitate collaboration and information sharing among stakeholders in the SADC region. It serves as a SADC gateway to sustainable sanitation information. The website is the first regional website with dedicated on sustainable sanitation information. We encourage our stakeholders to register on the website and share with us any documents that will contribute to knowledge sharing and capacity building in the region.

The SAKNSS website consists of: Document management system

The SAKNSS document management system is a user friendly component that allows users to search documents by Document Type, theme, country, keyword and advanced search

Benefits for members:

- Link and exchange information with peers
- Access to new information and experience
- Practical support and capacity building
- Lessons learned
- Analysis of policies and sector trends
- Documentation and sharing of best practice
- Facilitating platforms for sustainable sanitation dialogue
- Awareness raising and Networking

www.afrisan.org

How to access SAKNSS items?

Users should first register their details before they can have full access to the SAKNSS items.

Contact management module

The contact management module provides an opportunity for the stakeholders to access their peers, contractors, suppliers, NGOs and government officials. It further allows stakeholders to advertise their own organisations/companies on the website.

Links database

The Links database provides access to organisations, private companies and government ministries working with the water and sanitation field.

SADC country information on sanitation

The country information page presents the status of sanitation in SADC countries with links to the responsible ministries and their contact details.